

МИНОБРНАУКИ РОССИИ
ВЛАДИВОСТОКСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ

РАБОЧАЯ ПРОГРАММА
УЧЕБНОЙ ДИСЦИПЛИНЫ

СГ.02 Иностранный язык в профессиональной
деятельности

программы подготовки специалистов среднего звена
26.02.02 Судостроение

Форма обучения: очная

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Рабочая программа учебной дисциплины ОГСЭ.03 Иностранный язык в профессиональной деятельности разработана в соответствии с требованиями Федерального государственного образовательного стандарта среднего профессионального образования по специальности 26.02.02 Судостроение, утвержденного приказом Минобрнауки России от 08.02.2024, № 84, примерной образовательной программой.

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СОДЕРЖАНИЕ

1	ОБЩАЯ ХАРАКТЕРИСТИКА РАБОЧЕЙ ПРОГРАММЫ УЧЕБНОЙ ДИСЦИПЛИНЫ	4
2	СТРУКТУРА И СОДЕРЖАНИЕ УЧЕБНОЙ ДИСЦИПЛИНЫ	4
3	УСЛОВИЯ РЕАЛИЗАЦИИ УЧЕБНОЙ ДИСЦИПЛИНЫ	12
4	КОНТРОЛЬ И ОЦЕНКА РЕЗУЛЬТАТОВ ОСВОЕНИЯ УЧЕБНОЙ ДИСЦИПЛИНЫ	14

1 ОБЩАЯ ХАРАКТЕРИСТИКА ПРОГРАММЫ УЧЕБНОЙ ДИСЦИПЛИНЫ

1.1 Место дисциплины в структуре основной образовательной программы

Учебная дисциплина СГ.02 Иностранный язык в профессиональной деятельности является частью общего гуманитарного и социально-экономического учебного цикла основной образовательной программы (далее ООП) в соответствии с ФГОС СПО по специальности 26.02.02 Судостроение.

1.2 Цель и планируемые результаты освоения дисциплины

По итогам освоения дисциплины, обучающиеся должны продемонстрировать результаты обучения, соотнесённые с результатами освоения ООП СПО, приведенные в таблице.

Код компетенции	Умения	Знания
ОК 01 ОК 09	строить простые высказывания о себе и о своей профессиональной деятельности; взаимодействовать в коллективе, принимать участие в диалогах на общие и профессиональные темы; применять различные формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии; понимать общий смысл четко произнесенных высказываний на общие и базовые профессиональные темы; понимать тексты на базовые профессиональные темы; составлять простые связные сообщения на общие или профессиональные темы; общаться (устно и письменно) на иностранном языке на профессиональные и повседневные темы; переводить иностранные тексты профессиональной направленности (со словарем); самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас	лексический и грамматический минимум, относящийся к описанию предметов, средств и процессов профессиональной деятельности; лексический и грамматический минимум, необходимый для чтения и перевода текстов профессиональной направленности (со словарем); общеупотребительные глаголы (общая и профессиональная лексика); правила чтения текстов профессиональной направленности; правила построения простых и сложных предложений на профессиональные темы; правила речевого этикета и социокультурные нормы общения на иностранном языке; формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии

2 СТРУКТУРА И СОДЕРЖАНИЕ УЧЕБНОЙ ДИСЦИПЛИНЫ

2.1 Объем учебной дисциплины и виды учебной работы

Вид учебной работы	Объем часов
Объем образовательной программы учебной дисциплины	272
в том числе:	
– теоретическое обучение	
– практические занятия <i>(если предусмотрено)</i>	180
– лабораторные занятия <i>(если предусмотрено)</i>	
– курсовая работа (проект) <i>(если предусмотрено)</i>	
– самостоятельная работа	92
– консультации	
– промежуточная аттестация – <i>дифференцированный зачет</i>	

2.2 Тематический план и содержание учебной дисциплины

Наименование разделов и тем	Содержание учебного материала и формы организации деятельности обучающихся	Объем в часах	Коды компетенций, формированию которых способствует элемент программы
1	2	3	4
Раздел 1	Вводно-коррективный курс	20	
Тема 1.1. Описание людей: друзей, родных и близких и т.д. (внешность, характер, личностные качества)	Содержание учебного материала Практическое занятие № 1 Введение. Входной контроль, тест Практическое занятие № 2 Фонетический материал- основные звуки и интонаемы английского языка; основные способы написания слов на основе знания правил правописания; совершенствование орфографических навыков. Практическое занятие № 3 Лексический материал по теме. Практическое занятие № 4 Грамматический материал: простые нераспространенные предложения с глагольным, составным именным и составным глагольным сказуемым (с инфинитивом); простые предложения, распространенные за счет однородных членов предложения и/или второстепенных членов предложения; предложения утвердительные, вопросительные, отрицательные, побудительные и порядок слов в них; безличные предложения; понятие глагола-связки.	8	ОК 01 ОК 09
Тема 1.2. Межличностные отношения дома, в учебном заведении, на работе. Повседневная жизнь, условия жизни, учебный день, выходной день	Содержание учебного материала Практическое занятие № 5 Лексический материал по теме: расширение потенциального словаря за счет овладения интернациональной лексикой, новыми значениями известных слов и новых слов, образованных на основе продуктивных способов словообразования Практическое занятие № 6 Грамматический материал: модальные глаголы, их эквиваленты; предложения с оборотом there is/are; сложносочиненные предложения: бессоюзные и с союзами and, but. образование и употребление глаголов в Present, Past, Future Simple Практическое занятие № 7 Лексический материал по теме, расширение потенциального словаря Практическое занятие № 8 Грамматический материал: имя существительное: его ос-	12	ОК 01 ОК 09

	новные функции в предложении; имена существительные во множественном числе, образованные по правилу, а также исключения. артикль: определенный, неопределенный, нулевой. Основные случаи употребления определенного и неопределенного артикля. Употребление существительных без артикля. Практическое занятие № 9 Грамматический материал: числительные; система модальности; образование и употребление глаголов в Past, Future Simple. Практическое занятие № 10 Контрольная работа по грамматическому материалу		
Раздел 2.	Развивающий курс	160	
Тема 2.1 ОПИСАНИЕ СУДНА (DEFINITION OF A SHIP)	Содержание учебного материала	8	
	Практическое занятие № 11 Definition of a Ship Active vocabulary of the lesson		OK 01 OK 09
	Практическое занятие № 12 Definition of a Ship Read and translate the text and give the main idea.		
	Практическое занятие № 13 Грамматический материал: числительные; система модальности.; образование и употребление глаголов в Past, Future Simple.		
	Практическое занятие № 14 Definition of a Ship Discussion		
Тема 2.2 ИСТОРИЯ КОРАБЛЕСТРОЕНИЯ (THE HISTORY OF SHIP-BUILDING)	Содержание учебного материала	6	
	Практическое занятие № 15 The History of Shipbuilding, Active vocabulary of the lesson.		OK 01 OK 09
	Практическое занятие № 16 The History of Shipbuilding, Read and translate the text and give the main idea. Грамматический материал:- образование и употребление глаголов в Present, Past, Future Simple/Indefinite		
	Практическое занятие № 17 Revision		
	Самостоятельная работа обучающихся: Портфолио или учебно-контрольный файл обучающегося.	10	
Тема 2.3 АРХИТЕКТУРА КОРАБЛЕЙ (ARCHITECTURE OF SHIPS)	Содержание учебного материала	8	
	Практическое занятие № 18 Architecture of Ships, Active vocabulary of the lesson.		OK 01 OK 09
	Практическое занятие № 19 Architecture of Ships, Read and translate the text and give the main idea.		
	Практическое занятие № 20 Грамматический материал: образование и употребление глаголов в Present, Past, Future Simple/Indefinite, использование глаголов в Present Simple/Indefinite для выражения действий в будущем, придаточные предложения времени и условия (if, when).		

	Практическое занятие № 21 Architecture of Ships, Discussion		
Тема 2.4 ТРЮМЫ И ЛЮКИ (HOLDS AND HATCHES)	Содержание учебного материала	8	
	Практическое занятие № 22 Holds and Hatches, Active vocabulary of the lesson.		OK 01 OK 09
	Практическое занятие № 23 Holds and Hatches, Read and translate the text and give the main idea		
	Практическое занятие № 24 Грамматический материал: - образование и употребление глаголов в Present Continuous/Progressive, Present Perfect; - местоимения: указательные (this/these, that/those) с существительными и без них, личные, притяжательные, вопросительные, объектные;		
	Практическое занятие № 25 Holds and Hatches, Discussion		
Тема 2.5 СУДОВОЕ ОБОРУДОВАНИЕ (SHIPBOARD EQUIPMENT)	Содержание учебного материала	8	
	Практическое занятие № 26 Shipboard Equipment, Active vocabulary of the lesson.		OK 01 OK 09
	Практическое занятие № 27 Shipboard Equipment, Read and translate the text and give the main idea		
	Практическое занятие № 28 Грамматический материал: сложноподчиненные предложения с союзами because, so, if, when, that, that is why; понятие согласования времен и косвенная речь. неопределенные местоимения, производные от some, any, no, every. имена прилагательные в положительной, сравнительной и превосходной степенях, образованные по правилу, а также исключения, наречия в сравнительной и превосходной степенях, неопределенные наречия, производные от some, any, every.		
	Практическое занятие № 29 Shipboard Equipment, Discussion		
Тема 2.6 ИЗМЕРЕНИЕ СУДОВ (MEASURING SHIPS)	Содержание учебного материала	8	
	Практическое занятие № 30 Measuring Ships, Active vocabulary of the lesson.		OK 01 OK 09
	Практическое занятие № 31 Measuring Ships, Read and translate the text and give the main idea		
	Практическое занятие № 32 Грамматический материал: глаголы в страдательном залоге, преимущественно в Indefinite Passive, инфинитив и инфинитивные обороты и способы передачи их значений на родном языке, признаки и значения слов и словосочетаний с формами на -ing без обязательного различения их функций.		

	Практическое занятие № 33 Measuring Ships, Discussion		
	Самостоятельная работа обучающихся: Summarize the information from the Unit and make a report on any type of classification you've chosen.	12	
Тема 2.7 ВИДЫ (ТИПЫ) Кораблей (TYPES OF SHIPS)	Содержание учебного материала	8	
	Практическое занятие № 34 Types of Ships, Active vocabulary of the lesson		OK 01 OK 09
	Практическое занятие № 35 Types of Ships, Read and translate the text and give the main idea		
	Практическое занятие № 36 Грамматический материал: предложения со сложным дополнением типа I want you to come here; сложноподчиненные предложения с союзами for, as, till, until, (as) though; предложения с союзами neither...nor, either...or; дифференциальные признаки глаголов в Past Perfect, Past Continuous, Future in the Past; - признаки инфинитива и инфинитивных оборотов и способы передачи их значений на родном языке.		
	Практическое занятие № 37 Types of Ships, Discussion		
Тема 2.8 Торговые суда (COMMERCIAL VESSELS)	Содержание учебного материала	8	
	Практическое занятие № 38 Commercial Vessels, Active vocabulary of the lesson		OK 01 OK 09
	Практическое занятие № 39 Commercial Vessels, Read and translate the text and give the main idea		
	Практическое занятие № 40 Грамматический материал: глаголы в страдательном залоге, преимущественно в Indefinite Passive; сложноподчиненные предложения с придаточного типа If I were you, I would do English, instead of French.		
	Практическое занятие № 41 Commercial Vessels, Discussion		
Тема 2.9 Военные и вспомогательные суда (MILITARY AND AUXILIARY VESSELS)	Содержание учебного материала	6	
	Практическое занятие № 42 Military and Auxiliary Vessels, Active vocabulary of the lesson		OK 01 OK 09
	Практическое занятие № 43 Military and Auxiliary Vessels, Read and translate the text and give the main idea		
	Практическое занятие № 44 Грамматический материал: предложения со сложным дополнением типа I want you to come here; сложноподчиненные предложения с союзами for, as, till, until, (as) though; сложноподчиненные предложения с придаточного		

	типа If I were you, I would do English, instead of French; Глаголы в страдательном залоге, преимущественно в Indefinite Passive.		
Тема 2.10 РЫБОЛОВНЫЕ, ВНУТРЕННИЕ И ПРИБРЕЖНЫЕ СУДА) FISHING, INLAND AND COASTAL VESSELS AND OTHERS	Содержание учебного материала	8	OK 01 OK 09
	Практическое занятие № 45 Fishing, Inland and Coastal Vessels and Others, Active vocabulary of the lesson		
	Практическое занятие № 46 Fishing, Inland and Coastal Vessels and Others, Read and translate the text and give the main idea		
	Практическое занятие № 47 Грамматический материал для продуктивного усвоения: - распознавание и употребление в речи изученных ранее коммуникативных и структурных типов предложения; - систематизация знаний о сложносочиненных и сложноподчиненных предложениях, в том числе условных предложениях (Conditional I, II, III)		
	Практическое занятие № 48 Fishing, Inland and Coastal Vessels and Others, Discussion		
Тема 2.11 МАШИННОЕ ОТДЕЛЕНИЕ (ENGINE ROOM)	Содержание учебного материала	4	OK 01 OK 09
	Практическое занятие № 49 Engine Room, Active vocabulary of the lesson	16	
	Практическое занятие № 50 Engine Room, Read and translate the text and give the main idea		
	Самостоятельная работа обучающихся: Summarize the information from the Unit and make a report on any type of classification you’ve chosen.		
Тема 2.12 СИСТЕМЫ ДВИЖЕНИЯ (PROPULSION) SYSTEMS	Содержание учебного материала	8	OK 01 OK 09
	Практическое занятие № 51 Propulsion Systems, Active vocabulary of the lesson		
	Практическое занятие № 52 Propulsion Systems, Read and translate the text and give the main idea		
	Практическое занятие № 53 Грамматический материал: глаголы в страдательном залоге.		
	Практическое занятие № 54 Propulsion Systems, Discussion		
Тема 2.13 ЖИЗНЕННЫЙ ЦИКЛ СУДНА (LIFECYCLE OF A SHIP)	Содержание учебного материала	8	OK 01 OK 09
	Практическое занятие № 55 Lifecycle of a Ship, Active vocabulary of the lesson		
	Практическое занятие № 56 Lifecycle of a Ship, Read and translate the text and give		

	the main idea		
	Практическое занятие № 57 Lifecycle of a Ship, Discussion		
	Практическое занятие № 58 Грамматический материал: дифференциальные признаки глаголов в Past Perfect, Past Continuous, Future in the Past; Признаки инфинитива и инфинитивных оборотов и способы передачи их значений на родном языке. Признаки и значения слов и словосочетаний с формами на -ing без обязательного различия их функций.		
Тема 2.14 ЗАГРЯЗНЕНИЕ СУДАМИ (SHIP POLLUTION)	Содержание учебного материала	10	
	Практическое занятие № 59 Ship Pollution, Active vocabulary of the lesson		OK 01 OK 09
	Практическое занятие № 60 Ship Pollution, Read and translate the text and give the main idea		
	Практическое занятие № 61 Ship Pollution Грамматический материал: - словообразование; - типы предложений; - вопросительные, отрицательные предложения		
	Практическое занятие № 62 Ship Pollution, Discussion		
	Практическое занятие № 63 Ship Pollution, Revision		
	Самостоятельная работа обучающихся Summarize the information from the Unit and make a report on any type of classification you've chosen.	6	
Тема 2.15 ЗВАНИЯ И ПРОФЕССИИ МОРЯКОВ (SEAFARER RANKS AND PROFESSIONS)	Содержание учебного материала	10	
	Практическое занятие № 64 Seafarer Ranks and Professions, Active vocabulary of the lesson	22	OK 01 OK 09
	Практическое занятие № 65 Seafarer Ranks and Professions, Read and translate the text and give the main idea		
	Практическое занятие № 66 Seafarer Ranks and Professions, Discussion		
	Практическое занятие № 67 Seafarer Ranks and Professions Грамматический материал: - словообразование		
	Практическое занятие № 68 Seafarer Ranks and Professions		
	Самостоятельная работа обучающихся: Summarize the information from the Unit and make a report on any type of classification you've chosen.		

Тема 2.16 УЛУЧШЕНИЕ ЭКСПЛУАТАЦИОННЫХ ХАРАКТЕРИСТИК С ПОМОЩЬЮ КЕРАМИ- КИ, ГРЕБНЫХ ВИНТОВ И СИСТЕМ МОНИТО- РИНГА ДВИГАТЕЛЕЙ (IMPROVING OPERA- TIONS WITH CERAMICS, PROPELLERS AND ENGINE MONITORING)	Содержание учебного материала	10	
	Практическое занятие № 69 Improving Operations with Ceramics, Propellers and Engine Monitoring		OK 01 OK 09
	Практическое занятие № 70 Improving Operations with Ceramics, Propellers and Engine Monitoring		
	Практическое занятие № 71 Improving Operations with Ceramics, Propellers and Engine Monitoring		
	Практическое занятие № 72 Improving Operations with Ceramics, Propellers and Engine Monitoring		
	Практическое занятие № 73 Improving Operations with Ceramics, Propellers and Engine Monitoring		
	Содержание учебного материала Практические занятия	34	OK 01 OK 09
Тема 2.17 ПОИСКОВОЕ ЧТЕНИЕ И КРАТКОЕ ИЗЛОЖЕНИЕ ПРОЧИ- ТАННОГО (SCANNING & ABSTRACT)	Практическое занятие № 74 Scanning, Active vocabulary of the lesson		
	Практическое занятие № 75 Scanning, Read and translate the text and give the main idea		
	Практическое занятие № 76 Scanning, Discussion		
	Практическое занятие № 77 Scanning, Discussion		
	Практическое занятие № 78 Scanning, Revision		
	Практическое занятие № 79 Scanning		
	Практическое занятие № 80 Scanning		
	Практическое занятие № 81 Scanning		
	Практическое занятие № 82 Summary		
	Практическое занятие № 83 Summary		
	Практическое занятие № 84 Abstract, Read and translate the text and give the main idea		
	Практическое занятие № 85 Abstract, Read and translate the text and give the main idea		
Практическое занятие № 86 Abstract, Read and translate the text and give the main idea			

	Практическое занятие № 87 Abstract, Read and translate the text and give the main idea		
	Практическое занятие № 88 Abstract, Read and translate the text and give the main idea		
	Практическое занятие № 89 Abstract, Read and translate the text and give the main idea		
	Практическое занятие № 90 Revision		
	Самостоятельная работа обучающихся: Summarize the information from the Unit and make a report on any type of classification you've chosen.	10	
Всего		272	

3 УСЛОВИЯ РЕАЛИЗАЦИИ ПРОГРАММЫ ДИСЦИПЛИНЫ

3.1. Требования к минимальному материально-техническому обеспечению

Реализация учебной дисциплины требует наличия учебного кабинета «Иностранного языка».

Оборудование учебного кабинета:

- посадочные места по количеству обучающихся;
- рабочее место преподавателя;
- комплект учебно-наглядных пособий «Страноведение»;
- грамматические таблицы;
- дидактические материалы;
- пособия для мультимедийного оборудования.
- методические рекомендации по созданию презентаций
- методические рекомендации по грамматике английского языка

Технические средства обучения:

Мультимедийный комплект (проектор CASIO XJ-V2, экран LUMIEN Eco Picture) – 1 шт., персональный компьютер Lenovo ThinkCentre – 21 шт., наушники Sanako SLHO7 – 21 шт., колонки Microlab 2.0 SOLO4C – 1 шт., стол – 21 шт., стул – 21 шт.

Лицензионное программное обеспечение:

OS Windows 10, Microsoft Office 10, Nibelung 3.8, Toefl, словари – Multitran, ABBYY Lingvo

3.2. Информационное обеспечение обучения

Перечень рекомендуемых учебных изданий, Интернет-ресурсов, дополнительной литературы

Основная литература

1.Байдикова, Н. Л. Английский язык для технических направлений (B1–B2) : учебное пособие для среднего профессионального образования / Н. Л. Байдикова, Е. С. Давиденко. — Москва : Издательство Юрайт, 2022. — 171 с. — (Профессиональное образование). — ISBN 978-5-534-10078-5. — Текст : электронный // ЭБС Юрайт [сайт]. — URL: <https://urait.ru/bcode/455909>

2.Кузьменкова, Ю. Б. Английский язык для технических колледжей (A1) : учебное пособие для среднего профессионального образования / Ю. Б. Кузьменкова. — Москва : Издательство Юрайт, 2022. — 207 с. — (Профессиональное образование). — ISBN 978-5-534-12346-3. — Текст : электронный // ЭБС Юрайт [сайт]. — URL: <https://urait.ru/bcode/463497>

3.Куряева, Р. И. Английский язык. Лексико-грамматическое пособие в 2 ч. Часть 1 : учебное пособие для среднего профессионального образования / Р. И. Куряева. — 8-е изд., испр. и доп. — Москва : Издательство Юрайт, 2022. — 264 с. — (Профессиональное образование). — ISBN 978-5-534-09890-7. — Текст : электронный // ЭБС Юрайт [сайт]. — URL: <https://urait.ru/bcode/452245>

4.Куряева, Р. И. Английский язык. Лексико-грамматическое пособие в 2 ч. Часть 2 : учебное пособие для среднего профессионального образования / Р. И. Куряева. — 8-е изд., испр. и доп. — Москва : Издательство Юрайт, 2021. — 254 с. — (Профессиональное образование). — ISBN 978-5-534-09927-0. — Текст : электронный // ЭБС Юрайт [сайт]. — URL: <https://urait.ru/bcode/452246>

5.Минина, О.Г. Базовый профессиональный английский язык : учебное пособие : [12+] / О.Г. Минина. — Москва ; Берлин : Директ-Медиа, 2022. — 160 с. : ил., табл. — ISBN 978-5-4499-1303-6. — Текст : электронный.—

URL: <http://biblioclub.ru/index.php?page=book&id=595465>

Дополнительная литература

1.Куряева, Р. И. Английский язык. Лексико-грамматическое пособие в 2 ч. Часть 1 : учебное пособие для среднего профессионального образования / Р. И. Куряева. — 8-е изд.,

испр. и доп. — Москва : Издательство Юрайт, 2021. — 264 с. — (Профессиональное образование). — ISBN 978-5-534-09890-7. — Текст : электронный // ЭБС Юрайт [сайт]. — URL: <https://urait.ru/bcode/452245>

2.Куряева, Р. И. Английский язык. Лексико-грамматическое пособие в 2 ч. Часть 2 : учебное пособие для среднего профессионального образования / Р. И. Куряева. — 8-е изд., 21испр. и доп. — Москва : Издательство Юрайт, 201. — 254 с. — (Профессиональное образование). — ISBN 978-5-534-09927-0. — Текст : электронный // ЭБС Юрайт [сайт]. — URL: <https://urait.ru/bcode/452246>

3.Нужнова, Е. Е. Английский язык. Professional Reading: Law, Economics, Management : учебное пособие для среднего профессионального образования / Е. Е. Нужнова. — 2-е изд., испр. и доп. — Москва : Издательство Юрайт, 2022. — 149 с. — (Профессиональное образование). — ISBN 978-5-534-12993-9. — Текст : электронный // ЭБС Юрайт [сайт]. — URL: <https://urait.ru/bcode/448712>

4.1. Описание показателей и критериев оценки компетенций

<i>Результаты обучения</i>	<i>Критерии оценки</i>	<i>Методы оценки</i>
Перечень знаний, осваиваемых в рамках дисциплины		
<u>Знать:</u> лексический и грамматический минимум, относящийся к описанию предметов, средств и процессов профессиональной деятельности; лексический и грамматический минимум, необходимый для чтения и перевода текстов профессиональной направленности (со словарем); общеупотребительные глаголы (общая и профессиональная лексика); правила чтения текстов профессиональной направленности; правила построения простых и сложных предложений на профессиональные темы; правила речевого этикета и социокультурные нормы общения на иностранном языке; формы и виды устной и письменной коммуникации на иностранном языке при межличностном и межкультурном взаимодействии¹⁶	владеет лексическим и грамматическим минимумом, относящимся к описанию предметов, средств и процессов профессиональной деятельности; владеет лексическим и грамматическим минимумом, необходимым для чтения и перевода текстов профессиональной направленности (со словарем); демонстрирует знания при употреблении глаголов (общая и профессиональная лексика); демонстрирует знания правил чтения текстов профессиональной направленности; демонстрирует способность построения простых и сложных предложений на профессиональные темы; демонстрирует знания правил речевого этикета и социокультурных норм общения на иностранном языке; демонстрирует знания форм и видов устной и письменной коммуникации на иностранном языке при межличностном и межкультурном взаимодействии	Письменный и устный опрос. Тестирование. Дискуссия. Участие в диалогах, ролевых играх. Практические задания по работе с информацией, документами, профессиональной литературой. Ответы на промежуточной аттестации
Перечень умений, осваиваемых в рамках дисциплины		
<u>Уметь:</u> строить простые высказывания о себе и о своей профессиональной деятельности; взаимодействовать в коллективе, принимать участие в диалогах на общие и профессиональные темы; применять различные формы и виды устной и письменной коммуникации на иностранном языке при межличност-	строит простые высказывания о себе и о своей профессиональной деятельности; взаимодействует в коллективе, принимает участие в диалогах на общие и профессиональные темы; применяет различные формы и виды устной и письменной коммуникации на иностранном языке при межличностном и межкультурном взаимодействии; понимает общий смысл четко произнесенных высказываний на общие и базовые профессиональные темы;	Письменный и устный опрос. Тестирование. Дискуссия. Участие в диалогах, ролевых играх. Практические задания по

ном, межкультурном и профессиональном взаимодействии; понимать общий смысл четко произнесенных высказываний на общие и базовые профессиональные темы; понимать тексты на базовые профессиональные темы; составлять простые связные сообщения на общие или профессиональные темы; общаться (устно и письменно) на иностранном языке на профессиональные и повседневные темы; переводить иностранные тексты профессиональной направленности (со словарем); самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас	понимает тексты на базовые профессиональные темы; составляет простые связные сообщения на общие или интересующие профессиональные темы; общается (устно и письменно) на иностранном языке на профессиональные и повседневные темы; переводит иностранные тексты профессионально направленности (со словарем); совершенствует устную и письменную речь, пополняет словарный запас	работе с информацией, документами, профессиональной литературой. Ответы на промежуточной аттестации
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МИНОБРНАУКИ РОССИИ
ВЛАДИВОСТОКСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ

КОНТРОЛЬНО-ОЦЕНОЧНЫЕ СРЕДСТВА
для проведения текущего контроля и промежуточной аттестации
по учебной дисциплине

СГ.02 Иностранный язык в профессиональной
деятельности

программы подготовки специалистов среднего звена
26.02.02 Судостроение

Форма обучения: очная

Контрольно-оценочные средства для проведения текущего контроля и промежуточной аттестации по учебной дисциплине 26.02.02 Судостроение, утвержденного приказом Минобрнауки России от 08.02.2024, № 84, примерной образовательной программой, рабочей программой учебной дисциплины.

Разработчик: И.А. Трушкина, преподаватель

Рассмотрено и одобрено на заседании цикловой методической комиссии филологии

Протокол № 9 от «15» мая 2026 г.

Председатель ЦМК



И.А. Трушкина

1 Общие сведения

Контрольно-оценочные средства (далее – КОС) предназначены для контроля и оценки образовательных достижений обучающихся, освоивших программу учебной дисциплины СГ.02 Иностранный язык в профессиональной деятельности.

КОС включают в себя контрольные материалы для проведения текущего контроля успеваемости и промежуточной аттестации по дисциплине, которая проводится в форме дифференцированного зачёта (с использованием оценочного средства - устный опрос в форме ответов на вопросы билетов, устный опрос в форме собеседования, выполнение письменных заданий, тестирование и т.д.)

2 Планируемые результаты обучения по дисциплине, обеспечивающие результаты освоения образовательной программы

Код ОК	Код результата обучения	Наименование
ОК 01 ОК 09	31	использовать лексический и грамматический минимум, относящийся к описанию предметов, средств и процессов профессиональной деятельности, необходимый для чтения и перевода текстов профессиональной направленности (со словарем), общеупотребительные глаголы (общая и профессиональная лексика)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии
	У1	строить простые высказывания о себе и о своей профессиональной деятельности, взаимодействовать в коллективе, принимать участие в диалогах на общие и профессиональные темы, применять различные формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии;
	У2 20	понимать общий смысл четко произнесенных высказываний на общие и базовые профессиональные темы, тексты на базовые профессиональные темы составлять простые связные сообщения на общие или профессиональные темы, общаться (устно и письменно) на иностранном языке на профессиональные и повседневные темы, переводить иностранные тексты профессиональной направленности (со словарем), самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас

3 Соответствие оценочных средств контролируемым результатам обучения

3.1 Средства, применяемые для оценки уровня практической подготовки

Краткое наименование	Код ре-	Показатель овладения результатами обучения	Наименование оценочного средства и представление его в КОС
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раздела (модуля) / темы дисциплины	зультата обучения		Текущий контроль	Промежуточная аттестация
Раздел 1 Вводно-коррективный курс				
Тема 1.1 Практическое занятие № 1-4	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.1, п. 5.2 входной тест, в 1, в 2)	Выполнение упражнений (п. 6.1 в 1-6)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 1.2 Практическое занятие № 5-10	31 ²¹	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 3, в 4)	Выполнение упражнений (п. 6.1 в 7-12)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые		

Краткое наименование раздела (модуля) / темы дисциплины	Код результата обучения	Показатель овладения результатами обучения	Наименование оценочного средства и представление его в КОС	
			Текущий контроль	Промежуточная аттестация
		связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Раздел 2 Развивающий курс				
Тема 2.1 Практическое занятие № 11-14	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п.5.2. в 5, в 6)	Выполнение упражнений (п. 6.1 в 13, в 14)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2 22	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.2 Практическое занятие № 15-17	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п.5.2. в 7, в 8)	Выполнение упражнений (п. 6.1 в 15, в 16)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказыва-		

Краткое наименование раздела (модуля) / темы дисциплины	Код результата обучения	Показатель овладения результатами обучения	Наименование оценочного средства и представление его в КОС	
			Текущий контроль	Промежуточная аттестация
		ния, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.3 Практическое занятие № 18-21	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п.5.2. в 9)	Выполнение упражнений (п. 6.1 в 17)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1 ₂₃	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.4 Практическое занятие № 22-25	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессио-		

Краткое наименование раздела (модуля) / темы дисциплины	Код результата обучения	Показатель овладения результатами обучения	Наименование оценочного средства и представление его в КОС	
			Текущий контроль	Промежуточная аттестация
		нальная лексика)	Выполнение упражнений (п.5.2. в 10)	Выполнение упражнений (п. 6.1 в 18)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.5 Практическое занятие № 26-29	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 11)	Выполнение упражнений (п. 6.1 в 19)
	32 ²⁴	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совер-		

Краткое наименование раздела (модуля) / темы дисциплины	Код результата обучения	Показатель овладения результатами обучения	Наименование оценочного средства и представление его в КОС	
			Текущий контроль	Промежуточная аттестация
		шенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.6 Практическое занятие № 30 - 33	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2.в 12)	Выполнение упражнений (п. 6.1 в 20)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.7 Практическое занятие № 34 - 37	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 13)	Выполнение упражнений (п. 6.1 в 21)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуни-		

Краткое наименование раздела (модуля) / темы дисциплины	Код результата обучения	Показатель овладения результатами обучения	Наименование оценочного средства и представление его в КОС	
			Текущий контроль	Промежуточная аттестация
		кации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.8 Практическое занятие № 38 - 41	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 14)	Выполнение упражнений (п. 6.1 в 22)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2 ²⁶	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.9 Практическое занятие № 42 – 44	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 15)	Выполнение упражнений (п. 6.1 в 23)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном,		

Краткое наименование раздела (модуля) / темы дисциплины	Код результата обучения	Показатель овладения результатами обучения	Наименование оценочного средства и представление его в КОС	
			Текущий контроль	Промежуточная аттестация
		межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.10 Практическое занятие № 45 – 48	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 16)	Выполнение упражнений (п. 6.1 в 24)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1 ²⁷	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.11 Практическое	31	использовать лексический и грамматический минимум,		

Краткое наименование раздела (модуля) / темы дисциплины	Код результата обучения	Показатель овладения результатами обучения	Наименование оценочного средства и представление его в КОС	
			Текущий контроль	Промежуточная аттестация
занятие № 49 – 50		общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 17)	Выполнение упражнений (п. 6.1 в 25)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.12 Практическое занятие № 51 – 54	31 ²⁸	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 18)	Выполнение упражнений (п. 6.1 в 26)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие		

Краткое наименование раздела (модуля) / темы дисциплины	Код результата обучения	Показатель овладения результатами обучения	Наименование оценочного средства и представление его в КОС	
			Текущий контроль	Промежуточная аттестация
		или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.13 Практическое занятие № 55 – 58	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 19)	Выполнение упражнений (п. 6.1 в 27)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2 29	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.14 Практическое занятие № 59 - 63	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 20)	Выполнение упражнений (п. 6.1 в 28)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять раз-		

Краткое наименование раздела (модуля) / темы дисциплины	Код результата обучения	Показатель овладения результатами обучения	Наименование оценочного средства и представление его в КОС	
			Текущий контроль	Промежуточная аттестация
		личные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.15 Практическое занятие № 64 – 68	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 21)	Выполнение упражнений (п. 6.1 в 29)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1 30	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.16 Практическое занятие № 69 – 73	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 22)	Выполнение упражнений (п. 6.1 в 30)
	32	употреблять формы и виды устной и письменной комму-		

Краткое наименование раздела (модуля) / темы дисциплины	Код результата обучения	Показатель овладения результатами обучения	Наименование оценочного средства и представление его в КОС	
			Текущий контроль	Промежуточная аттестация
		никации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		
Тема 2.17 Практическое занятие № 74 – 90	31	использовать лексический и грамматический минимум, общеупотребительные глаголы (общая и профессиональная лексика)	Выполнение упражнений (п. 5.2 в 23, в 24, в 25)	Выполнение упражнений (п. 6.1 в 31, в 32, в 33)
	32	употреблять формы и виды устной и письменной коммуникации на иностранном языке при межличностном, межкультурном и профессиональном взаимодействии		
	У1	строить простые высказывания, взаимодействовать в коллективе, применять различные формы и виды устной и письменной коммуникации на иностранном языке		
	У2	понимать общий смысл четко произнесенных высказываний, составлять простые связные сообщения на общие или профессиональные темы, самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас		

5. Примеры оценочных средств для проведения текущей аттестации

5.1 Вопросы для собеседования (устного опроса):

My Family

1. Is your family large?
2. What members does it consist of?
3. What is your mother's name? (father's)
4. How old is she? (he)
5. What is your name?
6. What are you?
7. Where do you live?
8. Is your college far from your house?
9. What do you do in your spare time?
10. What do the members of your family like to do in the evening?

5.2 Примеры тестовых заданий

Входной тест

Choose the right variant.

1. I don't remember ... that I'm sure you're mistaken.
a) to say; b) say; c) saying; d) to have said.
2. There were two answers, and ... was right.
a) neither; b) no one; c) no; d) not any.
3. This dress is ... as the one I had before.
a) plenty the same; b) very similar; c) very same; d) much the same.
4. He ... here from 1955 to 1960.
a) worked; b) works; c) has been working; d) has worked.
5. He's... his sister.
a) much taller that; b) much more taller than; c) much taller than; d) more taller than.
6. Be careful you don't... your keys!
a) lost; b) loosen; c) lose; d) loose.
7. What they say may be true; you never can...
a) say; b) tell; c) remember; d) recognise.
8. He didn't move, but just... where he fell.
a) lain; b) lay; c) laid; d) lied.
9. I haven't had a reply to the invitation I sent you last week. ... to my patty?
a) Shall you come; b) Are you coming; c) Do you come; d) Should you come,
10. That man reminds me ... my history teacher.
a) from; b) of; c) about; d) on.
11. The children hadn't met ... their grandparents or their uncle before.
a) or, b) neither; c) nor, d) either.
12. Before she started university, Jane ... in the States for six months working as a nanny.
a) lives; b) has been living; c) has lived; d) had lived.
13. He was ... tired to go on.
a) to; b) enough; c) so; d) too.
14. I ... saw Michael two years ago.
a) lastly; b) last time; c) last; d) the last time.
15. I like the red dress and the pink shoes. The trouble is that they don't ...very well.
a) match not each other; b) match themselves; c) go with each other; d) go on with the other.
16. He's as polite as his brother is ...polite. (подобрать префикс)
a) im; b) non; c) dis; d) un.
17. It's been quite a long time ... I had a holiday abroad,
a) ago; b) since; c) for; d) when.
18. You ... pay for this information. It's free.
a) oughtn't to; b) don't have to; c) shouldn't to; d) mustn't.

19. ... quite a lot of rain forecast for today.
a) It has; b) Is; c) It's; d) There's.
20. I'm free this evening. ... we go out to dinner?
a) Will; b) Would; c) Shall; d) Won't.
21. I need a holiday, ... I?
a) need not; b) aren't; c) don't; d) need.
22. Most of the cattle ... under the trees.
a) is laying; b) is lying; c) are lying; d) are laying.
23. Children seem to find computers easy, but many adults aren't used to ... with microtechnology.
a) work; b) working; c) a work; d) the work.
24. Parents were made ... the school reconstruction,
a) finance; b) to financing; c) to finance; d) financing.
25. The children have made lots of new friends since we ... to this town.
a) have moved; b) moving; c) moved; d) have been moved.
26. I don't understand this sentence. Could you tell me what ...?
a) this word means; b) means this word; c) does mean this word; d) does this word mean.
27. ... of the three boys got a prize,
a) A few; b) Both; c) Each; d) Every.
28. The agency intended to let each applicant... in the interview.
a) participate; b) to participate; c) so as to participate; d) participating.
29. All the children in this family are gifted, but this one is ... gifted of all.
a) little; b) the less; c) the least; d) un- .
30. He enjoyed ... computer games at first, but after a while he got bored with them.
a) to play; b) playing; c) make play; d) having played.
31. We haven't managed to meet... three years.
a) since; b) for; c) after; d) last.
32. Nothing is wrong,...?
a) can it; b) is it; c) isn't it; d) can't be.
33. A meeting of the society will be ... on Tuesday evening at 6 o'clock.
a) made; b) taken; c) held; d) placed.
34. May I apologize ... being so late?
a) myself for; b) for; c) -; d) myself.
35. All the furniture in this room ... antique.
a) are; b) are made of; c) have; d) is.
36. ... traffic in the city center.
a) There's always many; b) It is always heavy; c) There's always heavy; d) It is always much.
37. You'll find the travel agency ... the end of the street.
a) by; b) in; c) on; d) at.
38. She ... the piano since she was ten.
a) has been playing; b) is playing; c) has played; d) had played.
39. Doing these exercises may be good ... me, but I hate every minute of it.
a) to; b) for; c) on; d) at.
40. She heard Miss Drake ... that Ann was really happy.
a) tell; b) to tell; c) say; d) to say.
41. You have bought a FIAT. You ... a BMW.
a) should have bought; b) would have bought; c) had better buy; d) would rather have bought.
42. Poor Jack — he lost his homework, and he ... do it again,
a) needs; b) ought; c) shall; d) has to.
43. The food at the party was horrible, I've never eaten ... awful food!
a) such a; b) such; c) such an d) so.
44. "I'm not very hungry". — "..."

- a) Neither do I; b) I am; c) So am I; d) Nor I am.
 45. The... from London to Bristol takes two hours by car.
 a) travel; b) journey; c) voyage; d) driving.
 46. Open the window, ... you?
 a) must; b) need; c) will; d) do.
 47. You must try not to ... so many mistakes.
 a) do; b) tell; c) make; d) perform.
 48. Helen asked me if... the film called "Star wars".
 a) have I seen; b) have you seen; c) had I seen; d) I had seen.
 49. I promise that I... to work on time every morning in future,
 a) get; b) am getting; c) will get; d) would get.
 50. I'm not going to tell you the reason ... my decision,
 a) to; b) with; c) on; d) for.

USE OF GRAMMAR answers.

1-c; 2-a; 3-d; 4-a; 5-c; 6-c; 7-b; 8-b; 9-b; 10-b; 11-d; 12-d; 13-d; 14-c; 15-c; 16-a; 17-b; 18-b; 19-d; 20-c; 21-c; 22-c; 23-b; 24-c; 25-c; 26 — a; 27-c; 28-a; 29-c; 30-b; 31-b; 32-b; 33-c; 34-b; 35-d; 36-c; 37-d; 38-a; 39-b; 40-c; 41-a; 42-d; 43-b; 44-b; 45-b; 46-c; 47-c; 48-d; 49-c; 50-d.

Вариант 1

Read the dialogues and dramatize them in class

1. – Can you do me a favor, Jim? Would you mind introducing me to Miss Jones?
 - Oh, yes, with pleasure, though it's rather strange you don't know each other yet.
 - I just didn't have a chance to get acquainted with her. Is she a nice girl?
 - Yes, of course, and she has a very nice dog.
2. – James, may I introduce Henry Brown? Mr. Smith, a friend of mine.
 - How do you do, Mr. Richardson?
 - How do you do, Mr. Brown?
 (They shake hands)

Вариант 2

Expand the situation introduced by the opening

1. – How do you do, Mr. Jones?
 - How do you do, Mr. Hardy?
 - Sit down, please. What can I do for you?

Вариант 3

Вставьте в предложения подходящую форму местоимения, переведите предложения:

A – I	B – you	C – he	D – she	E – it	F – we	G – they
H – him	I – her ³⁴	J – me	K – us	L – them	M – our	N – your
O – his	P – my	Q – their				

1. Mr. Stanley has a very friendly family. ... sons live with
2. Men's health depends upon ... life style.
3. Susan likes ... friends.
4. The students have practice now. ... plant different trees.
5. Alice asked ... brother where ... had to meet ... friends.
6. Jane and ... friend are painting the ceiling now. ... are going to finish this work tomorrow.
7. Who is speaking? It's, Peter
8. The teacher has corrected ... composition.
9. Mary's parents went to see ... friends.
10. Have ... been to Niagara Falls? Yes, ... have been there twice.
11. Is Pete at home? Can ... speak to ...?
12. Richard has passed his entrance examinations successfully and now ... is a student.
13. Look up into the sky! ... is so marvelous.

14. Primrose didn't know what to give grandfather on ... birthday.
15. The man was very old, but ... was strong and worked a lot.
16. ... parents are so old. Who will look after?
17. Jessica can never see the blackboard because the tall boy always sits in front of
18. Mother said: "... spent all ... money on ... children's education."
19. Gregory met ... wife when ... was working at ... hospital.
20. Don't worry! All ... expenses will be paid.

Вариант 4

Form the plural of the nouns in brackets.

Поставьте данные в скобках существительные во множественное число.

"(Woman) and (cat) will do as they please, and (man) and (dog) should relax and get used to the idea." (Robert Heinlein)

How do the following nouns form their plural?

Как образуют множественное число следующие существительные?

shelf..... ,	bus.....
church,	lorry
sheep,	photo
foot,	baby
hero..... ,	berry
tomato,	pony
radio..... ,	toy.....
thief,	video
tooth..... ,	wife

Tick (✓) the words which normally have plurals in English.

Отметьте слова (✓), которые в английском языке имеют форму множественного числа.

- ☐ wall ☐ air ☐ picture ☐ machine
☐ tea ☐ time (раз) ☐ hour ☐ river
☐ friend ☐ copper ☐ cheese ☐ teacher
☐ glass ☐ glass ☐ paper ☐ paper
 (стакан) (стекло) (бумага) (газета)
☐ music ☐ coffee ☐ armchair ☐ gold
☐ ship ☐ milk ☐ ice ☐ furniture
☐ butter ☐ happiness ☐ tree ☐ ink
☐ money ☐ coin ☐ university ☐ meat
☐ assistance ☐ assistant ☐ darkness ☐ time (время)
☐ wood ☐ wood

35

(древесина) (лес)

Complete the sentences with the noun in brackets using A/AN or a plural form of the noun where possible. Поставьте существительное в скобках во множественное число или используйте артикль A/AN, где это возможно.

1. You never have (time) to talk to me. I called you several (time) yesterday.
2. Could you give me (glass) of water, please? My husband has to wear (glass). I can't send this thing to you by post, it is made of (glass).
3. I need a piece of (wood). The cottage is located nicely. There is (wood) and a lake in the walking distance.
4. I'm allergic to (chicken). I'll draw you (chicken) if you eat your porridge, Mary.
5. (beauty) is a great force. Your younger daughter is going to be real (beauty). All my daughters are (beauty).
6. Anne doesn't eat (cake), it's too fattening, but she brought (cake) and (bottle) of wine to the party.
7. Is it made of (iron) or plastic? I need (iron) to press the suit.

Match the words. Make possessive forms of the words in List 1 to combine them with the words in List 2. Образуйте формы притяжательного падежа от слов в списке 1, в списке 2 найдите слово, сочетающееся с ним по смыслу.

List 1 teachers □ actress □ Tom □ hairdresser children □ our dog □ doctor □ women girls □ Anne and Oliver □ Doris parents □ sheep

List 2 phone number □ habit □ last name toys □ surgery □ school □ club □ home wool □ room □ career □ name □ car

Underline the correct noun group. Подчеркните правильное сочетание существительных.

- | | |
|---|--|
| 1. a cake of chocolate / a chocolate cake | 6. the company office / the company's office |
| 2. bar soap / a bar of soap | 7. the cat tail / the cat's tail |
| 3. Russia's history / the Russia history disks; | 8. disks of a computer / computer |
| 4. a telephone's box / a telephone box music lesson | 9. Mr Green music lesson / Mr Green's |

- | | |
|--|------------------------------------|
| 5. soup of vegetables / vegetable soup | 10. industry of oil / oil industry |
|--|------------------------------------|

Rewright each phrase using the correct genetive form. Напишите фразы, используя в каждой из них соответствующую форму, обозначающую принадлежность предмета.

1. (Oliver) son – Oliver's son;
2. (Canada) national football team
3. (the frame) picture
4. (a week) holiday
5. (bus) station
6. (Jeremy and Jessica) elder sister
7. (children) toys
8. (space) rocket
9. (the women) changing room
10. (the Walkers) party
11. (the key) the car
12. (fruit) tea
13. (the managers) meeting
14. (leather) shoe

Вариант 5

Find synonyms:

1) ship	3) a) to apply	8) to ship	h) vessel
2) transportation	b) to demonstrate	9) to call	i) investigation
3) activity	c) to navigate	10) to develop	j) to name
4) to use	d) term	11) mankind	k) shipment
5) exploration	e) little	12) concept	l) operation
6) to show	f) up-to-date	13) modern	m) needs
7) tiny	g) humankind	14) wants	n) to design

Give Russian equivalents to the English ones:

a large vessel to distinguish from boats based on passenger capacity a variety of activities transportation of people	to float on water based on size ships may be found on transportation of goods entertainment day to day life
---	--

alongside mankind modern commercial system to be key in history upon a raft to be close to to name a similarity of desert to the sea unique own name	throughout the world to serve scientific needs to tell the history to be equivalent to military-oriented vessel a certain kind of equipment port of registry
---	--

Read and translate the text “A SHIP”

A SHIP

A ship is a large vessel that floats on water. Ships are generally distinguished from boats based on size and passenger capacity. Ships may be found on lakes, seas, and rivers and they perform for a variety of activities, such as the transport of people or goods, fishing, entertainment, public safety, and warfare.



*Italian full rigged ship Amerigo Vespucci
in New York Harbor, 1976*

Ships and boats have developed alongside mankind. In major wars, and in day to day life, they have become an integral part of modern commercial and military systems. Fishing boats are used by millions of fishermen throughout the world. Military forces operate highly sophisticated vessels to transport and support forces ashore. Commercial vessels carry billion tons of cargo. These vessels were also key in history's great explorations and scientific and technological developments. Navigators such as Zheng He spread such inventions as the compass and gunpowder. Ships have been used for such purposes as colonization and the slave trade, and have served scientific, cultural, and humanitarian needs.

As Thor Heyerdahl demonstrated with his tiny boat *Kon-Tiki*, it is possible to navigate long distances upon a simple log raft. From Mesolithic canoes to today's powerful nuclear-powered aircraft carriers, ships tell the history of humankind.

The term 'ship' is close to concept of a vessel, but is not equivalent to it. A vessel is a wider concept. So, it is impossible to name a rowboat or a water bicycle the ship, however they are vessels. Usually only big military-oriented vessels or sailing vessels with a certain kind of equipment are called the ships.

Because of a certain similarity of desert to the sea a camel metaphorically is named 'the desert ship'.

A vessel has its unique own name, as a rule, have the state flag and a port of registry. Also, registers of the transport ships are regularly made and updated. The most known is the Lloyd's register.

Find in the text the following words and word-combinations:

которые ходят (плавают) основанный на ... рыболовство развлечение неотъемлемая часть рыбацкие лодки управлять исследования и технологические разработки работорговля колонизация длинные расстояния авианосец парусное судно государственный флаг	обычно признавать (допускать, разрешать) разрабатывать в большинстве войн военные силы перевозить тонны грузов мореплаватель изобретение пороха цель управлять судном эпоха мезолита история человечества верблюды составлять и обновлять
--	--

Вариант 6

Correlate words and word-combinations in two columns:

1. to float 2. size and passenger 3. a variety of 4. to become 5. to transport and support 6. to carry 7. to be key in 8. to be used for 9. to serve 10. to navigate 11. to be close to 12. to make and update	a) activities b) explorations and scientific and technological developments c) forces ashore d) colonization and slave trade e) capacity f) upon a log raft g) an integral part 2) billions tons of cargo 3) on water 4) scientific, cultural and humanitarian needs 5) concept to a vessel 6) register of ships
---	---

Make up your own sentences with the obtained word-combinations.

Translate the sentences into English:

1. Корабль это судно, которое ходит по воде.
2. Корабли выполняют такие виды деятельности, как перевозка людей и грузов, рыбный промысел и развлекательные круизы, спасение людей на воде и военные действия.
3. В наши дни суда стали неотъемлемой частью современных коммерческих и военных систем.
4. Суда являются ключевой составляющей в научных и технологических разработках и исследованиях.
5. Раньше корабли использовались для работорговли и колонизации стран, сейчас корабли служат научным, культурным и гуманитарным нуждам человечества.
6. Корабли рассказывают историю человечества, начиная от каноэ эпохи

мезолита и заканчивая современными атомными авианосцами.

7. Понятия «корабль» и «судно» близки по значению, однако понятие «судно» имеет более широкое трактование.
8. Как правило, каждое судно имеет свое собственное название, государственный флаг и порт приписки.

Answer the questions:

1. What is 'a ship'?
2. How are ships distinguished?
3. What activities do ships perform?
4. What is the role of ships in day to day life?
5. Were ships key in history's explorations and scientific and technological developments?
6. What purpose have ships served?
7. What is the difference between 'a ship' and 'a vessel'?
8. What does each ship have?
9. Where does this information contain?

Вариант 7

Work in chain using the words and word-combinations from the Active Vocabulary:

student 1 – a word in Russian,
 student 2 – the translation of the word,
 student 3 – the word-combination with the word,
 student 4 – the sentence with the word-combination,
 student 5 – the translation of the sentence.

Find pairs of synonyms:

1) shipbuilding	a) body	11) ancient	k) old
2) ship	b) century	12) to mount	l) contemporary
3) commercial	c) to install	13) shipwright	m) rudder
4) ship breaking	d) vessel	14) to steer	n) to finish
5) to develop	e) to fasten	15) to end	o) shipyard
6) millennium	f) merchant	16) side	p) board
7) wooden plank	g) timber board	17) helm	q) to move
8) to drift	h) ship construction	18) to propel	r) to introduce
9) hull	11) dismantling	19) modern	k) to float
10) to lash	12) to navigate	20) wharf	l) shipbuilder

Read and translate the text "SHIPBUILDING"

SHIPBUILDING

Shipbuilding is the construction of ships. It normally takes place in a specialized facility known as a shipyard. Shipbuilders, also called shipwrights, follow a specialized occupation that traces its roots to before recorded history.

Shipbuilding and ship repairs, both commercial and military, are referred to as the 'naval sector'. The construction of boats is a similar activity called boat building. The dismantling of ships is called ship breaking.

Evidence from ancient Egypt shows that the early Egyptians already knew how to assemble planks of wood into a ship hull as early as 3000 BC¹. The oldest ships were constructed of wooden planks which were ‘sewn’ together.

In the 2nd millennium BC the ships of Ancient Egypt’s Eighteenth Dynasty were typically about 25 meters (80 ft) in length, and had a single mast, sometimes consisting of two poles lashed together at the top making an A shape. They mounted a single square sail on a yard, with an additional spar along the bottom of the sail. These ships could also be oar propelled.

In the 1st millennium BC the Chinese built large rectangular barges known as ‘castle ships’, essentially floating fortresses complete with multiple decks with guarded ramparts. It was in 1st century China that the stern-mounted rudder was first developed.



Samos Agios Isidoro

Viking long ships developed from an alternate tradition of clinker-built hulls fastened with leather thongs. Sometime around the 12th century, northern European ships began to be built with a straight sternpost, enabling the mounting of a rudder, which was much more durable than a steering oar, held over the side. Development in the Middle Ages favored ‘round ships’, with a broad beam and heavily curved at both ends.

The introduction of cannons onto ships in the 18th century encouraged the development of tumblehome, the inward slant of the above water hull, for additional stability, as well as techniques for strengthening the internal frame.

Iron was gradually adopted in ship construction, initially in small areas needing greater strength, then throughout, although initially copying wooden construction. Steel supplanted wrought iron when it became readily available in the latter half of the 19th century. Wood continued to be favored for the decks, and is still the rule as deck covering for modern cruise ships.

The modern global shipbuilding industry is currently dominated by South Korea, which is by far the world’s largest shipbuilding nation in terms of tonnage and number of vessels built, in spite of high labour cost⁴⁹, producing more ships than the entire world output combined in 2008. This is largely due to its highly advanced shipbuilding technology and high productivity and efficiency of its shipyards.

Вариант 8

Match the words and word-combinations in two columns:

1) dismantling	a) руль, установленный на корме
2) additional stability	b) единственный квадратный парус
3) wooden planks	c) прямоугольная баржа
4) to lash poles together	d) плавучая крепость
5) floating fortress	e) кожаный ремень
6) multiple decks	f) деревянные доски
7) rectangular barge	g) высокая стоимость труда
8) clinker-built hull	h) демонтаж судна
9) leather thong	i) многочисленные палубы
10) high labour cost	j) усилить внутреннюю часть

11) advanced shipbuilding technology 12) to strengthen the internal frame 13) stern-mounted rudder 14) single square sail	шпангоута к) передовая технология корабле- строения л) дополнительная устойчивость м) обшитый внатрою корпус н) нагнать (связывать) шесты вместе
--	---

Fill in the gaps using the words and word-combinations suitable for characterizing earlier ships. The words and word-combinations are given in the box:

military, mast, oar, leather, beam, lashed, rectangular barges, rudder, sail, iron, stern-post, commercial, planks of wood, decks, hulls, cannons, tumblehome

- Both _____ and _____ are referred to as the 'naval sector'.
- The early Egyptians had already assembled _____ into a ship.
- These ships had a single consisting of two poles _____ together.
- They had a single square _____, and could also be _____ propelled.
- In the 1st century BC the Chinese built large _____ with multiple _____ and stern-mounted _____.
- Vikings fastened their clinker-built _____ with _____ thongs.
- Northern European ships were built with a straight _____.
- The Middle Ages 'round ships' were developed with a broad _____ and heavily curved at both ends.
- In the 18th century _____ was developed because of the introduction of _____.
- _____ became widely used in ship construction in the 19th century.

Answer the questions:

- What is shipbuilding?
- Where does it take place generally?
- What is dismantling?
- What were the first Egyptian ships similar?
- When and where was the first rudder developed?
- What facts do you consider to be interesting in Vikings ships?
- What caused the development of tumblehome?
- What construction material was adopted in the 19th century?
- Wood didn't continue to be used in shipbuilding later, did it?
- The global dominating shipbuilding industry is considered to be in South America, isn't it?

Вариант 9

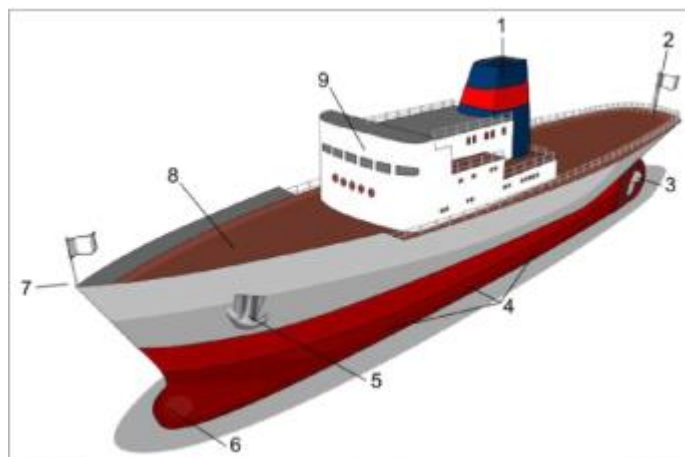
Read and translate the text "GENERAL DESCRIPTION OF A SHIP" using the Vocabulary.

GENERAL DESCRIPTION OF A SHIP

1. The main body of a ship

The main body of a ship is called a hull. The hull is divided into three main parts: the foremost part is called the bow; the rearmost part is called the stern; the part in between is called midships. The hull is the main part of the ship. This is the area between the main deck, the sides (port and starboard) and the bottom. It is made up of frames covered with plating. The part of the hull below water is the ship's underwater body. The distance between the waterline and the main

deck is the vessel's freeboard. The hull is divided up into a number of watertight compartments by decks and bulkheads. Bulkheads are vertical steel walls going across the ship and along. The hull contains the engine room, cargo spaces and a number of tanks. In dry cargo ships the cargo space is divided into holds. Openings giving access to holds are called hatches. In liquid cargo vessels the cargo space is divided into tanks.



*Main parts of ship: 1.smokestack or funnel; 2.stern;
3.propeller and rudder; 4.portside (the right side is known
as starboard); 5.anchor; 6.bulbous bow; 7.bow; 8.deck;
9.superstructure*

2. On deck facilities

At the fore end of the hull are the forepeak tanks, and at the after end are afterpeak tanks. They are used for fresh water and fuel. If a ship has double sides, the space between the sides contains wing tanks. The space between the tank top and the space contains double bottom tanks.

All permanent housing above the main deck is known as superstructure. Nowadays, cargo vessels are normally built with the after location of the engine room and bridge superstructure to gain more space for cargo. The forward raised part of the deck is called the forecastle and its after raised part is the poop. On deck there are cargo handling facilities, such as cranes, winches, derricks, etc. Ships having derricks also have cargo masts and cargo posts (or Samson posts) on deck.

3. Ship location when loading

Since a ship is supported by fluid pressure, she will incline in any direction in the process of loading according to the position of the weights placed on her. Therefore the ship's position below water must be closely watched. The angle that a ship is making fore and aft with the water is known as trim. An extreme difference between the water levels at each end of the ship indicates bad loading. The levels are read by numbers painted on the ship's stern and called draught marks. A list or inclination from one side to another, caused by faulty loading, is known as heel.

Read the sentences translating the words in brackets into English:

2. The main parts of a ship are the hull (надстройки) ____ and subdivision members.
3. The forward end of the hull is called (нос) _____.
4. The after end of the hull is called (корма) _____.
5. The framing (включает) _____ bottom, side and deck framing.
6. (Бак) _____ is a superstructure in the forward end of a ship.
7. (Ют) _____ is a superstructure aft.
8. Across (переборки) _____ are arranged from side to side.
9. Decks of a (корпуса) _____ are: upper deck, middle deck and lower deck.
10. (Палубы) _____ of the superstructure are: bridge deck, (прогулочная) _____ deck and boat deck.

Match the words in the two columns:

1) hull	a) vertical steel walls across and along the ship
2) bow	b) foremost part
3) stern	c) tanks at the after end
4) midships	d) openings of holds
5) underwater body	e) main body
6) freeboard	f) distance between waterline and the main deck
7) bulkheads	g) cargo handling facilities
8) hatches	h) rearmost part
9) tanks	i) tanks at the fore end
10) forepeak tanks	j) part between the bow and the stern
11) afterpeak tanks	k) cargo space for fluid
12) heel	l) all permanent housing above the deck
13) superstructure	m) part below water
14) cranes, winches, derricks	n) list, inclination

Вариант 10

Match the definition to the words given in box:

afterpeak, hold, beam, hatch cover, bottom, hatch coaming, bow, hatch, bridge, framing, bulkhead, frame, compartment, forepeak, deck, stern, forecastle, double bottom, plating, tweendeck, poop, sternpost, side, stem

- The forward end of the hull is called _____.
- The after end of the hull is called _____.
- The lowermost part of the hull is called _____.
- The topping part of the hull is called _____.
- The wall of the hull is called _____.
- The hull's shell is called _____.
- The system of beams, girders and frame is called _____.
- The vertical watertight wall is called _____.
- The superstructure erected at the forward end of the ship is called _____.
- The superstructure erected at the after end of the ship is called _____.
- The superstructure erected about amidships is called _____.
- The space in the hull restricted by bulkheads is called _____.
- Openings in the deck passage of cargo are called _____.
- The iron rim around a hatch is called _____.
- The plate which covers a hatch is called _____.
- Cargo storage areas are called _____.
- Decks fitted in the cargo holds are called _____. The space between two decks is also called _____.
- The foremost compartment is called _____.
- The transverse girders stiffening the deck plating are called deck _____.
- The transverse girders stiffening the side plating are called side _____.

Read and translate the text “HOLDS AND HATCHES”. HOLDS AND HATCHES

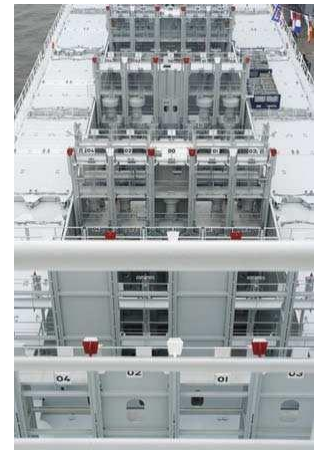
1. Holds

The inner space of a ship between the limber boards of a double bottom and the decks is designed for carrying cargoes. This space is called a hold.

Holds have different capacity. Big vessels have cargo holds divided into several separate compartments by watertight bulkheads. Each dry cargo vessel has four or five holds. The holds have bilges which serve to give way for drainage the water which may condensate on metal bulkheads or collect on wooden floorings. The water collected in the bilges is pumped out by a hold pump. To protect the bilges from corrosion they are covered with cement or special anti- corrosion substance, besides they are protected by

limber boards. The double bottom is covered with removable wooden flooring. Cargo battens or ‘spar ceiling’ as they are often called, comprises portable wooden battens fitted to the inner edges of the frames and so from sheathing to the ship’s side.

Spar ceiling is made up of boards and arranged either horizontally or vertically between frames. The purpose of this wooden sheathing is to prevent packages of cargo from damage by moisture which may collect on the side of the ship. The space so formed between the spar ceiling and the ship’s side helps to provide a complete air space around the cargo and thereby improves ventilation. The spar ceiling should always be kept in a good state.



2. Hatches

Each hold has a hatchway. The hatchway is a rectangular opening in the ship’s deck. The vertical plating around the hatchway is called hatchway coaming. When the cargo work is over, it is necessary to cover the ship’s hatches. Hatches should be covered with special covering systems. Despite the covering system used the hatch beams should be fitted into sockets riveted to the inner side of coamings.

The hatch beams serve to support the hatch covers. Quick operating hatch covers permit the opening or closing of covers in as little time as two minutes per hatch⁴. Some types of hatch covers are formed of hinged sections in one or several pairs and are especially suitable to big hatchways. The hinged sections are stowed at the ends of the hatchway. Where space is restricted at the hatch ends a side rolling system is used athwartships from the holds.



A hatch or hatchway is the opening at the top of a cargo hold.

The use of the modern form of hatch coverings has the following advantages: quick working reduced cargo handling time better use of the space elimination of damage due to the

presence of coamings. After finishing loading and before leaving the port it is compulsory to cover the hatches with tarpaulins to ensure water tightness.

Match words and word-combinations from columns:

1) the inner space of a ship used for stowage cargoes 2) a kind of a wall that separates the holds from each other 3) a place in the double bottom which gives way for drainage the water collected on wooden flooring 4) wooden battens which prevent packages of cargo from damage by moisture, collected on the side of the ship 5) wooden parts which protect the bilges from damage	a) bilge b) limber boards c) spar ceiling d) watertight bulkhead e) hold
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Вариант 11

Translate from English the following words and word-combinations:

to arrange cargo (bottom, side) shell the shell of the hull (bottom, side, deck) plating (bottom, side, deck) framing forward end (part) of a ship fore of the superstructure fore and aft protect the ship (the rudder arrangement) means of protection outer space the space between superstructures (the bridge and poop, the bridge and fore-castle) to serve as an explanation diplomatic service to provide the strength of a ship the bridge provided amidships to save a passenger (a ship) saving bank fire-proof safety transverse bulkheads (compartments, framing) longitudinal bulkheads (compartments, framing) the bridge provided amidships to save a passenger (a ship) a saving bank fire-proof safety transverse bulkheads (compartments, framing) longitudinal bulkheads (compartments, framing)	to arrange (superstructure, fore-castle, bridge, poop) general arrangement of the hull ship framing after end (part) of a ship aft of the superstructure the main parts (characteristics, building, machine) to be protected by bulwark to include the following members (life boats, bottom, side and deck framing, clean and dirty tankers) to serve in the Army to serve as an officer to serve the cause of peace communication service to provide openings strong plating (bulwark) the strength of the shell strength of materials strength requirements to strengthen the bow to strengthen peace and friendship
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Read and translate the text.

The tree was the first and most widespread material for a design of vessels. During several thousand years the ships did only of a tree but when there appeared a steam engine, the fighting ships have started to cover with metal iron, but more often, steel. In the 20th century all vessels were under construction of steel. Submarines also were under construction of steel, and in rare cases –from the titan.

Further also vessels were created from ferro-concrete, aluminium and reinforced concrete. At the end of the century there was a new material – plastic. The hull from aluminium is very easy and durable. Older ships and pleasure craft often have or had wooden hulls. Steel is used for most commercial vessels. Aluminium is frequently used for fast vessels, and composite materials are often found in sailboats and pleasure craft.

Some ships have been made with concrete hulls.

Shipboard equipment varies from ship to ship depending on such factors as the ship's era, design, area of operation, and purpose. Some types of equipment that are widely found include:

- masts can be the home of antennas, navigation lights, radar transponders, fog signals, and similar devices often required by law;
- ground tackle includes equipment such as mooring winches, windlasses, and anchors. Anchors are used to moor ships in shallow water. They are connected to the ship by a rope or chain. On larger vessels, the chain runs through a hawsepipe;
- cargo equipment such as cranes and cargo booms are used to load and unload cargo and ship's stores;
- safety equipment such as lifeboats, life rafts, fire extinguishers, and survival suits are carried aboard many vessels for emergency use.

Other safety means include the following:

- the life buoy is the belt from a floating material, for example from rubber, inflated with air;
- the life jacket is the floating waistcoat, which is put on to remain on a water surface;
- the saving raft is the rescue raft both inflatable and constructed. Sometimes it is built of a tree or other material wrecked;
- saving boats are also inflatable. In case of accident the boat lowers on water on cables.

Say in 3 sentences the main idea of the text.**Make up a plan to the text. Compare it with your group-mates.**

46

Вариант 12**Read and translate the text “MEASURING SHIPS”
MEASURING SHIPS**

One can measure ships in terms of overall length, length of the ship at the waterline, beam (breadth), depth (distance between the crown of the weather deck and the top of the keelson), draft (distance between the highest waterline and the bottom of the ship) and tonnage. A number of different tonnage definitions exist and are used when describing merchant ships for the purpose of tolls, taxation, etc.

In Britain until Samuel Plimsoll, a Member of Parliament, engaged some engineers to derive a fairly simple formula to determine the position of a line on the side of any specific ship's hull which, when it reached the surface of the water during loading of cargo, meant the ship had reached its maximum safe loading level. To this day, that mark, called the 'Plimsoll Line', exists on ships' sides, and consists of a circle with a horizontal line through the centre.

Because different types of water (summer, fresh, tropical fresh, winter north Atlantic) have different densities, subsequent regulations required painting a group of lines according to Samuel Plimsoll's Merchant Shipping Act of 1876 to indicate the safe depth (or freeboard above the surface) to which a specific ship could load in water of various densities. Hence, the 'ladder' of lines has been seen alongside to this day. The Plimsoll mark is called the 'freeboard mark' or 'load line mark' in the marine industry.

In the course of loading load lines must be watched above all. The load lines are engraved and then painted on the both sides of ships. The divided circle on the left shows the depth to which the ship may be loaded in summer time. Below this line are, on the grid to the right, two lines. The one marked *W* means winter loading, the lower one marked *WNA* means the maximum depth to which the ship may be loaded if she is going across the North Atlantic in winter. The other marks above these are: *R* for tropical, *F* for fresh water. These lines are shown on the ship's Load Line Certificate. In case of overloading a ship, so that these lines are under water, the penalties are severe.

Fill in the gap with the words from the box:

depth, determine, indicate, load, measure, tonnage, safe, centre, draft, line, mark, water, freeboard, marine

1. One can _____ ships in terms of length, depth, draft and tonnage.
2. _____ is the distance between the crown of the weather deck and the top of the keelson.
3. The distance between the highest waterline and the bottom of the ship is _____.
4. When describing merchant ships _____ is used for purpose of tolls and taxations.
5. S. Plimsoll and a group of engineers derived a formula to _____ the position of a line on the side of a hull.
6. The _____ means the ship has reached the maximum _____ loading level.
7. The _____ consists of a circle with a horizontal line through the _____.
8. Because of different types of _____ a group of lines is painted to _____ the safe depth.
9. The 'ladder' is called '_____ mark' or '_____ line mark' in _____ industry.

Match the words and word-combinations in the left and right columns:

1) when describing merchant ships	a) безопасная глубина
2) Plimsoll Line	b) расстояние между
3) safe depth	c) корпус судна
4) weather deck	d) прогулочная палуба
5) distance between	e) отметка на подводной части борта
6) to reach the surface of water	f) достигать поверхности воды
7) ship's hull	g) описывая торговые суда
8) freeboard mark	h) различные воды
9) ship's sides	i) борта судна
10) different types of water	j) линия Плимсолла
11) various water densities	k) различные плотности воды

Вариант 13

State the part of speech of the words in *italic* and translate the sentences:

1. This yard *launches* ice-breakers. This yard *launches* are fast and beautiful.
2. They wanted to *place* the order as quickly as possible. Two *places* were left on board the ship.
3. This ship *sails* from Vladivostok to Japan. The ship's *sails* were made of scarlet canvas.
4. *Transport* ships *transport* passengers and cargo.
5. Vehicle ferries are used for *transporting* cars. Ferries *transporting* cars are called vehicle ferries.

Read and translate the text "TYPES OF SHIPS"

TYPES OF SHIPS

1. Different classifications

Ships are difficult to classify, mainly because there are so many criteria to base classification on. One classification is based on propulsion, i.e. either a sailing ship or a motorship. Sailing ships are ships which are propelled solely by means of sails. Motorships are ships which are propelled by mechanical means to propel it. Motorships include ships that propel itself through the use of both sail and mechanical means.

Other classification systems exist that use criteria such as:

- the number of hulls, e.g., monohull, catamaran, trimaran;
- the shape and size, e.g., dinghy, keelboat, and icebreaker;
- the building materials used, e.g., steel, aluminum, wood, fiberglass, and plastic;
- the type of propulsion system used, e.g., human-propelled, mechanical, and sails;
- the epoch in which the vessel was used, e.g., triremes of Ancient Greece, man-o'-wars of the 18th century;
- the geographic origin of the vessel – many vessels are associated with a particular region, such as the pinnace of Northern Europe, the gondolas of Venice, and the junks of China;
- the manufacturer, series, or class;
- the port of destination, etc.

Another way to categorize ships and boats is based on their use. This system includes military ships, commercial vessels, fishing boats, pleasure craft and competitive boats, lake and river boats, etc.

2. Classification by drive

There exists another classification – classification by drive. A vessel is classified by a drive on three groups:

- non-self-propelled (for example, barges, flat-bottomed boats). Vessels which have no engine, hence, can move only by means of other vessels. Non-self-propelled vessels basically transport cargoes, rubbish, building materials.
- self-propelled: rowing, sailing and motor vessels. They are put in motion by means of the engine. Self-propelled vessels define the direction and speed. They are considered to be the most widespread kind of vessels; almost all vessels are self-propelled.
- rowing vessels: galleys, kayaks, canoes, life boats, walking boats, walking bicycles. Rowing vessels are set in motion by oars. They are non-self-propelled, as they are set in motion by rowing, and not self-propelled, as they are operated.

3. Classification by placing of the hull

Classification by placing of the hull concerning water is worth mentioning. According to this classification there exist various types of ships, such as:

- underwater – vessels move under water surface the basic part of time, e.g., nuclear submarines;
- diving – vessels plunge for some limited time under water, e.g., scientific bathyscaphes, diesel submarines;
- half-plunging – vessels is basically under water, e.g., drilling floating platforms;
- displacement type – the usual vessels that plunge on some depth under water, e.g., *Titanic*;
- gliding – the vessels which weight is perceived by dynamic pressure of water at vessel movement, e.g., high-speed powerboats;
- hydrofoil vessels – the vessels which weight is perceived by elevating force of underwater wings, e.g., *Rocket*, *Meteor*;
- air-cushion vessels – the vessels which weight is perceived by pressure of air, pumping under the vessel's bottom, e.g., the ferry going through the English Channel *Hovercraft*;
- dynamic hovercrafts – the vessels which weight is perceived by pressure of air owing to movement of air, e.g., ground-effect machine *Ship Model (The Caspian Monster)*.

Fill in the prepositions given in the box

by, in, under, for, on, with, owing to, of, to, from

I usually go _____ the University ____ foot.
The students listened _____ the lecture ____ shipbuilding with great interest.
This vessel sails _____ Vladivostok ____ Nakhodka.
The dockers will unload the ship _____ 5 o'clock.
_____ our way _____ port we met the steamship *Sedov*.
The shipbuilders will launch a new tug _____ September.
Sailors sail _____ port ____ port.
Our last visit _____ submarine *Kursk* was 1998.
Shokalski graduated _____⁴⁹ the naval school ____ honors.
_____ 1849 Nevelskoi sailed _____ the Far East ____ board the transport ship *Baikal*.
Classification _____ ships is based ____ many criteria.
Sailing ships are propelled _____ means ____ sails.
Self-propelled ships are put _____ motion ____ the help ____ engine.
Underwater vessels move _____ water the basic part ____ time.
Diving vessels plunge _____ some limited time ____ water.
Dynamic hovercrafts are the vessels which weight is perceived ____ pressure ____ air
_____ movement ____ air.

Read the sentences translating the words in brackets into English:

1. Ships may be classified (согласно) ____ the place of navigation, hull material, placing of the hull and drive.
2. According to (месту) _____ of navigation ships may be divided into ocean and seagoing ships, river and lake ships coasters.
3. According to the hull material ships may be wooden, steel, (пластиковые) _____, aluminium and so on.

4. Non-propelled ships are barges and (парусники) ____.
5. Self-propelled ships are (пароходы, теплоходы) ____, electric propulsion ships, nuclear-propulsion ships.
6. According to place of the hull ships are divided into floating, gliding, (суда на подводных крыльях, суда на воздушной подушке) ____.
7. According to (назначению) ____ ships are classified into transport ships, fishing ships, research ships, training, ships, competitive boats, etc.
8. Transport ships are divided into passenger ships, cargo ships, passenger-cargo ships and (паромы)_____.
9. (Навалочники) _____carry bulk cargo.
10. (Транспортные) _____ferries carry cars.

Вариант 14

Give Russian equivalents to the English ones:

atomic (heavy, liquid, solid, uranium)
 fuel service (cruising, trial, engine, free running, full, high) speed
 at full speed
 a speedy boat
 at a speed of 30 knots
 air (cargo, cargo-oil, clean ballast,
 deck, fresh water, salt water, oil, petroleum)
 pump
 pumproom
 is known as a speedy ship
 oil
 fuel oil
 oil engine
 engine oil
 diesel oil
 lubricating oil
 tank
 ballast (cargo, fuel, cargo-fuel, clean
 fuel oil, deep, diesel fuel) tank
 to keep air clean (a port open during
 the winter)
 to know the speed (the distance)

Find pairs of words with the same meaning:

1) commercial	a) operation	1) to carry	a) to set (put) in motion
2) ship	b) marine	2) to have	b) task
3) activity	c) baggage	3) to perform	c) to specialize
4) foodstuffs	d) vessel	4) to drive	d) to fulfill
5) luggage	e) automobile	5) to power	e) in great quantity
6) vehicle	f) machine	6) to specify	f) to differ
7) technics	g) voyage	7) to range	g) individual
8) sea (<i>adj.</i>)	h) merchant	8) in bulk	h) to possess
9) flight	i) cruise	9) purpose	i) to transport
10) trip	j) kind	10) person	j) to propel
11) type	k) provision		

Find pairs of words with the opposite meaning:

1) military	a) small	1) to roll on	a) to unpack
2) liquid	b) work	2) to maximize	b) to disappear
3) large	c) multi-purpose	3) to include	c) to stop
4) special-purpose	d) dry	4) to appear	d) unimportant
5) necessary	e) unnecessary	5) to pack	e) to minimize
6) long	f) short	6) to move	f) to exclude
7) leisure	g) civil	7) important	g) to roll off

a) learn the meaning of the verb 'to carry' with different prepositions:

to carry – носить, возить (на транспорте), содержать

to carry on – продолжать;

to carry out – проводить, выполнять

b) fill in the blanks with prepositions if necessary.

1. Cargo vessels carry _____ different commodity: products, technics, building materials, timber, etc.
2. Commercial vessels carry _____ very significant role for global commerce.
3. Different investigations are carried _____ in the field of shipbuilding.
4. Violent storm carried _____ the whole night.
5. His scientific adviser carries _____ to investigate phenomenon of buoyancy in the testing pool.
6. The student carried _____ a serious disease so he had to take exams in autumn.
7. The slogan carries _____ the following: 'Youth is our future'.
8. A young girl carrying _____ heavy cases, the driver suggested to carry _____ them.
9. Ferries are vessels which carry _____ both passengers and vehicles between two coasts of the river or strait.
10. Liquid cargo is carried _____ in bulk aboard tankers.

Read the sentences translating the words in brackets:

1. The ship (движется) _____ at a high speed.
2. The (насосное отделение) _____ is located aft of the engine room.
3. Longitudinal bulkheads (тянутся) _____ fore and aft.
4. Oil (перекачивается) _____ with great speed.
5. Some (насосы) _____ must keep the air clean.
6. (Смазочное масло)⁵¹ _____ can be carried in the double bottom.

Complete the sentences:

1. Tankers carry _____.
2. A clean tanker carries _____.
3. A dirty tanker carries _____.
4. A tanker has her machinery and funnel _____.
5. The cargo space of a tanker is divided by bulkheads into _____.
6. There are two types of bulkheads, such as _____.
7. Transverse bulkheads run _____.
8. Longitudinal bulkheads run _____.
9. Oil is moved into and out of tanks by means of _____.

Вариант 15

State the part of speech of the words in *italic* and translate the sentences:

1. We must *fuel* the ship. This engine works on liquid *fuel*.
2. *Oil* the engine regularly. Fuel *oil* is carried in tanks.
3. The ship sails at a *speed* of 30 knots. Hydrofoil ships *speed* along the river all day long.
4. Transverse bulkheads *run* from side to side. The *run* of this ship is from Khabarovsk to Nikolaevsk-na-Amure.
5. The ship has two *pumps*. Each *pumps* 3 000 gallons of fuel a minute.

Read and translate the text “MILITARY AND AUXILIARY VESSELS”.

MILITARY AND AUXILIARY VESSELS

1. Military Vessels

Modern naval vessels can be broken down into three categories: warships, submarines, and support and auxiliary vessels.



American aircraft carrier Harry S. Truman and a replenishment ship

Modern warships are generally divided into seven main categories, which are: aircraft carriers, cruisers, destroyers, frigates, corvettes, submarines and amphibious assault ships. Battleships cover an eighth category, but are not in current service with any navy in the world.

Most military submarines are either attack submarines or ballistic missile submarines. Most navies also include many types of support and auxiliary vessels, such as minesweepers, patrol boats, offshore patrol vessels, replenishment ships, and hospital ships which are designated with medical treatment facilities.

Combat vessels like cruisers and destroyers usually have fine hulls to maximize speed and maneuverability. They also usually have advanced electronics and communication systems, as well as weapons.

2. Auxiliary Vessels

Auxiliary vessels perform tasks of second importance. Auxiliary vessels do not transport passengers and cargoes, do not participate in flights, but carry out some important problems: suppression of fires, rescue of suffered in disaster. Others are intended for entertainment, for example, for races. There are also vessels which perform scientific research job.

The following auxiliary vessels exist:

- the ice-breaker is the vessel performing icebreaking operations: escort of vessels through ices, rescue operations and , at last, conquest of the Arctic and Antarctic ices. The ice-breaker breaks ice by its eight. The first ice-breaker was Russian *Pilot*. In 1959 there appeared the atomic ice-breaker *Lenin*, then *Arctic regions*, *Siberia* and *Russia*;

- the tow boat is the vessel intended for movement of non-selfpropelled vessels. The towing vessel takes the barge or broken vessel on a towing rope and delivers it in port. Sometimes tows simply push a vessel forward;
- the fire vessel is the vessel intended for suppression of fires on the big vessels, for example, tankers, or ashore. Fire vessels can extinguish also inflamed oil on a surface of water;
- the rescue ship is intended for rescue operations in the sea;
- the dredging pump is the underwater and surface vessel intended for deeping of underwater soil in some places and also for an earth capture for examination;
- the bathyscaphe is the underwater manned device intended for oceanographic and other underwater researches on the big depth. The first bathyscaphe appeared in 1948 was constructed by scientist Ogjustom Pikarom;
- sports vessels are vessels participating in races. Such vessels more often are the small boats developing the big speed. There is such concept as a regatta in which sailing vessels participate;
- the diving boat is a vessel equipped with a diving complex and intended for underwater works.

Render in Russian:

can be broken down into to cover an eighth category either... or... to include many types to maximize speed and maneuverability to carry out some important problems movement of non-self-propelled vessels to extinguish inflamed oil the underwater manned device to be constructed by scientist vessels participating in races a vessel intended for deeping of underwater soil a vessel intended for suppression of fires on the big vessels	to be generally divided into to be not in current service with any navy in the world to be designated with medical treatment facilities as well as weapons to be intended for entertainment icebreaking operations to take on a towing rope to push a vessel forward the underwater and surface vessel the concept as a regatta a vessel equipped with a diving complex a vessel performing icebreaking operations
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Вариант 16

Translate from English into Russian:

to subject to laws fishing vessels trade vessels to trade fish and sea animals modern rigging technical features such as rigging large autonomous special handling facilities a rear ramp commercially captured species blue whiting Atlantic herring Japanese anchovy to float upon the lakes river environment	to subject to regulations and classification to catch fish to be intended for catching various fishes minority of decked vessels enclosed and open deck vessels whaling vessels winches and arms tuna seiners have skiffs Alaska pollack skipjack tuna Chilean mackerel inland and coastal waterways rivers and canals
---	---

broad of beam less corrosive the salt water of the oceans a high growth area of shipping in liquid state to provide steam for the turbines internal combustion engines with greater thermal efficiency a simple classification scheme	shallow draft a low freeboard and high topsides to last much longer to be built with steam turbines to maintain the pressure and temperature two-stroke diesel engines the wide variety of vessels
---	---

Read and translate the text about fishing vessels, inland and coastal boats, LNG carrier and some other types of vessels.

1. Fishing vessels

Fishing vessels are a subclass of commercial vessels, but generally small in size and often subject to different regulations and classification. They can be categorized by several criteria: architecture, the type of fish they catch, the fishing method used, geographical origin, and technical features such as rigging. The world's fishing fleet consists of some 6 million vessels. There is minority of decked vessels with enclosed areas and the rest are open vessels. Most decked vessels are mechanized, but two-thirds of the open vessels are traditional craft propelled by sails and oars. More than 60% of all existing large fishing vessels are built in Japan, Peru, the Russian Federation, Spain or the United States of America.



Fishing boat in Cap-Haitien, Haiti

Trade (fishing) vessels are intended for catching various fishes, whales, and sea animals and non-fish objects. Such vessels have large autonomous. Among them: seiners, trawlers, whaling vessels and drifters.

Special purpose fishing vessels have special handling facilities. For example, trawlers have winches and arms⁵⁴; stern-trawlers have a rear ramp, and tuna seiners have skiffs. The top ten marine commercially captured species include Alaska pollack, blue whiting, skipjack tuna, Atlantic herring, Chilean mackerel, Japanese anchovy, salmon, shrimp, lobster, clams, squid and crab.

2. Inland and coastal boats

Many types of boats and ships are designed for inland and coastal waterways. These are the vessels that float upon the lakes, rivers and canals.



The lake freighter SS Edmund Fitzgerald

Barges are a prime example of inland vessels. Riverboats and inland ferries are specially designed to carry passengers, cargo, or both in the challenging river environment. Riverboats

are generally of shallow draft, being broad of beam, with a low freeboard or high topsides.

Lake freighters, also called lakers, are cargo vessels. These vessels are traditionally called boats, not ships. Since the freshwater lakes are less corrosive to ships than the salt water of the oceans, lakers tend to serve much longer than ocean freighters.

3. LNG carriers

New LNG carriers (a high growth area of shipping) continue to be built with steam turbines. The natural gas is stored in cryogenic vessels in liquid state aboard these ships, and a small amount of ‘boil off’ gas is needed to maintain the pressure and temperature inside the vessels within operating limits. The ‘boil off’ gas provides the fuel for the ship’s boilers, which provide steam for the turbines, the simplest way to deal with the gas. Technology to operate internal combustion engines (modified marine two-stroke diesel engines) on this gas has improved, however, so such engines are starting to appear in LNG carriers; with their greater thermal efficiency, less gas is burnt.



Supertanker AbQaiq

4. Others

The wide variety of vessels defies a simple classification scheme. The above categories include:

- historical boats frequently used as museum ships, training ships, or as good-will ambassadors of a country abroad;
- houseboats, floating structures used as dwellings;
- scientific, technical, and industrial vessels, such as mobile offshore drilling units, offshore wind farms, survey ships, and research vessels;
- submarines used for underwater navigation and exploration.

Вариант 17

Make up word-combinations using the following words. Translate them:

55

fuel, oil, lubricant, liquid, water, engine, dock, sea, space, propulsion, fresh, room, system, control, gear, air, electrical, auxiliary, box, pump, thruster, line, box, feed, accommodation, multiple, conditioned, living, machinery, proofed, generator, ship, synchronized, operation, hydraulic, sound.

Find pairs of words with the same meaning:

1) hazardous	a) voltage	8) cryogenic	h) to drive
2) craft	b) boat	9) ship	i) accommodation
3) type	c) technician	10) to operate	j) to run
4) personnel	d) machinery space	11) to draw	k) to suck
5) engineer	e) kind	12) to propel	l) vessel
6) engine room	f) staff	13) confine	m) cool
7) pressure	g) dangerous	14) cabin	n) limit

Read and translate the text “ENGINE ROOM”.

ENGINE ROOM

In a ship, an engine room is where the main engine(s), generators, compressors, pumps, fuel-lubrication oil purifiers and other major machinery are located. It is sometimes referred to as the ‘machinery space’. Engine rooms are typically towards the stern, or rear, of the boat from the crew’s living accommodations. On modern ships, a sound-proofed, air-conditioned engine control room is situated next to the engine room, for - the ship’s machinery control systems.

The engine room of a motor vessel typically contains several engines for different purposes. Main or propulsion engines are used to turn the ship’s propeller and move the ship through the water. They typically burn diesel oil or heavy fuel oil, and may be able to switch between the two. There are many propulsion arrangements for motor vessels, some including multiple engines, propellers, and gearboxes.

There are also large engines driving electrical generators which provide power for the ship’s electrical systems. Large ships typically have three or more synchronized generators to ensure smooth operation. The combined output of a ship’s generators is well above the actual power requirement in order to accommodate frequent planned maintenance or the loss of one generator.

On a steamship, power for both electricity and propulsion is provided by a large boiler. Superheated steam from the boiler is used to spin powerful turbines for propulsion and turbo generators for electricity. Besides propulsion and auxiliary engines, a typical engine room contains many smaller engines, including generators, air compressors, feed pumps, and fuel pumps. Today, these machines are usually powered by small diesel engines or electric motors, but may also use low-pressure steam.

The engines get their required cooling by means of heat exchangers connected to fresh seawater or divertible to recirculate to tanks in the engine room which are also full of sea water. Both devices are used to draw heat from the engines via the coolant and oil lines.

In addition to this array of equipment is the ships thruster system, typically operated by electric motors controlled from the bridge. These thrusters are laterally mounted propellers that can suck or blow water from port to starboard (i.e. left to right) or vice versa. They are normally used only in maneuvering, e.g. docking operations, and are often banned in tight confines, e.g. dry docks. Thrusters, like main propellers, are reversible by hydraulic operation.

Engine rooms are hot, noisy, sometimes dirty, and potentially dangerous. The presence of flammable fuel, high voltage electrical equipment and internal combustion engines means that a serious fire hazard exists in the engine room, which is monitored continuously by the ship’s engineering staff and various monitoring systems. That is why fire precautions are to be kept thoroughly.

56

If equipped with internal combustion or turbine engines, engine rooms employ some means of providing air for the operation of the engines and associated ventilation. If individuals are normally present in these rooms, additional ventilation should be available to keep engine room temperatures to acceptable limits. If personnel are not normally in the engine space, as in many pleasure boats, the ventilation need only be sufficient to supply the engines with intake air.

Вариант 18

Give the Russian equivalents to the English ones:

propulsion system for ships and boats contra-rotating nuclear ship rotor sail sails are hoisted on the erect masts for fuel savings propeller shaft waste disposal commercial nuclear ship via an alternator crosshead construction of engine opposed piston construction four-stroke medium speed diesel engine emissions in river environment	twin-propeller power-to-space ratio controllable pitch turbo sail poles and human propulsion used in marshy areas for recreation and racing outboard motors nuclear reactor to run submerged at a high speed rotating crankshaft to have an inferior power-to-space ratio two-stroke engine a jetfoil passenger ship low power cruising output reduction of emission
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Read and translate the text “PROPULSION SYSTEMS”

PROPULSION SYSTEMS

1. Types of propulsion systems

Propulsion systems for ships and boats vary from the simple paddle to the largest diesel engines in the world. These systems fall into three categories: human propulsion, sailing, and mechanical propulsion. Human propulsion includes the pole, still widely used in marshy areas, rowing which was used even on large galleys, and the pedals. In modern times, human propulsion is found mainly on small boats or as auxiliary propulsion on sailboats.

Propulsion by sail generally consists of a sail hoisted on an erect mast, supported by stays and spars and controlled by ropes. Sail systems were the dominant form of propulsion until the 19th century. They are now generally used for recreation and racing, although experimental sail systems, such as the kites, turbo sails, rotor sails, and other systems have been used on larger modern vessels for fuel savings.

Mechanical propulsion systems generally consist of a motor or engine turning a propeller. Steam engines were first used for this purpose, but have mostly been replaced by two-stroke or four-stroke diesel engines, outboard motors, and gas turbine engines on faster ships. Electric motors have sometimes been used, such as on submarines. Nuclear reactors are sometimes employed to propel warships and icebreakers.

There are many variations of propeller systems, including twin, contrarotating, controllable-pitch, and nozzle-style propellers. Smaller vessels tend to have a single propeller. Aircraft carriers use up to four propellers, supplemented with bow- and stern-thrusters. Power is transmitted from the engine to the propeller by way of a propeller shaft, which may or may not be connected to a gearbox.

2. Types of engines and turbines

Nuclear-powered steam turbines. In these vessels, the reactor heats steam to drive the turbines. Partly due to concerns about safety and waste disposal, nuclear propulsion is rare except in some navy and specialist vessels such as icebreakers. In large aircraft carriers, the space formerly used for ship's bunkering could be used instead to bunker aviation fuel. In submarines, the ability to run submerged at a high speed and in relative quiet for long periods holds obvious advantages. A few cruisers have also employed nuclear power. An example of a non-military ship with nuclear marine propulsion is the *Arktika* class icebreaker with 75,000 shaft hp. Com-

mercial experiments such as the nuclear ship *Savannah* proved uneconomical compared with conventional propulsion.

Reciprocating diesel engines. About 99% of modern ships use diesel reciprocating engines. The rotating crankshaft can power the propeller directly for slow speed engines, via a gearbox for medium and high speed engines, or via an alternator and electric motor in diesel-electric vessels.

The reciprocating marine diesel engine first came into use in 1903. Diesel engines soon offered greater efficiency than the steam turbine, but for many years had an inferior power-to-space ratio.

Diesel engines today are broadly classified according to their operating cycle (two-stroke or four-stroke), their construction (crosshead, trunk, or opposed piston) and their speed (slow speed up to 300 revs/minute, medium speed in the range 300-900 revs/minute and high speed above 900 revs/minute).

Most modern larger merchant ships use either slow speed, two stroke, crosshead engines, or medium speed, four stroke, trunk engines. The size of the different types of engines is an important factor in selecting what will be installed in a new ship. Slow speed two-stroke engines are much taller, but the area needed, length and width, is smaller than that needed for four-stroke medium speed diesel engines. As space higher up in passenger ships and ferries is at a premium, these ships tend to use multiple medium speed engines resulting in a longer, lower engine room than that needed for two-stroke diesel engines.

Gas turbines. Many warships built since the 1960s have used gas turbines for propulsion, as have a few passenger ships, like the jetfoil. Gas turbines are commonly used in combination with other types of engine, as *Queen Mary 2* has. Due to their poor thermal efficiency at low power cruising output, it is common for ships using them to have diesel engines for cruising, with gas turbines reserved for when higher speeds are needed however, in the case of passenger ships the main reason for installing gas turbines has been to allow a reduction of emissions in sensitive environmental areas or while in port.

Define the difference between the words ‘engine’ and ‘motor’.

Вариант 19

Find in the right column words formed of the words in the left one:

launch	a) lunch	b) lucky	c) launching
relationship	a) correlate	b) ship	c) relate
accommodation	a) date	b) accommodate	c) common
reconstruction	a) reconsider	b) reckon	c) construct
maintenance	a) main	b) ten	c) maintain
charter	a) chart	b) character	c) charisma
facilities	a) face	b) facile	c) facility
remove	a) move	b) remote	c) mow
sustainable	a) stain	b) sustain	c) suss out
significance	a) sign	b) sing	c) resin
compromise	a) prompt	b) promise	c) comprise

Find pairs of the words with the same meaning:

1) stage	a) event	1) to build	a) period
2) ship	b) vessel	2) thoroughly	b) to happen
3) significance	c) to go down	3) main	c) ventilation
4) to go away	d) to include	4) air condition	d) usually
5) feature	e) to end	5) generally	e) carefully
6) plan	f) permanent	6) to charge	f) to load
7) to finish	g) peculiarity	7) to take place	g) to operate
8) designer	h) architect	8) complex	h) to transfer
9) constant	i) to manufacture	9) season	i) difficult
10) case	j) phase	10) overall	j) basic
11) to produce	k) to minimize	11) to run	k) to depart
12) to comprise	l) scheme	12) to convert	l) general
13) to reduce	m) importance	13) to sink	m) to construct

Read and translate the text “LIFECYCLE OF A SHIP”.**LIFECYCLE OF A SHIP**

1. A ship will pass through several stages during its career. The first is usually an initial contract to build the ship, the details of which can vary widely based on relationships between the shipowners, operators, designers and the shipyard. Then, the design phase carried out by a naval architect. Then the ship is constructed in a shipyard. After construction, the vessel is launched and goes into service. Ships end their careers in a number of ways, ranging from shipwrecks to service as a museum ship to the scrapyard.

2. A vessel's design starts with a specification, which a naval architect uses to create a project outline, assess required dimensions, and create a basic layout of spaces and a rough displacement. After this initial rough draft, the architect can create an initial hull design, a general profile and an initial overview of the ship's propulsion. At this stage, the designer can repeat the ship's design, adding detail and improving the design at each stage.

The designer will typically produce an overall plan, a general specification describing the peculiarities of the vessel, and construction blueprints to be used at the building site. Designs for larger or more complex vessels may also include sail plans, electrical schematics, and plumbing and ventilation plans.

3. Ship construction takes place in a shipyard, and can last from a few months for a unit produced in series, to several years to reconstruct a wooden boat like the frigate *Hermione*, to more than 10 years for an aircraft carrier. Hull materials and vessel size play a large part in determining the method of construction. The hull of a mass produced fiberglass sailboat is constructed from a mold, while the steel hull of a cargo ship is made from large sections welded together as they are built.

Generally, construction starts with the hull and on vessels over about 30 meters, by the laying of the keel. This is done in a drydock or on land. Once the hull is assembled and painted, it is launched. The last stages, such as raising the superstructure and adding equipment and accommodation, can be done after the vessel is afloat.

Once completed, the vessel is delivered to the customer. Ship launching is often a ceremony of some significance, and is usually when the vessel is formally named.

4. Ships undergo nearly constant maintenance during their career, whether they be underway, pierside, or in some cases, in periods of reduced operating status between charters or shipping seasons.

Most ships, however, require flights to special facilities such as a drydock at regular intervals. Tasks often done at drydock include removing biological growths on the hull, sandblasting and repainting the hull. Major repairs to the propulsion and steering systems as well as major electrical systems are also often performed at dry dock. Vessels that sustain major damage at sea may be repaired at a facility equipped for major repairs, such as a shipyard. Ships may also be

converted for a new purpose: oil tankers are often converted into floating production storage and offloading units.

5. Most ocean-going cargo ships have a life expectancy of between 20 and 30 years. A sailboat made of plywood or fiberglass can last between 30 and 40 years. Solid wooden ships can last much longer but require regular maintenance. Carefully maintained steel-hulled yachts can have a lifespan of over 100 years.

As ships age, forces such as corrosion, osmosis, and rotting compromise hull strength, and a vessel becomes too dangerous to sail. At this point, it can be scuttled at sea or scrapped by shipbreakers. Ships can also be used as museum ships, or expended to construct breakwaters or artificial reefs.

Many ships do not make it to the scrapyard, and are lost in fires, collisions, grounding, or sinking at sea.

Вариант 20

Find pairs of words with the same meaning:

1) to accelerate	a) collapse	1) navigation	a) world
2) disease	b) to contain	2) diversity	b) strict
3) sheer	c) change	3) to expose	c) variety
4) to include	d) illness	4) spill	d) crude
5) to destroy	e) to wreck	5) harmful	e) to subject
6) destruction	f) pollution	6) raw	f) threat
7) stipulation	g) evident	7) global	g) spot
8) contamination	h) condition	8) stringent	h) shipping
9) alteration	i) to speed up	9) menace	i) destructive

Read and translate the text “SHIP POLLUTION”.

SHIP POLLUTION

Ship pollution is the pollution of air and water by shipping. It is a problem that has been accelerating as trade has become increasingly globalized, posing an increasing threat to the world's oceans and waterways as globalization continues. Because of increased traffic in ocean ports, pollution from ships also directly affects coastal areas. The pollution produced affects biodiversity, climate, food, and human health.

1. Oil spills

Oil spills have ⁶⁰devastating effects on the environment. Crude oil contains polycyclic aromatic hydrocarbons (PAHs) which are very difficult to clean up, and last for years in the sediment and marine environment. Marine species constantly exposed to PAHs can exhibit developmental problems, susceptibility to disease, and abnormal reproductive cycles.

By the sheer amount of oil carried, modern oil tankers must be considered something of a threat to the environment. The International Tanker Owners Pollution Federation has researched 9,351 accidental spills since 1974. According to this study, most spills result from routine operations such as loading cargo, discharging cargo, and taking on fuel oil. Spills resulting from accidents like collisions, groundings, hull failures, and explosions are much larger.

The United States passed the Oil Pollution Act of 1990 (OPA-90), which included a stipulation that all tankers entering its waters be double-hulled by 2015. The European Union passed its own stringent anti-pollution packages, which require all tankers entering its waters to be double-hulled by 2010.

2. Ballast water

When a large vessel such as a container ship or an oil tanker unloads cargo, seawater is pumped into compartments in the hull to help stabilize and balance the ship. During loading, this

ballast water is pumped out from these compartments. One of the problems with ballast water transfer is the transport of harmful organisms.

Ballast and bilge discharge from ships can also spread human pathogens and other harmful diseases and toxins potentially causing health issues for humans and marine life alike. Discharges into coastal waters, along with other sources of marine pollution, have the potential to be toxic to marine plants, animals, and microorganisms, causing alterations such as changes in growth, disruption of hormone cycles, birth defects, suppression of the immune system, and disorders resulting in cancer, tumors, and genetic abnormalities or even death.

3. Exhaust emissions

Exhaust emissions from ships are considered to be a significant source of air pollution. Seagoing vessels are responsible for an estimated 14 percent of emissions of nitrogen from fossil fuels and 16 percent of the emissions of sulphur from petroleum uses into the atmosphere. In Europe ships make up a large percentage of the sulphur introduced to the air, as much sulfur as all the cars, lorries and factories in Europe put together. By 2010, up to 40% of air pollution over land could come from ships.

4. Marine fuel management

Marine fuel management (MFM) is a multi-level approach to measuring, monitoring, and reporting fuel usage on a boat or ship, with the goals of reducing fuel usage, increasing operational efficiency, and improving fleet management oversight. MFM has grown in importance due to the rising costs of marine fuel and increased governmental pressures to reduce the pollution generated by the world's fleet.

Effective MFM requires that you know: how much fuel is used? how the fuel was used? what things impact fuel usage? and by how much?

MFM allows a fleet owner to track actual fuel consumption and relate fuel consumption to the work performed by the vessel. It supports the analysis of the effectiveness of operating strategies and helps develop a clearer understanding of how well a vessel uses its fuel.

Вариант 21

Read and translate the text “SEAFARER’S PROFESSIONS AND RANKS”.

SEAFARER’S PROFESSIONS AND RANKS

1. Introduction

Seafarers hold a variety of professions and ranks, and each of these roles carries unique responsibilities which are integral to the successful operation of a seafaring vessel. A ship's bridge, filled with sophisticated equipment, requires skills differing from those used on the deck, which houses berthing and cargo gear, which requires skills different from those used in a ship's engine room, and so on.

The following is only a partial listing of professions and ranks. Ship operators have understandably employed a wide variety of positions, given the vast variety of technologies, missions, and circumstances that ships have been subjected to over the years. A ship's crew can generally be divided into four main categories: the deck department, the engineering department, the steward's department, and other.

2. Captain / Master

The Captain or Master is the ship's highest responsible officer, acting on behalf of the ship's owner. Whether the captain is a member of the deck department or not is a matter of some controversy, and generally depends on the opinion of an individual captain. The captain has no watch in addition to officers.

3. Deck department

Chief Officer / Chief Mate. The Chief Officer (often called the Chief Mate in the United States) is the head of the deck department on a merchant vessel, second-in-command after the ship's Master. The Chief Mate's primary responsibilities are the vessel's cargo operations, its stability, and supervising the deck crew. The Mate is responsible for the safety and security of

the ship, as well as the welfare of the crew on board. Additional duties include maintenance of the ship's hull, cargo gears, accommodations, the life saving devices and the firefighting appliances. The Chief Mate also trains the crew and cadets on various aspects like safety, firefighting, search and rescue, and various other contingencies. On most vessels, the Chief Officer and First Officer (or First Mate) are synonymous, but passenger vessels often carry a separate First Officer who is junior to the Chief Officer.

Second Officer / Second Mate. The Second Officer (or Second Mate) of a merchant vessel is usually in charge of navigation and is the next licensed position above Third Officer and below Chief Officer. The Second Mate typically stands the 12-4 navigation watch periods. That is, the Second Mate will stand watch from 12.00 to 16.00 at noon and again from 00.00 to 04.00 in the nights. The Second Mate is typically the navigation officer aboard a ship. The navigation officer is responsible for maintaining the charts and navigational equipment on the bridge. The duties also usually consist of developing the voyage plans under the direction of the ship's Master. The other duties of this position often depend upon the type of ship worked aboard. On oil tankers, the Second Officer usually provides the Chief Mate with assistance in tank cleaning.

Third Officer / Third Mate. The Third Officer or Third Mate is the third officer of a merchant vessel. The most junior officer of the ship, the Third Mate is usually the safety officer responsible for firefighting equipment, lifeboats, and emergency systems and is in charge of a bridge or cargo watch.

Deck Cadet. A Deck Cadet (or Apprentice) is a nautical school graduate. The Cadet must first carry out a one-year training on board ships, executing tasks of an officer-of-the-watch under the supervision of senior officers.

Boatswain. A Boatswain, often phonetically spelled and pronounced 'bosun', is in charge of the unlicensed deck crew and is sometimes also third or fourth mate.

Carpenter. Ship's carpenters are now rare. They are, however, frequently found aboard passenger liners. Ship's carpenters are sometimes referred to by the nickname 'Chips'.

Able Seaman. In the modern merchant marine, an able seaman (AB) is a member of the deck department and must possess a merchant mariner's document. An AB will work in a ship's deck department as either a watchstander, a day worker, or a combination of these roles. At sea an AB watchstander's duties include standing watch as helmsman and lookout. While the ship is in port, a watchstander may stand security-related watches, such as a gangway watch or anchor watch.

Ordinary Seaman. An Ordinary Seaman or OS is a first-level position in a ship's deck department. An OS performs a variety of duties concerned with the operation and upkeep of deck department areas and equipment. Upkeep duties include scaling, buffing, and painting decks and superstructure; as well as sweeping and washing the deck. An OS may splice wire and rope; break out, rig, overhaul, and load cargo-handling gear, stationary rigging, and running gear. Additionally, the OS secures cargo, as well as launches and recovers boats. The OS may rig and operate hydrographic and other specialty winches, handle and load oceanographic explosives, and arrange and load beach support equipment.

4. Engineering department

Chief Engineer. The Chief Engineer on a merchant vessel is the official title of someone qualified to supervise the engine department. The qualification for this position is colloquially called a 'Chief's Ticket'. The Chief Engineer commonly referred to as 'Chief' is responsible for all operations and maintenance that have to do with all engineering equipment aboard the ship.

Second Engineer / First Assistant Engineer. The Second Engineer or First Assistant Engineer is the officer responsible for supervising the daily maintenance and operation of the engine department. He or she reports directly to the Chief Engineer. The person holding this position is typically the busiest engineer aboard the ship, due to the supervisory role this engineer plays and the operations duties performed. Operational duties include responsibility for the refrigeration systems, main engines (steam / gas turbine, diesel), and any other equipment. If the engine room

requires round the clock presence and other junior engineers can cover the three watch rotations, this officer is usually a 'day worker' from 06.30-18.30.

Third Engineer / Second Assistant Engineer. The Third Engineer or Second Assistant Engineer is junior to the Second Engineer / First Assistant Engineer in the engine department and is usually in charge of boilers, fuel, auxiliary engines, condensate, and feed systems. This engineer is the third highest marine engineer in rank. □□ is also typically in charge of fueling or bunkering.

Fourth Engineer / Third Assistant Engineer. The Fourth Engineer or Third Assistant Engineer is junior to the Second Assistant Engineer / Third Engineer in the engine department. The most junior marine engineer of the ship, he or she is usually responsible for electrical, sewage treatment, lubricating oil, bilge, and oily water separation systems and usually stands a watch.

Engineering Cadet. An Engineering Cadet (or Apprentice) is a nautical school graduate. The cadet must first carry out a one-year training on board ships, executing tasks of an officer-of-the-watch under the supervision of senior officers.

Qualified Member of the Engine Department. A Qualified Member of the Engineering Department is a senior unlicensed crew member in the engine room of a ship.

Pumpman. A position frequently found aboard fuel tankers.

Oiler. An Oiler is one of the most junior crew members in the engine room of a ship. An Oiler's role consists mainly of keeping machinery lubricated.

Wiper. A Wiper is the most junior crew member in the engine room of a ship. His role consists of wiping down machinery and generally keeping it clean.

5. Steward's department

Chief Steward. The Chief Steward is the senior unlicensed crew member working in the steward's department of a ship. The Chief Steward directs, instructs, and assigns personnel performing such functions as preparing and serving meals, cleaning and maintaining officers' accommodations and steward department areas, and receiving, issuing, and inventorying stores. The Chief Steward also plans menus, arranges supply, overtime, and cost control records. The Steward may inspect or purchase stores and equipment. Additional duties may include baking bread, rolls, cakes, pies, and pastries.

Chief Cook. The Chief Cook is a senior unlicensed crew member working in the Steward's department of a ship. The Chief Cook directs and participates in the preparation and serving of meals, determines timing and sequence of operations required to meet serving times, inspects galley and equipment for cleanliness and proper storage and preparation of food. The Cook may plan or assist in planning meals and taking inventory of stores and equipment. Chief Cooks are sometimes referred to by the nickname 'Cookie'.

Steward's Assistant. A Steward's Assistant or SA is a first-level crew member in the Steward's department of a ship. The role of the SA consists mainly of cleaning and assisting with the preparation and serving of meals.

Вариант 22

Прочитайте, переведите текст, обращая внимание на сноски к тексту

IMPROVING OPERATIONS WITH CERAMICS, PROPELLERS AND ENGINE MONITORING

***The final sessions of The Motor Ship's Tenth Propulsion Conference,
considered techniques, some already in use, for ships of the future***

1. Thrusters developed for the offshore industry but used on ships have a slightly lower efficiency than a single traditional screw plus rudder. However, according to Mr. O. Bjorheden, of KaMeWa, whose paper dealt with thrusters and propellers, a thruster with a 'pulling' propeller combined with a streamlined gear housing, and a stay shaped like a conventional rudder gave comparable efficiency. There were a number of advantages of rotatable thrusters compared with

conventional propulsion systems, he continued. For instance, steering gear was not needed nor was room to house it necessary, and the engine room length could be reduced.

2. At low speeds the effectiveness of a rudder was at its poorest, a problem which naturally did not occur with a thruster; maneuvering therefore was improved at the lower end of speed range. Rudders also reduced the efficiency of the propellers.

3. He described a system, which was a development of the counter rotating propeller concept, in which two equally loaded counter-rotating propellers, coaxially mounted could give a 12 to 15 per cent improvement in efficiency over a propeller. In practice, the mechanical problems in installing such a system inhibited its widespread application¹.

4. But the concept could be realized, Mr. Bjorheden said, using a main propeller, conventionally driven, and a thruster, mounted further aft and in line but facing forward and rotating in the opposite direction, driven through a bevel gear² by, for instance, an electric motor. This arrangement exploits the rotational losses in the propeller's slipstreams³, and can improve hydrodynamic efficiency by 8 to 12 per cent. The thruster can also replace the rudder and steering gear, giving improved maneuverability.

5. This arrangement had been model tested on a number of ships, he continued. Details of one of the tests, and principal particulars of the vessel on which it was carried out are shown below. The improvement in fuel consumption was calculated at just over 2300 tons a year.

6. A similar test was carried out for a double-ended car and passenger ferry belonging to the Stena Line. Anticipated power gains⁴ for this ship were calculated to be between 5 to 8 per cent. The capital costs for installing these systems were approximately equal to the capital costs saved in steering gear, etc.

7. Another way of improving propulsion efficiency through the propeller was discussed by Mr. Kazauyuki Oyachi of Mitsui OSK Lines. He pointed out that of the two main energy losses of the propeller, that is those associated with the tip vortex⁵ and those with the hub vortex⁶, only the former had been studied extensively. But significant gains in efficiency could be made, he said, by weakening the hub vortex, which would also reduce noise, vibration and cavitation⁷.

8. The way which had been investigated by the speaker's company was to modify the propeller characteristics through the addition of propeller boss cap fins (PBCFs); the concept is shown in the diagram below. The angle and shape of the boss fins were varied throughout a series of model tests and an improvement in propeller efficiency of about 2 to 3 per cent was anticipated. This arrangement was used with a car carrier, *Mercury Ace*, the principle particulars of which are shown below, giving an efficiency improvement of about 4 per cent. The difference between the anticipated and actual figure was attributed to scale effect. No change in maneuvering capability was observed.

9. In the last presentation at The Motor Ship's Propulsion Conference on the prospect for ceramics in diesel engine (March 2000), Dr. Buckley-Golder of Harwell Laboratory noted that ceramics were about three times harder than metals, had melting temperature⁹ about twice that of metals, and had about a third of the expansion coefficient of most metals.

10. These characteristics could be exploited in the manufacture of diesel engines, he continued, although because ceramics were very weak in tension, applications were limited. Their properties would be most useful in the liner, replacing it completely or in part, the piston, either replacing the crown or the complete piston, exhaust valve facings, the exhaust port, and possibly the inlet port. It might be possible to get rid of the water jacket¹⁰, he continued, which could give a much smaller engine and perhaps an increase in hydrodynamic efficiency.

11. He went on to discuss the predictions made by industrial and research workers on the likely use of ceramics by the year 2005. By that time there was a 50/50 probability that ceramics would be successfully used in adiabatic components such as turbochargers and wear parts. In general, although the proportion by weight of the material in engines would be small, "the technical and economic consequences could be dramatic", he concluded.

12. The use of ceramics in diesel engines was felt to be unlikely in the near future, according to Mr. Katayama of Mitsubishi, who touched on the research his company, in conjunction with oth-

er major shipbuilders in Japan, was undertaking in this field. "I don't see a bright future for ceramics in ... this application", he said. But he felt more optimistic about their use in turbochargers and, "in the very near future we will produce a ceramic turbine".

13. USE ORIENTED EXPERT SYSTEMS. A performance evaluation system for two-stroke diesel engines known as CAPA (computer aided performance analysis) was described by Mr. Joannes Kjolbro of MAN B&W. The system was based on a set of engine measurements taken under steady load. The data were entered by keyboard on to a conventional pc11. Mr. Kjolbro noted that there were possibilities of inputting directly from suitable interfaces with the engine sensors.

14. The stored information, he explained, was used for developing maintenance procedures and fault diagnosis. The program would generate a set of performance curves¹² which were corrected for ambient¹³ conditions. The computer would then indicate those parameters which had exceeded the limits as defined by the curves. A typical printout is shown below showing the indicated pressure deviation for each cylinder of an eight cylinder engine.

Notes to the text:

1) *to inhabit application* – вызывать необходимость использования

2) *bevel gear* – ремённая передача

3) *slipstream* – струя за гребным винтом

4) *anticipated gains* – ожидаемая, предполагаемая экономия

5) *tip vortex* – концевой вихрь

6) *hub vortex* – вихрь у ступицы

7) *cavitation* – кавитация, образование пустот

8) *propeller boss cap fins* – лопасти-обтекатели на ступице винта

9) *melting temperature* – температура плавления

10) *water jacket* – водяной кожух

11) *pc* – propulsive coefficient

12) *curve* – кривая

13) *ambient* – окружающий

Вариант 23

Определите тему каждого абзаца

1. Archaeological evidence indicates that humans arrived on New Guinea at least 60,000 years ago, probably by sea from Southeast Asia during an ice age period when the sea was lower and distances between islands shorter (See History of Papua New Guinea). The ancestors of Australian Aborigines and New Guineans went across the Lombok Strait to Sahul by boat over 50,000 years ago.

2. Design work, also called naval architecture, may be conducted using a ship model basin. Modern ships, since roughly 1940, have been produced almost exclusively of welded steel. Early welded steel ships used steels with inadequate fracture toughness, which resulted in some ships suffering catastrophic brittle fracture structural cracks (see problems of the Liberty ship). Since roughly 1950, specialized steels such as ABS Steels with good properties for ship construction have been used. Although it is commonly accepted that modern steel has eliminated brittle fracture in ships, some controversy still exists. Brittle fracture of modern vessels continues to occur from time to time as the use of grade A and grade B steel of unknown toughness or fracture appearance transition temperature (FATT) in way of ships' side shells can be less than adequate for all ambient conditions.

3. Marine Engineering involves the design, construction, installation, operation and support of the systems and equipment which propel and control marine vehicles, and of the systems which make a vehicle or structure habitable for crew, passengers and cargo. Marine Engineering is al-

lied to mechanical engineering, although the modern marine engineer requires knowledge (and hands on experience) with electrical, electronic, pneumatic, hydraulic, chemistry, control engineering, naval architecture or ship design, process engineering, steam generations gas turbines and even nuclear technology on certain military vessels.

4. An autonomous underwater vehicle (AUV) is a robot which travels underwater. In military applications, AUVs are also known as unmanned undersea vehicles (UUVs). AUVs constitute part of a larger group of undersea systems known as unmanned underwater vehicles, a classification that includes nonautonomous remotely operated underwater vehicles (ROVs) controlled and powered from the surface by an operator / pilot via an umbilical.

5. Many marine vessels do not provide a way for captain and crew to measure and monitor fuel usage while underway. An optimum system onboard would include the ability to instantaneously monitor fuel burn rates from the wheelhouse. Individual engine and generator burn rates would be included, as well as fuel tank levels. This proactive monitoring would allow the crew to make decisions that positively impact fuel burn rates and efficiency.

Вариант 24

Определите тему всего текста, тему каждого абзаца, ключевые слова, ключевые предложения каждого абзаца и основную мысль текста

In some parts of the world, fuel theft is an ongoing concern. Consequently, the accurate measurement of fuel taken on board coupled with the fuel actually consumed by engines and generators, is an important part of MFM. Meters should be installed in all fuel transfer lines so accurate fueling data can be captured. This data can then be compared with burn rates to determine whether fuel is being transferred off the vessel secretly.

Beyond fuel theft, many governmental jurisdictions require that all fuel spill incidents be recorded and reported to the local authorities. For example, the Marine Department of the Government of Hong Kong has specific guidelines for responding to accidental marine fuel spills which reflect international requirements as promulgated by MARPOL, the International Convention for the Prevention of Pollution from Ships.

Additionally, accounting for fuel usage at various points along a voyage provides the ability to tie fuel burn and its associated costs to shipping or container rates. For example, understanding how a vessel burns fuel on certain parts of a voyage, allows the more accurate bidding of container rates so profit margins stay healthy. Consequently, varying shipping rates based on documented fuel usage rates can allow a shipper to bid more aggressively.

A modern marine fuel management system would help in monitoring fuel usage, fuel transfers, and could be configured to sound an audible alarm when refilling fuel tanks might lead to a spill.

Вариант 25

Прочитайте следующий абзац. Из предложенных ниже предложений выберите к нему наиболее подходящее ключевое предложение и объясните свой выбор

Discovered by Egyptologist David O'Connor of New York University, woven straps were found to have been used to lash the planks together, and reeds or grass stuffed between the planks helped to seal the seams. Because the ships are all buried together and near a mortuary belonging to Pharaoh Khasekhemwy, originally they were all thought to have belonged to him, but one of the 14 ships dates to 3000 BC, and the associated pottery jars buried with the vessels also suggest earlier dating. The ship dating to 3000 BC was 75 feet long and is now thought to perhaps have belonged to an earlier pharaoh. According to Professor O'Connor, the 5,000-year-old ship may have even belonged to Pharaoh Aha.

Choices:

1. Woven straps were used to lash the planks together as early as 3000 BC.
2. Egyptologist David O'Connor discovered the ships were all buried together.
3. Pottery jars buried with the vessels.
4. The 5,000-year-old ship belonged to Pharaoh Aha.

6. Примеры оценочных средств для проведения промежуточной аттестации**6.1 Примеры тестовых заданий****Вариант 1****Выберите правильный вариант:**

1. Shea secretary.
a) is b)are c)have d)were
2.swine is big.
a)these b)those c)this d)its
3. He....taking his dog for a walk.
a)were b)is c)have d)shall be
4. We know their names, but they don't know
a)us b)our c)ours d) we
5. Are these coats?
a)yours b)your c)you d) us
6. Gina gave the wrong phone number just for fun.
a)he b)him c)his d) he's
7. We have a large garden. Do you know where garden is?
a)us b)our c)ours d) our's
8. I like that camera. I am going to buy
a)she b)it c)its d) he
9. This is not my pencil; is blue.
a)my b)mine c)me d)mines
10. My room is bigger than hers, but is nicer.
a)she b)her c)hers d)her's
11. Will you give me his telephone number? I don't know
a)him b)its c)it d)hers
12. I gave her my address and she gave hers.
a)my b)mine ⁶⁷ c)me d)l
13. I don't like dogs. I am afraid of
a)they b)them c)their d)theirs

Преобразуйте предложения, употребляя оборот there is / are:

- a) 1. This city has many monuments. 2. Our town has no theatres. 3. This family has two children. 4. Our group has many good pupils. 5. Every week has seven days and every year has twelve months. 6. She has a lot of English books in her library.
- b) 1. The dog is in the room. 2. The children are in the yard. 3. The students are in the laboratory. 4. The car is near the house. 5. The bench was under the tree. 6. A lot of people will be at the stadium tomorrow.

Употребите глаголы to be или to have в нужной форме:

1. There is no school in this village and the children go to the school which ... two miles away.
2. How old ... you? I ... 17.
3. ... you English lessons twice a week? – Yes, we ...
4. I ... no time to help you yesterday. I ... very sorry about it.
5. We ... a conference tomorrow. So I ... busy with my report today.
6. My sister ... a second-year student of the Law Faculty.

7. What ... you fond of? My hobby ... drawing.
8. Will you ... any lectures tomorrow?
9. Physics ... my favorite subject at school.
10. He ... a lot of trouble with his car yesterday.
11. My grandfather ... short grey hair but my grandmother's hair ... long and thick.
Your glasses ... on the table.

Вариант 2

Выберите правильный вариант:

1. The comes everyday.
a)postman b)postmen c) postmans d)postmens
2. There are a lot of in the forest .
a) deer b)deers c)a deer d)the deers
3.play in the yard.
a)the child b)a child c)children d)childrens
4. The Browns are my
a)neighbors b)neighbor c)a neighbor d)the neighbor
5. Myworks at school.
a)sisters b)the sisters c)the sister d)sister
6.speak English well.
a)student b)students c)he d)she
7. We work five ... a week.
a)day b)a day c)the day d)days
8. Mylives not far from her.
a)mothers' friend b)mother friend's c)mother friends' d)mother's friend
9. Ouris light.
a)friend's rooms b)friends' room c)friend's room
10.is not elected every four years.
a) Britain's Queen b)Britains' Queen c)Britain Queen's d) Britain Queens'
11. Prime Minister is the....
a)Parliament's the head b)head's Parliament c)Parliament's head d)Parliament head
12.was moved to Moscow.
a) Russias' capital b)Russia's capital c)Russia capital's d)Russia capitals'
13. Thewill arrive tomorrow.
a)country's delegations b)country's delegation c)delegation's country d)delegations' country
14. My are at home.
a)children's brother b)brother's childrens c)brother's child d)brother's children
15. He received his
a)friends' letter b)friend's letter's c)letter's friend d) friend letters
16. Our....is brown.
a)teachers' tables b)table's teacher c)teacher's table d) table's teachers
17. My..... is new.
a)mothers' umbrellas b)mother's umbrella c)umbrella's mother d)umbrellas' mother
18. The interesting thing about is all the roads that they built in Britain.
a) Romans b) a Romans c) the Romans d) Romen

Употребите глаголы, данные в скобках, в Present Indefinite:

1. We (read) the newspaper in class every day.
2. He always (prepare) his homework carefully.
3. We always (play) tennis on Saturdays.
4. She (speak) several foreign languages.
5. The children (play) in the park every afternoon.
6. Helen (work) very hard.

7. They (take) a lot of trips together.
8. We always (travel) by car.
9. I (eat) lunch in the cafeteria every day.

Вариант 3

Choose the right variant.

1. Have you ever visited other countries? - Yes, I... to Italy and France.
a) was c) had been
b) have been d) would be
2. I feel really tired. We ... to the party last night and have just returned home.
a) went c) had seen
b) has gone d) was going
3. At the beginning of the film I realized that I ... it before.
a) see c) had seen
b) saw d) have seen
4. When the bus stopped in the small square, Helen ... her magazine and didn't realized at first that she had arrived at her destination.
a) read c) was reading
b) reads d) had read
5. My sister's son ... in tomorrow's race, because he is too young. They do not allow riders under sixteen.
a) won't ride c) wouldn't ride
b) shan't ride d) doesn't ride
6. A beautiful bridge ... in our city. It will be finished next year.
a) builds c) is being built
b) is built d) has been built
7. It has been raining for two hours. I hope it ... raining soon.
a) stops c) would stop
b) shall stop d) stop
8. Television has many advantages. It keeps us informed about the latest news, and also ... entertainment at home.
a) provide c) is provided
b) provides d) provided
9. On the other hand television ... for the violent behavior of some young people, and for encouraging children to sit indoors, instead of doing sports.
a) blames ⁶⁹ c) is blamed
b) blamed d) would blame
10. Some millionaires have lots of money and ... what to do with it.
a) don't know c) won't know
b) didn't d) knows
11. How ... at college? You didn't say much about it in your last letter.
a) do you get on c) will you get on
b) are you get on d) are you getting on
12. When you ... in this city again? - In a month.
a) arrive c) have you arrived
b) arrived d) will you arrive
13. Every time that I miss the bus, it means that I ... walk to work.
a) has to c) had to
b) have to d) could
14. Every time when I missed the bus, I ... to return home late.
a) must c) can
b) had d) may

15. That was great! It was ... meal you have ever cooked.
 a) good c) best
 b) better d) the best
16. This exhibition is ... interesting than the previous one.
 a) little c) least
 b) less d) the least
17. We saw ... good film last night. The film was about the love of a girl to her cat and dog.
 a) a c) -
 b) the d) an
18. Everybody agrees that ... happiness is very important in the life of people.
 a) - c) a
 b) the d) many
19. In the past people lived in ... harmony with the environment.
 a) a c) the
 b) an d) -
20. When they arrived ... the station, they rushed to the platform not to miss the train.
 a) to c) in
 b) at d) for

Вариант 4

Choose the right variant.

1. When you ... older, you'll change your mind about this.
 a) will grow c) have grown
 b) grow d) grew
2. By the time the police get there, the burglars
 a) vanish c) will have vanished
 b) will vanish d) vanished
3. As soon as the taxi arrives, I ... you know.
 a) let c) had let
 b) have let d) will let
4. My friend has been writing to me for years already, but he never ... a photo.
 a) sends c) will send
 b) has sent d) sent
5. Why are you busy packing? - My train ... in two hours, so we'll leave the house in an hour.
 a) is leaving c) leaves
 b) will be leaving d) left
6. When was this building finished? - They say it ... by the end of last year.
 a) had been finished c) will be finished
 b) was finished d) finishes
7. I thought that I ... my key and was very glad when I found it.
 a) lose c) had lost
 b) lost d) was losing
8. What's the matter? You look upset. Last week I lost my scarf and now I just ... my gloves.
 a) lost c) had lost
 b) have lost d) lose
- 9.1 ... for this bank for five years already but I have decided to change my job.
 a) am working c) have been working
 b) has worked d) worked
10. Martin said that he ... the tickets the next day.
 a) bought c) will buy
 b) had bought d) would buy
11. The house opposite our college ..., that's why we are using the back entrance at present.

- a) pulls down c) is being pulled down
 b) is pulled down d) pulled down
12. You ... an umbrella when you left the house, didn't you?
 a) have c) had had
 b) was having d) had
13. By the time we got to the cinema the film
 a) will begin c) had begun
 b) would begin d) began
14. Is there anything I ... do to help you?
 a) can c) am to
 b) may d) as to
15. The last film I saw was ... frightening than this one.
 a) little c) least
 b) less d) the least
16. Someone is calling you. Will you answer ... phone?
 a) a c) -
 b) the d) these
17. To tell the truth I don't like ... pair of trousers that I bought last month.
 a) those c) that
 b) this d) a
18. Whose house is it? - It's
 a) my c) her
 b) mine d) our
19. Today is ... cold than yesterday. So, I'm wearing my shorts.
 a) little c) least
 b) less d) the least
20. "Come home ... Christmas Day, we'll be waiting for you", my mother always says to me.
 a) in c) -
 b) on d) at

Вариант 5

Choose the right variant.

1. Excuse me, do you speak English? I ... for a hotel.
 a) look c) was looking
 b) am looking d) have been looking
2. Last summer we wanted a relaxing holiday, so we ... to stay on a small island.
 a) choose c) had chosen
 b) have chosen d) chose
3. Mathematics ... hard. I don't understand it.
 a) are c) was
 b) is d) were
4. While we ... for the train, it started to rain.
 a) waited c) was waiting
 b) are waiting d) were waiting
5. The police officer said that every house in that street ... already by the police.
 a) search c) had been searched
 b) were searched d) searched
6. There is going to be a big art exhibition. It... a lot of visitors.
 a) attracts c) has attracted
 b) will attract d) attracted
7. The result of his investigation ... in the newspaper soon.
 a) publish c) will be published

- b) be published d) is published
8. When they arrived home, their children ... outside the door waiting for them.
a) sit c) was sitting
b) are sitting d) were sitting
9. We ... a new computer not long ago. Now the job will be done much more quickly.
a) had bought c) bought
b) was bought d) have bought
10. He was sorry that he ... to me for so long.
a) didn't write c) hadn't been writing
b) haven't been writing d) hasn't been writing
11. The ring you found ... be returned to an old lady who had lost it.
a) can c) have to
b) must d) are to
12. Everybody in our team played ... except the captain.
a) bad c) worst
b) badly d) the worst
13. You know much, but you know ... than your teacher.
a) little c) least
b) less d) much
14. Small shops are not as ... as supermarkets.
a) more convenient c) most convenient
b) convenient d) the most convenient
15. Sarah is a very good pianist. She plays ... piano very well.
a) a c) the
b) an d) -
16. We had five phone calls, but there were ... for you.
a) no c) either
b) none d) neither
17. I didn't have much time, but I ... visit a lot of places of interest in London.
a) can c) must
b) was able to d) had to
18. That's an easy question! ... knows the answer!
a) All c) Each
b) Everybody d) Every
19. The comic told silly jokes, but nobody laughed ... him.
a) on c) at
b) under d) about
20. We feel sorry ... Sam because he hasn't got any friends.
a) for c) with
b) about d) by

Вариант 6 Choose the right variant.

1. If I ... some fish, will you cook it for me?
a) will catch c) caught
b) catch d) am catching
2. She said that she ... her present flat. She tried to find another one.
a) doesn't like c) didn't like
b) won't like d) likes
3. I saw you yesterday from the bus. Where ... you ... at that time?

- a) was hurrying c) had hurried
b) were hurrying d) did hurry
- 4.1 found that everything I said on the phone ... to the police.
a) report c) was reported
b) is reported d) had been reported
5. When I speak Italian, all the others in the class ... at me as I don't know the language well.
a) laughed c) will laugh
b) was laughing d) laugh
6. He ... in the Army for eighteen months. This is his last month.
a) serves c) has been serving
b) is serving d) have served
7. Don't make noise: the children ... to sleep.
a) try c) will try
b) is trying d) are trying
8. A new museum ... in the city. What a beautiful building it will be!
a) was being built c) is built
b) is being built d) builds
9. Two terrorists ... in New York some days ago.
a) are arrested c) were arrested
b) have been arrested d) will be arrested
- 10.1 ... understand this letter. Will you translate it for me?
a) mustn't c) may not
b) can't d) shouldn't
11. Diana's parents don't let her go to late-night disco. She ... be at home at 9 o'clock in the evening.
a) must c) may
b) can d) have to
12. Henry ... apologize for his bad behaviour yesterday.
a) have to c) had to
b) may d) is to
13. The children studied hard, and as a result they passed the exams ... of all.
a) good c) best
b) better d) the best
14. This is ... film I've ever seen.
a) more interesting c) most interesting
b) the most interesting ⁷³ d) not interesting
15. ... old, ... sick, ... unemployed need our special care.
a) - c) the
b) an d) everybody
16. Someone who saw ... robbery called the-police.
a) - c) the
b) a d) those
17. According to this song ... we need is love.
a) all c) each
b) every d) some
18. We wished the bride and groom happiness in ... new life together.
a) there c) theirs
b) their d) these
19. Excuse me, but does this umbrella belong ... you?
a) to c) at
b) for d) with
20. I listened to the radio every day to know the weather forecast but I can never rely ... it.

- a) - c) the
b) a d) mine

17. Our city is famous for ... beautiful ancient buildings.
 a) its c) it's
 b) it d) his
18. Her hair is long and fair. Everybody admires
 a) them c) they
 b) it d) its
19. You are very good ... dealing with people.
 a) in c) on
 b) at d) about
20. Last summer our neighbours decided to drive to Scotland ... a short holiday.
 a) at c) on
 b) to d) for

Вариант 8

Choose the right variant.

1. When the light ... I was sitting in the armchair reading a book.
 a) goes out c) go out
 b) had gone out d) went out
2. I thought I ... this film before, but I hadn't.
 a) saw c) had seen
 b) seen d) have seen
3. Why haven't you brought me the letters for signature? ... them yet?
 a) Don't you type c) Haven't you typed
 b) Didn't you type d) Will you type
4. She wasn't sure whether she ... the door of her flat.
 a) locked c) had locked
 b) has locked d) didn't lock
5. I... my homework all morning and haven't finished it yet.
 a) am doing c) have been doing
 b) do d) did
6. The inspector suspected that the thief ... a special key for opening this door.
 a) uses c) had used
 b) has used d) will use
7. I was very tired. When I ... to bed, I fell asleep immediately.
 a) got c) had got
 b) has got ⁷⁵ d) will get
8. The Vikings ... to North America a thousand years ago.
 a) sail c) had sailed
 b) sailed d) have sailed
9. Thank you for your offer, but I ... not to accept it.
 a) decide c) have decided
 b) has decided d) decided
10. You ... through your old photograph album for half an hour already.
 a) look c) have looked
 b) are looking d) have been looking
11. Nobody knows where his picture is. Perhaps, it
 a) was stolen c) has been stolen
 b) will be stolen d) stolen
12. I agree. You ... apologize for not inviting him to your birthday party.
 a) can't c) shouldn't
 b) mustn't d) may not
13. Actually, today I feel ... than I did yesterday.

- a) bad c) worst
b) worse d) the worst
14. ... people who are unemployed often feel depressed.
a) The c) A
b) - d) That
15. Who was the first astronaut who landed on ... Moon?
a) the c) a
b) - d) those
16. What happened at the end of the film? - I'm sorry to say, but I haven't seen ... film.
a) a c) -
b) the d) those
17. This is ... interesting exhibition I've ever visited.
a) more c) less
b) most d) the most
18. Would you mind waiting ... minutes?
a) few c) little
b) a few d) a little
19. I'm ... interested in languages than in mathematics,
a) much c) little
b) many d) less
20. The students often translate English texts ... Russian.
a) to c) into
b) in d) on

1. My mother ... strawberries for years but she has never had such a good crop before.
a) grow c) has been growing
b) grew d) had grown
2. Helen got off the bus and walked into the bank when she realized that she ... her handbag on the bus.
a) left c) has left
b) had left d) leaves
3. You are a great cook! This cake ... wonderful as usual.
a) taste c) will taste
b) tasted 76 d) tastes
4. I cut my finger when I ... the potatoes.
a) am peeling c) was peeling
b) have peeled d) will peel
5. The students ... not to be late for their classes.
a) ask c) are asked
b) asked d) are asking
6. Yesterday, while Jane ... she broke two cups.
a) wash up c) was washing up
b) washes up d) has washed up
7. Be attentive and more serious. You always ... something!
a) lose c) have lost
b) are losing d) have been loosing
8. What ... you ... when I phoned you last night?
a) did do c) had done
b) were doing d) had been doing
9. Our flat ... at the moment, so it doesn't look its best.

- a) paints c) is being painted
 b) is painted d) has been painted
10. My brother will be absent. He ... for his exam at this time tomorrow.
 a) will prepare c) will have prepared
 b) will be preparing d) will have been preparing
11. ... you give me some advice about the language courses?
 a) Have c) Should
 b) May d) Could
12. Why didn't you give me a call yesterday? We ... discuss everything together.
 a) can c) may
 b) must d) could
13. At college the work is harder than the work we did at school, but it is much ... interesting.
 a) more c) many
 b) most d) a few
14. A person with a good education usually gets ... better job.
 a) - c) the
 b) a d) an
15. ... poor people need help from the government.
 a)- c)A
 b) The d) This
16. The government should help ... poor.
 a) - c) a
 b) the d)that
17. You can do ... you want, but don't bother me now.
 a) anything c) some
 b) something d) any
18. The government is going to provide ... houses for homeless people.
 a) much c) most
 b) more d) least
19. I think of coming to Moscow ... a few days to visit my sister.
 a) of c) for
 b)on d)over
20. I think we should ask ... some information about this case.
 a) about c) for
 b) - d) on

77

Вариант 10

Choose the right variant.1

1. The train stopped at all the stations, and long before we got to London every seat ... and people were standing in the corridors.
 a) has been taken c) had been taken
 b) was taken d) is taken
2. Most of the young people left this village a long time ago and nobody ... yet.
 a) returned c) had returned
 b) has returned d) was returned
3. The police suspected that Bill himself had broken the window at his house because he wanted to make them think that a burglar ... his valuable stamp collection.
 a) stole c) was stealing
 b) had stolen d) has stolen
4. The police thought that he ... it because he needed money.
 a) did c) was doing
 b) had done d) has done

5. If you work a bit harder, I'm sure you ... the exam.
a) pass c) have passed
b) will pass d) would pass
6. Where are you going? I ... speaking with you yet.
a) not finished c) haven't finished
b) didn't finish d) don't finish
7. I didn't see where the bus stop was, so I ... the bus yesterday.
a) miss c) has missed
b) missed d) had missed
8. Last week a burglar broke into the house while we ... television.
a) watch c) watched
b) have watched d) were watching
9. When are you going to finish this translation? - I ... this translation today.
a) finish c) have finished
b) finished d) had finished
10. I felt really tired. We ... for two hours before we reached the nearest hotel.
a) walked c) have been walking
b) were walking d) had been walking
11. My father is sure that most people ... bicycles to work in twenty years' time.
a) shall ride c) ride
b) will be riding d) are riding
12. The plane ... take off after the fog had lifted.
a) must c) can
b) was able to d) may
13. Finally we ... stop: we were tired and it was dark.
a) can c) must
b) may d) had to
14. In the past most of the population lived in ... country.
a) the c) -
b) a d) this
15. The judge sent our neighbor to ... prison for a month.
a) the c) -
b) a d) an
16. ... English are proud of their country and that the English language is spoken all over the world.
a) the c) an
b) - d) few
17. Why have you done it? Oh, there are ... reasons for it.
a) much c) a little
b) little d) many
18. Sorry, but I can't hear ... of you properly.
a) neither c) nobody
b) either d) none
19. We were looking forward ... a quiet rest near the forest.
a) for c) on
b) to d) at
20. Our city is famous ... its beautiful ancient buildings.
a) of c) by
b) for d) with

Вариант 11

Choose the right variant.

1. My passport ... last month, and nobody has found it yet .
a) lost c) has been lost
b) was lost d) had been lost
2. There's going to be an interesting art exhibition. It ... a lot of visitors.
a) attracts c) will attract
b) attract d) would attract
3. Have you heard the news? He ... all his exams this week.
a) passed c) had passed
b) has passed d) pass
4. By the time we get to the cinema the film
a) will begin c) will have begun
b) begins d) began
5. He says his train ... at 8 a.m. He's packing his things at the moment.
a) leave c) has left
b) leaves d) would leave
6. I was quite ... to see Ben behaving like that.
a) shocked c) being shocked
b) shocking d) shock
7. I ... on the phone when the postman knocked on the door and entered the room.
a) speak c) was speaking
b) am speaking d) have spoken
8. We first came to this town more than twenty years ago. Everything ... in the town since that time.
a) change c) has changed
b) changed d) is changed
9. We didn't know that Bill ... to Brazil the week before, and he was abroad when the burglary took place.
a) flew c) has flown
b) had flown d) would flow
10. I arrived in Prague in September last year. So I ... here for six months.
a) live c) have lived
b) lived d) will live
11. While I was wondering whether to buy the shoes or not, they ... by someone else.
a) buy c) were bought
b) bought d) had been bought
12. He was happy. He ? pass his driving test at the first attempt.
a) should c) had to
b) must d) was able to
13. At present I ... afford to go to the cinema twice a week.
a) can't c) must not
b) couldn't d) might not
14. We didn't think you were ... in ancient history.
a) interested c) not interesting
b) interesting d) less interesting
15. Every morning I listen to ... radio, but I don't like to watch TV so early.
a) the c) -
b) a d) these
16. ... English is the world language and the English language spoken in the USA or Australia differs from the English language spoken in Britain.
a) the c) an
b) - d) a
17. You are always quarreling! Stop it, ... of you!

- a) everybody c) both
- b) some d) every
- 18. Mr. Smith was accused of spying and put ... prison.
- a) in c) at
- b) of d) to
- 19. Our city succeeded ... collecting a large sum of money for charity.
- a) on c) with
- b) in d) at
- 20. I'm sorry ... your difficulties. Can I help?
- a) for c) about
- b) at d) on

Вариант 12

Choose the right variant.

1. It's 11 o'clock so I ... to bed now.
- a) go c) will go
- b) am going d) have gone
2. The tickets to the football match usually ... and checked at the entrance.
- a) sell c) are sold
- b) was sold d) won't be sold
3. We ... to the party today.
- a) have been invited c) have invited
- b) are invited d) had been invited
4. The baby ... because it is hungry now.
- a) crying c) cries
- b) is crying d) cried
5. There ... a lot of people waiting in the station yesterday evening.
- a) is c) was
- b) are d) were
6. Some people ... on the benches waiting for their trains.
- a) was sleeping c) have slept
- b) were sleeping d) had slept
7. By the time the train arrived, Susan ... to push her way to the front of the crowd.
- a) managed c) had managed
- b) has managed d) would manage
8. ... you ... my English book anywhere? I can find it nowhere.
- a) Did ... see c) Will ... see
- b) Have ... seen d) Had ... seen
9. He ... the text before I decided to help him.
- a) translated c) has translated
- b) had translated d) will translate
10. It ... in London this morning that the British Oil Corporation had discovered oil under the sea near the Welsh coast.
- a) announced c) had been announced
- b) would be announced d) was announced
11. If he ... when I come, I won't wake him up.
- a) sleep c) will sleep
- b) will be sleeping d) is sleeping
12. ... they leave before supper or have they time to stay until my friends come?
- a) must c) might
- b) may d) should
13. My ... brother studies at college.

- a) old c) older
b) elder d) the eldest
14. This is ...film I have ever seen.
a) good c) worse
b) the best d) better
15. ... Hyde Park is a very large park in central London.
a) - c) a
b) the d) an
16. My friends tell me that professors are people who think a lot, but say
a) little c) a few
b) few d) some
17. These books cost ... than my friend wants to pay.
a) more c) most
b) much d) the most
18. He has earned so ... money that he has decided to help the poor.
a) much c) little
b) many d) few
19. They go to work by car and come home ... foot.
a) by c) with
b) on d) in
20. The bus from Glasgow arrives ... the Central bus station.
a) at c) in
b) to d) for

Ключи к заданиям:

Вариант 3

- 1) b; 2) a; 3) c; 4) c; 5) a; 6) c; 7) a; 8) b; 9) c; 10) a; 11) d; 12) d; 13) b; 14) b; 15) d; 16) b;
17) a; 18) a; 19) d; 20) b.

Вариант 4

- 1) b; 2) c; 3) d; 4) b; 5) c; 6) a; 7) c; 8) b; 9) c; 10) d; 11) c; 12) d; 13) c; 14) a; 15) b; 16) b;
17) c; 18) b; 19) b; 20) b.

Вариант 5

- 1) b; 2) d; 3) b; 4) d; 5) c; 6) b; 7) c; 8) d; 9) c; 10) c; 11) b; 12) b; 13) b; 14) b; 15) c; 16) b;
17) b; 18) b; 19) c; 20) a.

Вариант 6

- 1) b; 2) c; 3) b; 4) ~~a~~; 5) d; 6) c; 7) d; 8) b; 9) c; 10) b; 11) a; 12) c; 13) c; 14) b; 15) c; 16) c;
17) a; 18) b; 19) a; 20) d.

Вариант 7

- 1) b; 2) c; 3) d; 4) b; 5) b; 6) c; 7) b; 8) c; 9) d; 10) a; 11) d; 12) d; 13) d; 14) b; 15) b; 16) c;
17) a; 18) b; 19) b; 20) d.

Вариант 8

- 1) d; 2) c; 3) c; 4) c; 5) c; 6) c; 7) a; 8) B; 9) c; 10) d; 11) c; 12) c; 13) B; 14) B; 15) a; 16) B;
17) d; 18) b; 19) d; 20) c.

Вариант 9

- 1) c; 2) b; 3) d; 4) c; 5) c; 6) c; 7) b; 8) b; 9) c; 10) b; 11) d; 12) d; 13) a; 14) b; 15) a; 16) b;
17) a; 18) b; 19) c; 20) c.

Вариант 10

- 1) c; 2) b; 3) b; 4) b; 5) b; 6) c; 7) b; 8) d; 9) c; 10) d; 11) b; 12) b; 13) d; 14) a; 15) c; 16) a;
17) d; 18) b; 19) b; 20) b.

Вариант 11

- 1) b; 2) c; 3) b; 4) c; 5) b; 6) a; 7) c; 8) c; 9) b; 10) c; 11) c; 12) d; 13) a; 14) a; 15) a; 16) b;
17) c; 18) d; 19) b; 20) c

Вариант 12

1) b; 2) c; 3) a; 4) b; 5) d; 6) b; 7) c; 8) b; 9) b; 10) d; 11) d; 12) a; 13) b; 14) b; 15) a; 16) a; 17) a; 18) a; 19) b; 20) a;

Критерии оценки

- оценка «отлично» выставляется обучающемуся, если студент выполнил задание от 91% до 100%
- оценка «хорошо», если студент выполнил задание от 70% до 90%
- оценка «удовлетворительно», если студент выполнил задание от 50% до 69%
- оценка «неудовлетворительно», если студент выполнил задание менее 50%

Вариант 13

Read the text “Explorer Heyerdahl Hunts for Lost Civilization in Peru” and give short summary of the text in Russian.

EXPLORER HEYERDAHL HUNTS FOR LOST CIVILIZATION IN PERU

Oslo Norwegian explorer Thor Heyerdahl, famous for his daring *Kon-Tiki* expedition, said he had faced the most exciting project of his life in a hunt for clues¹ to a lost civilization which lied buried in a Peruvian city of pyramids.

Archaeologists working in North-Western Peru found that 26 mounds², previously thought to be natural features of the landscape, were pyramids hidden by the ravages of time. The ancient city is called Tucume.

“This is the most exciting project I have ever been involved in”, Heyerdahl, 73, told *The Aftenposten Daily* in an interview.

Heyerdahl has devoted much of his life to rewriting the history books on the peoples of the southern hemisphere, claiming that they were much more civilized than previously thought and that their culture was spread through sea travel.

In 1947, he crossed the Pacific on the balsa wood raft *Kon-Tiki* to prove that ancient South American peoples could have travelled to the Pacific islands and populated them.

His book on *Kon-Tiki* has sold more than 20 million copies.

In 1970, he succeeded in sailing a replica³ of an Egyptian vessel, called *Ra Two*, from Morocco to Barbados in an attempt to prove that the ancient Egyptians could have reached the western hemisphere centuries before Christopher Columbus in 1492.

Notes to the text:

1) clue – *у́лёт*;

2) mound – *насыпь, курган*;

3) replica – *модель*.

Answer the questions to the text:

1. What was Thor Heyerdahl?
2. What was he interested in?
3. Where did he hunt the lost civilization?
4. What kind of ship did he use while crossing the Pacific?
5. What did the expedition find out?
6. Did the expedition open a new epoch in archaeology?
7. Where did Heyerdahl repeat his expedition in 1970?
8. Do you believe in existence of Ancient lost civilization? Give your arguments.

Вариант 14

Imagine you are a member of this expedition. Tell your groupmates you had to overcome while preparing to the trip.

Speak on the following:

What 'a ship' is.

A camel is metaphorically compared with 'the desert ship'.

Thor Heyerdahl's raft *Kon-Tiki*.

Вариант 15

Speak on the following:

- shipbuilding, its major meaning;
- shipbuilding in the ancient world;
- shipbuilding in the Middle Ages;
- shipbuilding in the 18th-19th centuries;
- modern shipbuilding.

Imagine you are a shipbuilder. Design your variant of the ship. Give her* a name, choose the port of register. (*her (she) – говоря о морских судах, употребляют местоимение 'she' и его производные.)

Вариант 16

Read the text "HISTORY OF A SHIP" and do assignments. Use thesaurus if necessary.

HISTORY OF A SHIP

1. Prehistory and antiquity

The history of boats parallels the human adventure. The first boats known date back to the Neolithic Period, about 10,000 years ago. They were used mainly for hunting and fishing and were often cut from coniferous tree logs, using simple stone tools. By around 3000 BC, Ancient Egyptians already knew how to assemble planks of wood into a ship hull. They used woven straps to lash the planks together, and reeds or grass stuffed between the planks helped to seal the seams. At about the same time, people living near Kongens Lyngby in Denmark invented the segregated hull, which allowed the size of boats to gradually be increased. Boats soon developed into keel boats similar to today's wooden pleasure craft.

The first navigators began to use animal skins or woven fabrics as sails. Before the introduction of the compass, celestial navigation was the main method for navigation at sea. In China, early versions of the magnetic compass were being developed and used in navigation between 1040 and 1117.

2. Through the Renaissance

Until the Renaissance, navigational technology remained comparatively primitive. This absence of technology didn't prevent some civilizations from becoming sea powers. Towards the end of the 14th century, ships like the carrack began to develop towers on the bow and stern. These towers decreased the vessel's stability, and in the 15th century, the caravel, a descendent of the Arabic qārib which could sail closer to the wind, became more widely used. The towers were gradually replaced by the forecabin, as in the carrack Santa Maria of Christopher Columbus.

In the 16th century, the use of freeboard and freeing ports become widespread on galleons. The English modified their vessels to maximize their firepower and demonstrated the effectiveness of their doctrine, in 1588, by defeating the Spanish Armada.

At this time, ships were developing in Asia in much the same way as Europe. Japan used defensive naval techniques in the Mongol invasions of Japan in 1281. Middle Age Swahili Kingdoms are known to have had trade port islands and trade routes with the Islamic world and Asia and were described by Greek historians as 'metropolises'. Famous African trade ports such as Mombasa, Zanzibar, Mogadishu and Kilwa were known to Chinese sailors such as Zheng He and medieval Islamic historians such as the Berber Islamic voyager Abu Abdullah ibn Battua. In the 14th century King Abubakari I, the brother of King Mansa Musa of the Mali Empire is thought to have had a great armada of ships sitting on the coast of West Africa. This has lead to great speculation, with historical evidence, that it is possible that Malian sailors may have reached the coast of Pre-Colombian America under the rule of Abubakari II, nearly two hundred years before Christopher Columbus and that black traders may have been in the Americas before Columbus.

Fifty years before Christopher Columbus, Chinese navigator Zheng He traveled the world at the head of a huge armada. The largest of his ships had nine masts, were 130 metres (430 ft) long and had a beam of 55 metres (180 ft). His fleet carried 30,000 men aboard 70 vessels, with the goal of bringing glory to the Chinese emperor.

3. Specialization and modernization

Parallel to the development of warships, ships in service of marine fishery and trade also developed in the period between antiquity and the Renaissance. Maritime trade was driven by the development of shipping companies with significant financial resources. Canal barges, flat-bottomed and flexible scow boats also became widely used for transporting small cargoes. During the first half of the 18th century, the French Navy began to develop a new type of vessel known as a ship of the line, featuring seventy-four guns. This type of ship became the backbone of all European fighting fleets.

Ship designs stayed fairly unchanged until the late 19th century. The industrial revolution, new mechanical methods of propulsion, and the ability to construct ships from metal triggered an explosion in ship design. Ships built for entirely new functions, such as fire-fighting, rescue, and research, also began to appear.

4. Today

Nowadays the world's fleet included about 50, 000⁸⁴ commercial vessels with gross tonnage totaling 1.00 billion tons. In terms of tonnage, 39% of these ships are tankers, 26% are bulk carriers, 17% container ships and warships and 15% were other types counting small vessels such as patrol boats.

Assignments:

1. Render the content of the text in short in Russian.
2. Make up a plan to the text.
3. Write an abstract to the text.

Вариант 17

Fill in the sentences using words and word-combinations:

<i>freeboard, midships, tanks, forepeak, compartments, superstructure, holds, hull, engine, frame, deck, underwater, bow, sides, fuel, poop, wing, bottom, stern, hatches, bulkheads, cargo, plating, decks, afterpeak, fresh, forecastle</i>

1. The main body of a ship is called _____.
2. The foremost part of the hull is called _____; its rearmost part is called _____; the part in between is called _____.
3. The hull is the area between _____.
4. The hull is made up of _____ covered with _____.
5. The part of the below water is the ship's _____.
6. The distance between the waterline and the main deck in the vessel's _____.
7. The hull is divided up into a number of _____ by _____.
8. _____ are vertical steel walls going across the ship and along.
9. The hull contains _____.
10. In dry cargo ships the cargo space is divided into _____.
11. Openings giving across to holds are called _____.
12. At the fore end of the hull are _____, and at the after end are _____. They are used for _____.
13. The space between the holds and the bottom of the hull contains _____. They are used for _____.
14. If a ship has double sides, the space in between contains _____.
15. All permanent housing above the main deck is known as _____.
16. The forward raised part of the deck is called _____ and its after raised part is _____.

Agree or disagree with the statements, using the clichés:

That's wrong. – это неверно.
That's (quite) right. – (Совершенно) верно.
That's not quite true to the fact. – Это не совсем соответствует факту.
According to the text ... – Согласно тексту ...

1. The main body of a ship is called a trim.
2. The hull is divided into five main parts.
3. The part of the hull below water is the ship's upwater body.
4. The distance between the waterline and the main deck in the vessel's freeboard.
5. The hull is divided up into one watertight compartment.
6. Bulkheads are horizontal steel walls going across the ship and along.

Answer the questions:

1. How is the main body of a ship called?
2. What parts is the hull divided into?
3. What is the hull made up of?
4. What cargo spaces are there in dry cargo ships?
5. What tanks are there in dry cargo ships?
6. What are these tanks be used for?
7. Can these tanks be used carriage of the cargo?
8. What is superstructure?
9. Where is superstructure located on modern ships?
10. What cargo handling facilities are there on deck?
11. What do we call the forecastle / the poop?
12. What is trim/heel?

Render in Russian

Основные части судна – корпус и надстройки. Передняя часть корпуса называется носом. Задняя часть корпуса называется кормой. Корпус состоит из набора и облочечек. Зона

между главной палубой, бортами и днищем называется корпусом. Часть корпуса под водой, это подводная часть корпуса. Корпус делится на ряд водонепроницаемых отсеков палубами и переборками. Переборки это вертикальные стальные стенки, идущие вдоль и поперек судна. В корпусе располагаются моторное отделение, грузовые отсеки и ряд резервуаров. Цистерны используются для пресной воды и топлива. Надстройки в современных кораблях находятся в кормовой части судна. На палубе размещаются краны, грузовые стрелы и лебёдки для обработки груза.

Вариант 18

Translate sentences into Russian:

1. Holds are designed for carrying cargoes.
2. Holds are divided into several compartments.
3. This is made for drainage the water.
4. Sometimes water condensates on metal bulkheads.
5. You must pump out all the water.
6. Metal should be protected from corrosion.
7. Metals should be covered with anticorrosion substance.
8. This wooden flooring will not fit to this small compartment.
9. Cargo battens are made up of wooden boards.
10. Prevent this cotton bales from damage.
11. Sometimes moisture collects on the sides of the ship.
12. The passenger train travels 100 km per hour.
13. It takes two minutes per hatch to open or close the covers.
14. Light travels 300.000 kilometers per second.
15. The rate of loading is 1200 tons per weather working day.

Add sentences using words in box:

<i>portable wooden battens, boards, the frame by angle brackets, to prevent packages of cargo from damage, moisture</i>

1. Spar ceiling comprises _____.
2. Spar ceiling is made up of _____.
3. Spar ceiling is attached to _____.
4. The purpose of a wooden sheathing is _____.
5. Bale cargoes may be damaged by _____.

Answer the questions to the text:

1. What do you call a hold?
2. Are all the ships holds of the same capacity?
3. How are the holds separated from each other?
4. How many holds has a typical dry-cargo vessel?
5. What do the bilges serve for?
6. How much water collected in the bilges can be removed?
7. What are the bilges covered with to protect them from corrosion?
8. What are limber boards used for?
9. What is spar ceiling used for?
10. What's the shape of a hatch coaming?

Make up a report (7-8 sentences) about hatches and holds.

Вариант 19

Match two columns. Use the information from the part of the text describing shipbuilding materials.

1. The first material for designing the ship was _____.	a) concrete
2. The early fighting ships were covered with _____.	b) steel
3. Submarines are usually constructed of _____, but in rare cases they are made with _____.	c) composite material
4. A new material – _____ – appeared at the end of the 20th century.	d) tree
5. In the 20th century the vessels began to be designed of _____.	e) aluminium
6. Older ships and pleasure crafts often had _____ hulls.	f) the titan
7. The most usable material for commercial vessels is _____.	g) plastic
8. _____ is often used for fast vessels.	
9. Sailboats are designed of _____.	
10. Some modern ships are made with _____ hulls.	

Make up a 3 minutes report about safety equipment and what they are used for.

Arrange groups of 2-3 students and discuss the following shipboard equipment:

- masts;
- ground tackle;
- cargo equipment;
- safety equipment.

Read the text “THE WORLD’S FIRST COMPASS” and do assignments.

THE WORLD’S FIRST COMPASS

It was in the compass that magnetism first found a practical use.

Many centuries ago the people of ancient China noticed the attracting properties of loadstones, that is, magnetic oxides of iron. A loadstone, which means loading stone, is a name given to the natural magnet.

The property they had noticed helped them to discover that a freely suspended magnetized bar points North and South, and so it can be used to determine direction. Thus the compass was invented.

In ancient books we find a description of the compass of those days. It was shaped like a spoon mounted on a graduated plate. We know the spoon had to be rotated by hand and when it came to rest, it was pointing North and South.

The Chinese not only invented the compass but as early as the 11th century had discovered how to make magnetic needles. This was the first time such a thing had been done anywhere in the world. These needles made of fish-shaped pieces of iron which floated on water, were acted on by the earth’s magnetic field.

About the end of the 11th century the Chinese began to use the compass in navigation. In the 12th century the compass of the floating needle type came into use. Its iron-needle was fastened to a thin strip of cork or wood, so that it floated in a bowl of water. The needle was magnetized by contact with a natural magnet taken from the earth. This early seagoing compass was in use on Chinese ships up to the 17th century. It was probably the best type available if we consider the scientific and technical level of the time.

In Middle Ages there was a lively trade and a busy cultural exchange between China and the Arab countries.

It was from the Chinese that the Arabs first learnt to make compasses and to use them in navigation. The Arabs in their turn introduced the compass to Europe, where it began to appear over 800 years ago. We know it was used on Italian, Portuguese and Norwegian ships of the 12th century.

The great invention of the ancient Chinese was further developed thanks to the skilled Arab and European scientists and thus reached its present perfection.

Assignments:

1. Render the content of the text in short in Russian.
2. Find the passage where the description of the compass is given. Read it.

Вариант 20

Match the definition of marks in two columns:

1) <i>T</i> mark	a) winter loading
2) <i>WNA</i> mark	b) fresh water
3) <i>W</i> mark	c) tropical water
4) <i>F</i> mark	d) the maximum depth to be loaded going across the North Atlantic in winter

Answer the questions to the text:

1. What terms can one measure ships of?
2. What does the depth of ships mean?
3. What is draft?
4. What was Samuel Plimsoll?
5. What is he famous for in marine industry?
6. What do these lines determine?
7. Where are they painted?
8. Do lines differ according to types of water densities?
9. Are there any official documents regulating lines to be painted?
10. What other words can be used to describe the 'ladder' of lines?

Group 2-3 students and discuss the following items:

- measurement of ships;
- S. Plimsoll and engineers, and their innovation;
- freeboard marks or load line marks;
- other marks painted on ship's sides.

88

Find the words from the Active Vocabulary in the table. The words are located either across or down.

	1	2	3	4	5	6	7	8	9	10	11	12	13
A	Q	W	E	M	E	A	S	U	R	E	R	T	Y
B	U	L	I	O	F	R	E	E	B	O	A	R	D
C	D	E	P	T	H	P	A	S	D	F	G	H	J
D	W	N	K	B	L	Z	X	B	O	T	T	O	M
E	A	G	C	R	V	B	R	E	A	D	T	H	B
F	T	T	N	O	M	D	R	A	F	T	Q	D	W
G	E	H	E	A	R	E	T	M	Y	U	I	E	O
H	R	P	A	D	S	E	H	D	F	T	G	E	H
I	L	O	N	G	J	P	U	K	L	O	Z	P	X
J	I	C	V	B	N	M	L	Q	W	N	E	E	R
K	N	T	Y	K	E	E	L	S	O	N	U	N	I
L	E	O	P	A	S	S	H	I	P	A	D	F	G
M	S	U	R	F	A	C	E	D	H	G	J	K	L
N	V	E	S	S	E	L	Z	E	X	E	C	V	B

1) измерять	8) тоннаж	14) глубокий
2) длина	9) борт	15) углублять
3) ширина судна, бимс	10) корпус	16) ширина
4) кильсон	11) глубина	17) широкий
5) осадка судна	12) надводный борт	18) ватерлиния
6) днище, грунт	13) длинный	19) корабль, судно (2)
7) поверхность (воды)		

Вариант 21

Complete the sentences:

1. Ships are classified according to _____.
2. According to the place of navigation ships may be divided into _____.
3. According to the hull material ships may be _____.
4. According to drive ships are divided into _____.
5. Non-self-propelled ships are _____.
6. Rowing ships are _____.
7. Self-propelled ships are _____.
8. A motor ship is propelled _____.
9. A steamer is propelled _____.
10. According to their destination ships are divided into _____.
11. Transport ships are divided into _____.
12. There are many types of cargo ships, such as _____.
13. Fishing ships are _____.

Match the definition of the words in the box:

ice-breaker, pinnace, trireme, gondola, man-of-war, junk, trimaran, catamaran, keelboat, dinghy

1. This ship is one of two marine craft, the first a small vessel used as a tender to larger vessels amongst other things, and the second a ship rigged vessel popular in northern waters through the 17th-19th centuries.

2. The ship is ⁸⁹a traditional, flat-bottomed Venetian rowing boat, well suited to the conditions of the Venetian Lagoon.

3. The ship is a Chinese sailboat design dating from ancient times and still in use today. They were developed during the Han Dynasty (206 BC-220 AD) and were used as ocean-going vessels as early as the 2nd century AD.

4. The ship (from Tamil 'kattumaram') is a type of multihulled boat or ship consisting of two hulls, or 'vakas', joined by some structure, the most basic being a frame, formed of 'akas'. They can be sail- or engine-powered.

5. The ship is a type of small boat, often carried or towed by a larger vessel.

6. The ship is a type of usually long narrow cigar-shaped riverboat, or unsheltered water barge which is sometimes also called a poleboat.

7. The ship is a special-purpose ship or boat designed to move and navigate through ice-covered waters.

8. The ship (Greek or Latin origin) is a class of warship used by the ancient civilizations of the Mediterranean, especially the Phoenicians, ancient Greeks and Romans.

9. The ship was the most powerful type of armed ship from the 16th to the 19th centuries.

10. The ship is a multihulled boat consisting of a main hull (vaka) and two smaller outrigger hulls (amas), attached to the main hull with lateral struts (akas).

Answer the questions:

1. Are there any classifications of ships?
2. What are the classifications?
3. What do they differ?
4. What criteria are used in the classifications?
5. What is the difference between the classification based on propulsion and the classification by drive?
6. What types of ships can you enumerate taking into account the classification based on the usage of the ships?
7. What are non-self-propelled ships?
8. What kind of ship can be self-propelled?
9. Are rowing vessels concerned with non-self-propelled type of vessels?
10. What ships are classified by placing of the hull?
11. How do diving ships and underwater vessels differ?
12. What other types of ships of latter classification do you know?
13. What is the more often used type of vessels in your region? Why?

Speak on the following items:

- different types of ships' classifications;
- classification by drive;
- classification by placing of the hull;
- classification based on propulsion

Вариант 22

Read and translate the text "COMMERCIAL SHIPS".

COMMERCIAL VESSELS

Commercial vessels or merchant ships can be divided into three broad categories: cargo ships, passenger ships, and special-purpose ships. Cargo ships transport dry and liquid cargo. Dry cargo can be transported in bulk by bulk carriers, packed directly onto a general cargo ship in break-bulk, packed in intermodal containers as aboard a container ship, or driven aboard as in roll-on roll off ships. Liquid cargo is generally carried in bulk aboard tankers, such as oil tankers, chemical tankers and LNG tankers (carriers).

Passenger ships range in size from small river ferries to giant cruise ships. This type of vessel includes ferries, which move passengers and vehicles on short trips; ocean liners, which carry passengers on one-way trips; and cruise ships, which typically transport passengers on round-trip voyages promoting leisure activities onboard and in the ports they visit.



Special-purpose vessels are not used for transport but are designed to perform other specific tasks. Examples include tugboats, pilot boats, rescue boats, cable ships, research vessels, survey crafts, and ice breakers.

Most commercial vessels have full hull-forms to maximize cargo capacity. Hulls are usually made of steel, although aluminium can be used on faster craft, and fiberglass on the smallest service vessels. Commercial vessels generally have a crew headed by a captain, with deck officers and marine engineers on larger vessels. Special-purpose vessels often have specialized crew if necessary, for example scientists aboard research vessels. Commercial vessels are typically powered by a single propeller driven by a diesel engine. Vessels which operate at the higher end of the speed spectrum may use pump-jet engines or sometimes gas turbine engines.

Cargo vessels have appeared a little thousand years ago and since then have not spent the popularity as carry out very important role for the world economy. They transport products, the foodstuffs, technics, building materials.

There are many types of cargo vessels. They are:

- container ship intended for container transportation on the deck. The vessel has only 10-26 persons of crew as the ship-handling is automated;
- refrigerator ships are refrigerators with strong ventilation keeping cold temperature in cargo compartments. They are intended for transportation perishable products and products demanding low temperature;
- 'roll-on' ships are ships transporting containers, cars, timber which are driven (or roll on) into a ship by lorries or trucks;
- bulk ships are cargo ships transporting bulk cargoes. The bulk ship can transport more than 150 thousand tons;
- tankers are vessels transporting liquid and bulk cargoes, such as oil, natural gases, and liquid products. The most tankers move oil directly in holds;
- multi-purpose vessels are cargo vessels transporting at once some kinds of cargoes, both liquid, and products, and technics, in different compartments.

Passenger ships are vessels intended for transportation of passengers and their luggage and for maintenance of their safety. The passenger ship has cabins for passengers, a cargo compartment where their luggage is stored, a dining room and other entertaining rooms. They are:

- the liner is a large fast passenger vessel making regular flights. The greatest sea liner is *Queen Mary 2*;
- the cruise vessel is the vessel making international flight;
- the ferry is the vessel transporting passengers and vehicle between two coasts of the river or strait. The ferry is used also in the military purpose. It moves through a water barrier transport, soldiers and provisions.

Match the definition to the types of vessel given in the box:

commercial vessels, special-purpose vessels, multi-purpose vessels, passenger ships, cargo ships, bulk ships, refrigerator vessels, ferries, container ships, Roll-on ships, Roll-off ships, tankers, cruise ships, liners

1. Vessels transporting both passengers and vehicles between two coasts of the river or strait.
2. Vessels transporting containers on the deck.
3. Vessels including different categories of ships, such as cargo and passenger ships, and special-purpose ships.
4. Vessels making international flights.
5. Vessels transporting perishable products.
6. Vessels performing specific tasks, e.g. rescue, survey, research, pilot and some other functions.

7. Vessels making regular flights.
8. Vessels transporting liquid and bulk cargoes.
9. Vessels transporting cargoes which are driven into the ships by lorries.
10. Cargoes are driven off this type of ships.
11. Vessels transporting different cargoes at once.
12. Vessels transporting cargoes in large quantity.
13. Vessels carrying people and their luggage only.
14. Vessels transporting products, technics, building materials, etc.

Answer the questions to the text:

1. What types of commercial vessels do you know?
2. What purposes are they intended for?
3. What is the main task of cargo vessels?
4. Passenger ships carry only people, don't they?
5. There are two classes of tankers, aren't there?
6. How are tankers classified?
7. What does a clean tanker carry?
8. What does a dirty tanker transport?
9. Where is the machinery of a tanker located?
10. By means of what is the cargo space of a tanker divided into tanks?
11. What kinds of bulkheads do you know?
12. How do transverse bulkheads run?
13. How do longitudinal bulkheads run?
14. How is oil moved into and out of tanks?
15. Are pump designed for pumping only oil?

Make up a plan to the text. Compare it with your group-mates.

Make up dialogues on the following items:

- types of commercial ships;
- technical characteristics of commercial ships;
- cargo vessels;
- passenger ships.

Вариант 23

92

Fill in the gap with suitable verbs given in the box:

include, maximize, divided, transport, develop, broken, deeps, have, perform, appeared, carry out, intended, suppress, makes

1. Modern military ships can be _____ into 3 categories.
2. Contemporary warships are usually _____ into 7 types.
3. Most navies _____ different types of support and auxiliary vessels.
4. Combat vessels generally _____ fine hulls to _____ speed.
5. Auxiliary vessels _____ tasks of second importance.
6. They don't _____ passengers and cargoes, but _____ some important problems.
7. The first atomic ice-breaker _____ in 1959.
8. The tow boat is _____ to move non-self-propelled vessels.
9. The fire vessel is intended to _____ fires on the big vessels.
10. The dredging pump _____ underwater soil.
11. The bathyscaphe _____ researches on the big depth.

12. Sports vessels participate in races and can _____ big speed.

Answer the questions:

1. How many categories of naval ships do you know? What are they?
2. Are there 7 or 8 types of warships in current service with a navy?
3. What types of submarines are most military ones?
4. What classes of support and auxiliary vessels can you enumerate?
5. Which main characteristics of combat vessels do you find preferable?
6. Auxiliary vessels perform tasks of main importance, don't they?
7. What operations do ice-breakers perform?
8. What is the main function of the tow boats?
9. The fire vessel is intended to suppress fires only on tankers, isn't it?
10. What is the rescue ship?
11. The dredging pump isn't considered the auxiliary vessel, is it?
12. What are the main features of the bathyscaph?
13. Are sports and diving vessels intended for entertainment? Why?

Read the text "GERMAN BATTLESHIP TIRPITZ" and do assignments.

GERMAN BATTLESHIP TIRPITZ

Tirpitz was the second of two *Bismarck*-class battleships built for the German Kriegsmarine during World War II. Named after Grand Admiral Alfred von Tirpitz, the architect of the Imperial Navy, the ship was laid down at the *Kriegsmarinewerft* in Wilhelmshaven in November 1936 and launched two and a half years later in April 1939. Work was completed in February 1941, when she was commissioned into the German fleet. Like her sistership *Bismarck*, *Tirpitz* was armed with a main battery of eight 38-centimeter (15 in) guns in four twin turrets. As a result of a series of wartime modifications she was some 2,000 metric tons (2,000 long tons; 2,200 short tons) heavier than *Bismarck*.

After completing sea trials in early 1941, *Tirpitz* briefly served as the centerpiece of the Baltic Fleet, which was intended to prevent a possible breakout attempt by the Soviet Baltic Fleet. In early 1942, the ship sailed to Norway to act as a deterrent against an Allied invasion. While stationed in Norway, *Tirpitz* could also be used to intercept Allied convoys to the Soviet Union; two such missions were attempted in 1942, but both failed. Despite her inability to attack the convoys directly, *Tirpitz* acted as a fleet in being, forcing the British Royal Navy to retain significant naval forces in the area to contain the battleship.

In September 1943, *Tirpitz*, along with the battleship *Scharnhorst*, bombarded Allied positions on the island of Spitzbergen, the first time the ship used her main battery in anger. Shortly thereafter, the ship was damaged in an attack by British mini-submarines and subsequently subjected to a series of large-scale air raids. On 12 November 1944, British Lancaster bombers equipped with 12,000 pounds (5,400 kg) "Tallboy" bombs destroyed the ship; two direct hits and a near miss caused the ship to capsize rapidly. A deck fire spread to the ammunition magazine for one of the main battery turrets, which caused a large explosion. Figures for the number of men killed in the attack range from 950 to 1,204. The wreck was broken up by a joint Norwegian and German salvage operation after the war, with work lasting from 1948 until 1957.

Assignments:

1. Make up a plan to the text. Compare it with your group mates. Choose the best one.
2. What situation described in the text was demonstrated in the film?

Вариант 24

Fill in the blanks with the words given in the box:

vessels, fishes, criteria, subclass, inland, fleet, sails, intended, wind, waterways, corrosive, boats,

1. Fishing vessels are a _____ of commercial ones.
2. The world's fishing _____ consists mostly of decked _____.
3. Most of the vessels are propelled by _____ or oars.
4. Fishing vessels are _____ for catching various _____.
5. Many types of boats are designed for inland and coastal _____.
6. Barges, riverboats, ferries and other boats are typical _____ vessels.
7. Inland and coastal vessels are traditionally called _____, not ships.
8. Fresh water of lakes is less _____ to ships than the salt water of the oceans.
9. The plenty of ships can be categorized by several _____.
10. Industrial vessels include offshore _____ units, _____ farms and others.
11. _____ means liquid natural gas.
12. The natural gas is stored in _____ vessels.

Fill in the chart. Enumerate technical handling facilities, fishes and types of fishing boats described in the text:

Types of fishing boats	Fishes captured	Technical features and handling facilities
seiner	whale	winch

Tell about inland and coastal boats, their advantages and purpose of usage.

Вариант 25

Translate from English into Russian:

major machinery
 air-conditioned engine control room
 to move through the water
 to provide power
 to ensure smooth operation
 both electricity and propulsion
 required cooling
 in addition to 94
 flammable fuel
 to keep room temperature
 crew's living accommodation
 next to the engine room
 for different purpose
 propulsion arrangements for motor vessels
 frequent planned maintenance
 low-pressure steam
 full of sea water
 to be used in maneuvering
 electrical equipment
 intake air

Translate the sentences:

1. Air compressors are used to supply compressed air for starting engines.
2. Coolers are used for cooling either oil or water.

3. Besides running and maintaining the main propulsion machinery of the ship, the ship officer has a great deal with auxiliary machinery to look after.
4. Water for the boilers is also heated before being admitted into the boiler by feed water pump.
5. A lot of equipment is duplicated, so that one generator can be overhauled without cutting off the supply of electricity to the ship.
6. Engineer officers on tankers are also busy with operating the cargo pumping machinery.

Answer the questions:

1. What is the engine room?
2. Where is it typically located?
3. What engines does the engine room include?
4. What is the purpose of propulsion engines?
5. Are there any propulsion arrangements for motor ships?
6. What is the ship's electrical system provided by?
7. What is the main peculiarity of a steamship's propulsion and electrical power?
8. What is the main work principle of the engine cooling system?
9. What is the thruster system?
10. What is its main objective?
11. Why is the engine room considered to be potentially dangerous?
12. What safety means of precautions are used aboard?
13. Why is ventilation necessary for the operation of the engine room?

Discuss the following items:

- location of the engine room;
- engines and equipment;
- safety means;
- thrusters;
- engine cooling process;
- ventilation.

Вариант 26

Fill in the blanks with either 'motor' or 'engine'. Translate the word-combinations:

Diesel ____, steam ____, two-stroke ____, four-stroke ____, outboard ____, gas turbine ____, electric ____, reciprocating ____, slow speed ____, medium speed ____, high speed ____, crosshead ____,⁹⁵ trunk ____, piston ____, ____ room, ____ installations, hydraulic ____, propulsion ____, starting ____, universal ____, water ____, ____ ship, ____ boat, ____ car, ____ generator.

Make up as many word-combinations as possible with the words 'sail', 'motor' and 'engine'.

Fill in the chart:

Categories of propulsion systems	Means of propulsion
1. Human propulsion 2. Sailing propulsion 3. Mechanical propulsion	

Answer the questions:

1. What is a propulsion system?
2. What is it subdivided into?
3. What are the main means of human propulsion?

4. Propulsion by sail generally consists of a motor or engine, doesn't it?
5. What is the main purpose of using motors and engines on ships?
6. What types of propulsion are employed on submarines and warships?
7. What types of engines are applied on modern ships?
8. When did they come into operation?
9. What classes of diesel engines d'you know?
10. What mechanical items are used for propulsion except motors and engines?
11. What types of turbines do you learn from the text?
12. Where is a nuclear-powered steam turbine applied?
13. What types of turbines do warships and some passenger ships have?

Вариант 27

Translate from English into Russian:

several stages during the ship's career after construction to create a project outline to create a basic layout of spaces and a rough displacement construction blueprints to be used at the building site plumbing and ventilation plans in determining the method of construction large sections welded together once the hull is assembled and painted a ceremony of some significance to be underway to remove biological growths to sandblast and repaint the hull the propulsion and steering systems a life expectancy a lifespan as ships age to be scuttled at sea or scrapped by shipbreakers	an initial contract to build the ship to go into service to assess required dimensions to iterate on the ship's design a general specification describing the peculiarities of the vessel electrical schematics a unit produced in series a mass-produced fiberglass sailboat by the laying of the keel the vessel is afloat to deliver to the customer to undergo nearly constant maintenance between charters or shipping seasons to sustain major damage at sea to be converted into floating production storage and offloading units too dangerous to sail to be lost in fires and collisions
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96

Fill in the blanks with the words in the box:

shipyard, plan, lasts, mold, maintenance, biological growths, relationships, construction, layout, specification, welded, painted, launched, blueprints, ceremony, repair, sustained, peculiarities, stages, dimensions, sandblasting, expectancy

1. A ship passes through several _____ during its career.
2. The details of contract to build the ship are widely based on _____ between the ship-owners, operators, designers and the _____.
3. After the vessel is _____ it goes into service.
4. A naval architect creates a project outline according to required _____ and basic _____ of spaces and displacement.
5. The designer produces an overall _____ and general _____ describing the _____ of the vessel.
6. The construction _____ are used at the building site.
7. The period of ship construction _____ to several years and the _____ takes place in a shipyard.

8. The hull of fiberglass sailboat is constructed from a _____ while the steel hull of a cargo ship is made of a large units _____ together.
9. The hull assembled and _____, it is launched.
10. Ship launching is often a _____ of great significance.
11. Constant _____ is needed during the whole ship career.
12. Performed operations in drydocks and pierside are suitable for _____ and conversion.
13. Repair and maintenance include removing _____ on the hull, _____ and re-painting the hull.
14. Ships _____ major damage can be repaired or converted.
15. A life _____ of a ship can last between 20 and 100 years.

Answer the questions to the text:

1. How many stages does a ship pass through its life?
2. What are these phases?
3. Where does a ship begin its life?
4. What moments does ship's design include?
5. How long does ship's construction last?
6. Need a ship be repaired during its life?
7. What is the average period of a ship's life?

Вариант 28

Translate from English into Russian:

ship pollution the world's oceans and waterways oil spills to clean up marine species to exhibit developmental problems accidental spills discharging cargo double-hulled tankers to help stabilize and balance the ship human pathogens to cause alteration disruption of hormone cycles suppression of the immune system emissions of nitrogen from fossil fuels marine fuel management multi-level approach increasing operational efficiency the rising costs governmental pressure reducing fuel usage	as trade has become globalized pollution affects coastal areas human health polycyclic aromatic hydrocarbon the sediment and marine environment susceptibility to disease abnormal reproductive cycle loading cargo taking on fuel oil ballast water the transport of harmful organisms harmful diseases and toxins changes in growth birth defects exhaust emissions a significant source of air pollution emissions of sulphur from petroleum improving fleet management oversight to track and relate fuel consumption to the work of the vessel
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Express the meaning of the following words and word-combinations:

biodiversity, polycyclic aromatic hydrocarbon, pollution, susceptibility to disease, double-hulled, harmful organism, disruption of hormone cycle, marine fuel management.

Answer the questions:

1. What is ship pollution?
2. What does pollution affect?
3. What effects on the environment do oil spills have? Give examples.
4. What stipulations are necessary for oil tankers?

5. Ballast and bilge waters are potentially causing human health and sea animals, aren't they?
6. What do exhaust emissions result?
7. What is the average percent of air pollution come from ships?
8. What is the major goal of MFM?
9. What does effective MFM require?
10. What does MFM allow a fleet owner?
11. What analysis does MFM support?

Fill in the prepositions where necessary:

because of, into, with, of, on, by, to, in, from

1. Ship pollution is the pollution ___ air and water ___ shipping.
2. Pollution ... ships directly affects ___ coastal areas ___ increased traffic ___ ports.
3. Oil spills effect ___ the environment.
4. Marine species exposed ___ PAHs can exhibit developmental problems.
5. Modern oil tankers must be considered something ___ a threat ___ the environment ___ the sheer amount ___ oil carried.
6. ___ 2015 all tankers must be double-hulled.
7. ___ stabilize and balance the ship seawater is to be pumped ___ compartments ___ the hull.
8. The transport ___ harmful organisms is one ___ the problems ___ ballast water transfer.
9. Ballast and bilge waters ___ ships can spread human pathogens and other harmful diseases.
10. Exhaust emissions ___ ships is a significant source ___ air pollution.

Вариант 29

State the department of the following positions. Fill in the chart.

Department:	Professions:	
1) the deck department 2) the engineering department 3) the steward's department 98	☐ captain ☐ deck cadet ☐ chief officer ☐ third assistant engineer ☐ second officer ☐ forth engineer ☐ third officer ☐ boatswain ☐ pumpman ☐ master ☐ qualified member ☐ carpenter ☐ engineering cadet ☐ third mate ☐ second engineer	☐ able seaman ☐ second mate ☐ chief engineer ☐ third engineer ☐ chief steward ☐ oiler ☐ chief mate ☐ chief cook ☐ apprentice ☐ steward's assistant ☐ first assistant engineer ☐ wiper ☐ ordinary seaman ☐ second assistant engineer

Match professions and their duties and responsibilities:

Professions:	Duties and responsibilities:
1) captain 2) deck cadet 3) chief officer 4) third assistant engineer 5) second officer 6) forth engineer 7) third officer	a) the ship's highest responsible officer; b) the safety and security of the ship and the welfare of the crew on board; c) maintaining the charts and navigational equipment on the bridge, developing the voyage plans and standing watch; d) is responsible for firefighting equipment, lifeboats, and emergency systems and is in charge of a bridge or cargo watch;

8) boatswain 9) pumpman 10) master 11) qualified member 12) carpenter 13) engineering cadet 14) able seaman 15) second mate 16) chief engineer 17) third engineer 18) chief steward 19) oiler 20) chief mate 21) chief cook 22) apprentice 23) steward's assistant 24) first assistant engineer 25) wiper 26) ordinary seaman 27) second assistant engineer 28) third mate 29) second engineer	e) a nautical school graduate, executing tasks of an officer-of-the-watch; f) is in charge of the unlicensed deck crew; g) is frequently found aboard passenger liners nowadays; h) his duties include standing watch as helmsman and lookout; i) his duties concerned with the operation and upkeep of deck department areas and equipment; j) is responsible for all operations and maintenance all engineering equipment aboard the ship; k) his operational duties include responsibility for the refrigeration systems, main engines, and any other equipment; serving of meals and etc.; t) his role consists of cleaning and assisting with the preparation and serving of meals. l) is in charge of fueling or bunkering; m) is responsible for electrical, sewage treatment, lubricating oil, bilge, and oily water separation systems; n) a senior unlicensed crew member in the engine room; o) his position is found aboard fuel tankers; p) his role consists of keeping machinery lubricated; q) his role consists of wiping down machinery; r) he directs, instructs, and assigns personnel performing such functions as preparing and serving meals and etc.; s) he directs and participates in the preparation and
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Вариант 30

Переведите фразы 'techniques', 'some already in use', 'for ships of the future' 'propellers' and 'engine monitoring'.

Скажите как можно решить проблему эффективности хода:

А) модификацией характеристик винта путем установки дополнительных лопастей-обтекателей на его ступице;

Б) путем регулировки угла и формы лопастей-обтекателей на ступице вала.

Подготовьте сообщение о PBCFS

Вариант 31

Напишите ключевое предложение к каждому из приведенных абзацев

1. Early Egyptians also knew how to assemble planks of wood with treenails to fasten them together, using pitch for caulking the seams. The *Khufu ship*, a 43.6-meter vessel sealed into a pit in the Giza pyramid complex at the foot of the Great Pyramid of Giza in the 4th Dynasty around 2500 BC, is a fullsize surviving example which may have fulfilled the symbolic function of a solar barque. Early Egyptians also knew how to fasten the planks of this ship together with mortise and tenon joints.

2. The world's first tidal dock was built around 2500 BC during the Harappan civilization at Lothal near the present day Mangrol harbour on the Gujarat coast in India. Other ports were probably at Balakot and Dwarka. However, it is probable that many small-scale ports, and not massive

ports, were used for the Harappan maritime trade. Ships from the harbour at these ancient port cities established trade with Mesopotamia. Shipbuilding and boatmaking may have been prosperous industries in ancient India. Native labourers may have manufactured the flotilla of boats used by Alexander the Great to navigate across the Hydaspes and even the Indus, under Nearchos. The Indians also exported teak for shipbuilding to ancient Persia. Other references to Indian timber used for shipbuilding is noted in the works of Ibn Jubayr.

Вариант 32

Прочитайте внимательно текст. Составьте на английском языке план текста, выделив его основные темы. План можно составить в вопросной, назывной или тезисной форме

MARITIME HISTORY

The ancient Egyptians were perfectly at ease building sailboats. A remarkable example of their shipbuilding skills was *The Khufu ship*, a vessel 143 feet (44 m) in length entombed at the foot of the Great Pyramid of Giza around 2,500 BC and found intact in 1954. According to Herodotus, the Egyptians made the first circumnavigation of Africa around 600 BC.

The Phoenicians and Greeks gradually mastered navigation at sea aboard triremes, exploring and colonizing the Mediterranean via ship. Around 340 BC, the Greek navigator Pytheas of Massalia ventured from Greece to Western Europe and Great Britain.

Before the introduction of the compass, celestial navigation was the main method for navigation at sea. In China, early versions of the magnetic compass were being developed and used in navigation between 1040 and 1117. The true mariner's compass, using a pivoting needle in a dry box, was invented in Europe no later than 1300.

Вариант 33

Прочитайте внимательно текст и выполните после текстовые задания

MARINE ENGINEERING

Marine Engineering involves the design, construction, installation, operation and support of the systems and equipment which propel and control marine vehicles, and of the systems which make a vehicle or structure habitable for crew, passengers and cargo.

Marine Engineering is allied to mechanical engineering, although the modern marine engineer requires knowledge (and hands on experience) with electrical, electronic, pneumatic, hydraulic, chemistry, control engineering, naval architecture or ship design, process engineering, steam generations gas turbines and even nuclear technology on certain military vessels.

Marine Engineering on board a ship refers to the operation and maintenance of the propulsion and other systems, such as: electrical power generation plant, lighting, air conditioning, refrigeration, and water systems on board the vessel. This work is carried out by Marine Engineering Officers, who usually train via cadetships sponsored by a variety of Maritime organizations.

Marine engineering also embraces other areas, such as Autonomous Underwater Vehicle research, Marine renewable energy research, and careers related to the offshore extractive and infrastructure (Cable Laying) industries.

1. According to the text, Marine Engineering

- a) propel and control marine vehicles;
- b) means the design, construction, installation, operation and support of the systems and equipment aboard a ship;
- c) make a vehicle or structure habitable for crew, passengers and cargo.

2. What is implied in the final paragraph?

- a) Training of sea engineers is held by a variety of Maritime organizations.
- b) Marine Engineering on board a ship refers to the operation and maintenance

of the propulsion and other systems.

c) Marine engineering deals with such areas as underwater research, energy research, and infrastructure industries.