**Государственное бюджетное профессиональное образовательное учреждение
Республики Крым
«Керченский морской технический колледж»**

**МЕТОДИЧЕСКОЕ ПОСОБИЕ
для студентов II курса
специальности 26.02.02 «Судостроение»
по дисциплине
«ИНОСТРАННЫЙ ЯЗЫК»**

2020

Организация-разработчик: Государственное бюджетное профессиональное образовательное учреждение Республики Крым «Керченский морской технический колледж»

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Содержание

ВВЕДЕНИЕ

Методическое пособие по дисциплине «Иностранный язык» предназначено для студентов ГБП ОУ РК «КМТК» II курса, обучающихся по специальности 26.02.02 «Судостроение».

В разработке предоставлен необходимый материал для организации практических занятий по дисциплине «Иностранный язык»: перечень слов, необходимых для усвоения после каждой темы, грамматический материал, тексты профессиональной направленности, упражнения, тексты для аудирования, а также контрольные работы по каждой теме.

Целью данной методической разработки является обучение чтению оригинальной литературы по специальности, а также текстов общенаучного содержания и инструктивного характера. Задания позволяют проводить работу по формированию и развитию лексических и грамматических навыков, развитию речевых умений.

Данное методическое пособие может использоваться на практических занятиях по иностранному языку; также может пригодиться студентам, желающим продуктивно подготовиться к сдаче текущего контроля или промежуточной аттестации.

ТЕМА 1. ТЕРМИНЫ. АББРЕВИАТУРЫ. МАТЕМАТИЧЕСКИЕ ДЕЙСТВИЯ. СИ

1. plus, add – прибавлять, добавлять
2. minus, substract, take away - отнимать
3. percent - процент
4. multiply – умножать
5. divide – делить
6. to equal – равняться
7. to count, calculate - считать
8. figure – цифра
9. even/odd number - четное/нечетное число
10. sum – сумма
11. fraction – дробь
12. decimal – десятичный
13. sign – знак, символ
14. equation – уравнение, приравнивание
15. dot – точка
16. slash – косая черта
17. remainder - остаток
18. difference - разница
19. approximation - округление
20. value – величина, ценность
21. square (cube) root - квадратный (кубический) корень
22. solution – решение
23. expression – выражение
24. answer - ответ

ГРАММАТИКА

Numerals (Числительные)

Cardinal (количественные)	Ordinal (порядковые)
two, seven	first, second, third, fourth, tenth, twenty-first
13-19: +-teen: fourteen	
20-90: +-ty: seventy	
100 – (one) hundred	
1,000 – thousand	
1,000,000 - million	

7,000 – seven thousand
2.7 – two point seven
5.8 – five point eight
65 – sixty-five
123 – one hundred and twenty-three

Даты: 1981 – nineteen eighty-one

4,568 – four thousand five hundred and sixty-eight

1,225,375 – one million two hundred and twenty-five thousand three hundred and seventy-five (союз *and* ставится перед десятками и единицами).

ЗАДАНИЯ

1. Прочитайте и переведите текст:

English System Of Measurement: Definition, History, Advantages & Disadvantages

In 1960, the International Committee on Weight and Measures embraced a modern version of the metric system called System of International Units. Its abbreviation is SI.. It is also important to know that SI is just another name for the metric system and that the two are the same.

Yards, feet, inches, pounds, quarts, and miles are all part of the English system of measures. Learn more of its fascinating history and why most of the world has moved from this system to the modern metric system.

The U.S. and English System of Measurement

Are you ready for a quiz?

Question: How many countries in the world have not officially switched to the SI (International System of Units), or modern metric system?

Answer: Three - The U.S., Liberia, and Burma.

The United States still uses a system which is based on the English system of measurement. Over the last 200 years, nearly every other nation of the world has officially adopted SI. Even Great Britain has switched, with a few exceptions. In addition, the scientific world, as well as trade and commerce, uses the metric system, even in the U.S.

The English system of measurement had a good run, but there are a number of disadvantages of this system.

English System of Measurement

What is the *English system of measurement?*

It is a system of weights and measures that evolved over time and was once the de facto standard throughout much of the world. The best definition of this system comes with the British Weights and Measures Act of 1824. This act defined a standardized set of measures for the British Empire, known as the Imperial Units. Here is a table listing several examples of these:

Category	Name of Unit	Measure	
Length	Inch	1/12th	ft
	Foot	1	ft
	Yard	3	ft
	Mile	5280	ft
	Nautical mile	6080	ft
Area	Acre	43,560	sq ft
Volume	Fluid ounce	1/20th	pint
	Pint	1	pint
	Quart	2	pint
	Gallon	8	pint
Weight	Ounce	1/16th	lb
	Pound	1	lb
	Stone	14	lb
	Ton	2240	lb

Selected Imperial Units (1824)

The complete history of the English system of measurement spans many centuries. Countless books and articles have been written about this subject, and only a small fraction of the information will be summarized here. We'll be focusing on a few of the more interesting cases.

First, length. These units go back to the early Romans who settled in Britain. They defined a 'mille,' which means '1,000' in Latin, as a distance of 1,000 paces. At about 5 feet per double-pace, a 'mille' became known as a 'mile' and was equal to 5,000 feet. The Romans were also fond of dividing things by 12, so a 12th of a foot in Latin was an 'uncia,' which later became the 'inch.'

Some of the English units of length came about by decree. For example, there is a legend that King Henry I, who ruled from 1100 to 1135, announced that a yard would be defined as the distance from the tip of his nose to the end of his thumb. In the latter part of the 16th century, Queen Elizabeth I decreed that a mile would be exactly 8 furlongs (a furlong was 660 feet), which works out to be 5,280 feet. This replaced the previous 5,000-foot mile.

King Henry I and Queen Elizabeth I

Next, let's look at weight. One of the most interesting histories is that of the stone. Dating to Babylonian times (2000 BCE), stones were used as a counterbalance on scales to weigh commodities. Here is a picture of a Roman stone dating to the second century AD:

2nd century Roman stone

In the early history of the British Isles, stone weights were used extensively but varied in value from Scotland to Ireland to England and even county by county. The stone measure also varied by what was being weighed. For example, a stone of wool might weigh 14 pounds, but a stone of glass might be 5 pounds. Finally, in 1824, the stone was defined as exactly 14 pounds.

Finally, let's discuss volume. The first dry gallon was described by Edward I in 1303 as eight pounds of wheat. This led to wide-ranging interpretations and lack of standardization. Finally, Parliament, in 1696, defined a dry gallon to be a cylinder 18.5 inches in diameter and 8 inches deep. The dry gallon was also called the 'Winchester bushel.' They defined a liquid gallon to be 268.8 cubic inches, which was exactly 1/8th of the dry gallon.

Advantages of the English System

For any of you familiar with SI, you probably know that the English system of measurements holds few advantages. The primary advantage to hanging on to the English system is cost of conversion. For example, in 2009, NASA stated that the conversion of the space shuttle program to SI would cost $370 million. This was a price for which NASA simply did not have the funds. In another example, when Great Britain began to process for metrification in the 1990s, the estimated cost for changing all of its road signs was the equivalent of between $1.5 and $1.8 billion.

The second advantage of continuing with the English system is customary usage. For example, distances in football and baseball are closely linked to feet and yards, and decades of records are kept in these units. Cooking is another area where customary units in the U.S. are quarts, cups, ounces, pounds, etc. Finally, our culture is filled with sayings, such as, 'Give him an inch and he'll take a mile.' It just isn't the same to say, 'Give him 2.54 centimeters and he'll take 1.61 kilometers.

Disadvantages Of The English System

The primary disadvantage of the English system of measurement is converting from one unit to another. It's not easy to go from feet to miles, pounds to ounces, or gallons to pints. A common example is trying to remember that a square mile is 640 acres. The SI, on the other hand, is based on powers of 10, so 1,000 meters is a kilometer, 100 centimeters is a meter, 1,000 grams is a kilogram, etc. Conversion can often be done in one's head.

Another disadvantage of the English system is that the measures have not evolved in a systematic way. Most are arbitrary definitions that have their roots in hundreds or even thousands of years of tradition. Related to this disadvantage is the fact that there

are so many different measures for length, weight, area, and volume to remember. In the SI, for example, there is just one primary base measure for length, volume, and mass/weight

The final disadvantage to continued use of a system based on the English system is that most of the world is on SI. In fact, SI is the universal international system for science, engineering, finance, commerce, and technology. It is increasingly difficult for countries not officially on the SI to stay competitive.

Summary

English system of measures is a collection of measures for length, volume, weight, area, etc. that have their roots in hundreds of years of history. They were standardized somewhat by the British Weights and Measures Act of 1824, which defined the Imperial Units to be used throughout the British Empire. The history of these units is colorful, including heavy influence from the Romans and decrees by British monarchs.

There are a number of disadvantages to the English system, foremost of which is the difficulty in converting from one unit to another. Other disadvantages include the lack of a systematic foundation to the measures, the number of base measures to remember, and the fact that most of the world is officially on the International System of Units (SI, or the modern metric system).

The main advantage to not converting from the English system, or a system that is similar, is cost of conversion. A secondary reason for not converting is that a culture, such as in the U.S., can be rooted in the customary usage of feet, yards, quarts, miles, etc. Although a few of the English measures are still used in Britain today, the country has officially moved to SI. Only the U.S., which uses the U.S. Customary System, Liberia and Burma have not officially adopted the SI standard.

2. Угадайте, о каких цифрах идет речь:
1. The Celsius freezing point — _____
2. Days in April — _____
3. The number of letters in the English alphabet — _____
4. An unlucky number — _____
5. Teeth in the normal human mouth — _____
6. The number of years in a millennium — _____
7. The number of months in a year — _____
8. Days in December – _____
9. Degrees in a right angle — _____
10. Books in a trilogy — _____
11. Minutes in an hour — _____
12. Legs has an octopus — _____
13. The number of cents in a half-dollar — _____
14. Players in a soccer team — _____
15. Number of hours in a day — _____
16. Celsius boiling point — _____

3. Запишите правильные порядковые числительные:

1. Saturday is the _____ day of the week.
2. The _____ month of the year is June. .
3. The _____month of the year is March.
4. In a competition the gold medal is for the_____ place and the silver medal is for the_____
   place.

4. Скажите по-английски:

1. 245; 533; 816.
2. 3,562; 7,324.
3. 2+3=5; 7-4=3; 3x5=15; 10:2=5; 50+20=70; 48-6=42; 4*6=24; 36:6=6
4. 1 Января; 8 Марта.
5. 3.45; 8.9.
6. 2/3; 4/5; 3/7; 2/9.

5. Переведите предложения:

1. Mathematics has a language of its own, which uses numbers and symbols instead of words and punctuation.
2. The earliest recorded numbers were marks made on a stick.
3. In the branch of mathematics called algebra, letters are used to stand for unknown amounts.
4. Mathematicians introduced special symbols to replace words such as "plus" and "equals".
5. Some letters are called variables, because the numbers they represent vary from equation to equation.
6. Other letters are called constants because they represent numbers with a fixed value that never changes.
7. For example, in the equation shown above, the letter d (diameter of circle) is a variable.
8. Pi is a constant. Its value is always the same.
9. Graphs display numerical information in a way that is easy to understand.
10. Pie charts display information by dividing a circle into portions.
11. The branch of mathematics concerned with collecting and interpreting data is called statistics.
12. The data are often collected by interviewing a sample group of people who are meant to represent the whole population.
13. The information gained from the sample group can be very useful to government agencies and businesses, helping them find out tastes, opinions, and the probable outcome of events.

6. Переведите на русский:

1. It was Jane`s second impression.
2. Jack saw thousands of blubbers.

3. Sixty citizens voted for him.
4. Jack earned six hundred dollars a month.
5. That happened three hundred years ago.
6. This company employed fifty-nine workers.

7. Переведите текст:

Addition

6 + 4 = 12   SIX PLUS FOUR EQUALS TWELVE.

This type of calculation is called addition, which is when you add two or more numbers together. When saying the equation out loud, we use the word "plus," and the "+" symbol is called a plus sign. The result of an addition equation is called a sum.

Equation

Usually, we say that one expression equals another, and the "=" symbol is fittingly called an equals sign. Though it is fairly common in English to say the word "equals," it is also fine to use the singular "is." For example, two plus three *is* five. Any mathematical statement involving an equals sign is called an equation.

Subtraction

15 – 8 = 7   FIFTEEN MINUS EIGHT EQUALS SEVEN.

This type of calculation is called subtraction, which is when you subtract one number from the other to get a difference. When saying the equation out loud, we use the word "minus," and the "-" symbol is called—you guessed it—a minus sign. However, the word "minus" is not used when describing negative numbers (as opposed to positive numbers). For example, three minus four is not "minus one," but "negative one."

Multiplication

5 × 2 = 10   FIVE MULTIPLIED BY TWO EQUALS TEN.

The "×" symbol is considered to be the multiplication sign, although you can also use a dot (·) or an asterisk (∗).

Division

21 ÷ 7 = 3   TWENTY-ONE DIVIDED BY SEVEN EQUALS THREE.

When dealing with division, we say that one number is divided by another number to get a quotient. We call the "÷" symbol a division sign, but it is also common to use a slash (/), a symbol also used for fractions. If an answer contains a remainder, then you simply say "remainder" where the "r" is. For example, 22 ÷ 7 = 3r1 would be "twenty-two divided by seven equals three remainder one."

Decimal

3.141 THREE POINT ONE FOUR ONE

18.5 is considered a decimal, and the period used to write this number is called a decimal point.

When said out loud, we usually use the word "point," followed by a string of individual numbers. For example, 3.141 would be pronounced "three point one four one."

Money tends to be recited a little differently. For example, if something costs $5.75, you wouldn't say "five point seven five dollars." Instead you would say "five dollars and seventy-five cents" or simply "five seventy-five."

Approximation

П ≈ 3.14   PI IS APPROXIMATELY EQUAL TO 3.14

This type of equation is called an approximation, where one value is approximately equal to another value. The "≈" symbol is called an almost-equals sign.

The fields of math and science tend to borrow a lot of letters from the Greek alphabet as commonplace symbols, and English tends to put a twist on the pronunciation of these letters. For example, the letter π is not pronounced /pi/ as it normally would be, but rather as /paj/, like the word "pie."

Be careful about pronouncing Greek letters in English because oftentimes, it won't be the same.

8. Выполните тест, выбрав правильный вариант:

- *1) Ten ___ ten equals twenty.*
  - ○ minus
  - ○ is
  - ○ plus

- *2) Five ___ five is zero.*

  - ○ minus
  - ○ multiply
  - ○ add

- *3) Twenty ___ by five is four.*
  - ○ divided
  - ○ take away
  - ○ multiplied

- *4) Three ___ four is twelve.*
  - ○ times
  - ○ add
  - ○ minus

- *5) Six __ two is eight.*

○ divided

○ add

○ minus

- *6) Twelve ___ by four equals three.*
  ○ divide

  ○ divided

  ○ add

- *7) Ten ___ of a hundred is ten.*
  ○ divide

  ○ percent

  ○ subtract

9. Переведите на английский:
1. 7 прибавить 8 равняется 15.
2. Прибавь 7 к 8 и получишь 15.
3. 23 минус 3 будет 20.
4. Если отнимешь 3 от 23, ответ будет 20.
5. 6 умножить на 4 равно 24.
6. Умножь 6 на 4 и получишь 24.
7. 9 разделить на 3 равно 3.
8. Если разделить 9 на 3, ответ будет 3.

10. Переведите на русский:
1. He is the best at doing sums in our class.
2. The task is to reduce to the common denominator.
3. The difference of 15 and 10 is 5.
4. Solve the equation.
5. "Improper fractions" are not an easy topic for him.
6. He knows exactly what a mixed fraction is.
7. Find the cube root of 15.
8. Minus is an example of a mathematical sign.
9. Schoolchildren learn the multiplication table all over the world.
10. The right angle is 90° (degrees).

11. Текст для аудирования:
Isaac Newton was one of the world's greatest scientists. He did research in mathematics, physics, astronomy and many other fields.

Newton was born in 1642. He worked on his family's farm but was not really interested in farming. His father died before Isaac was born. In his childhood he spent much time with his grandmother. Newton didn't have many friends.

Newton did most of his scientific work at Cambridge, where he was a professor for many years. He died in 1727 and was buried at Westminster Abbey in London.

Isaac Newton was very ambitious young scientist who carried out his experiments very accurately. His main theory was that everything in nature could be explained through mathematics. Not all scientists had the same opinion.

Newton was an astronomer, who studied the Earth, the planets and stars. He became well-known for theories of gravity, in which he claimed that all objects of the universe have a gravitational force that pulled other objects towards them. An apple is pulled to the Earth's surface just like the Earth is being pulled towards the sun. He also showed that planets move around the sun in ellipses.

He also conducted experiments with light and found out that normal light is made up of many colors. He used prisms to break up light into a rainbow of colors. Newton invented a new kind of telescope that used lenses. It made objects look bigger.

In his book "The Mathematical Principles" Newton describes the three laws of motion:
- Every moving object keeps moving until something stops it. An object that lies on the ground continues to lie there until a force sets it in motion.
- Acceleration happens when a force acts on a mass. The greater the mass the more force must be applied to move the object. For example, you need more force to push a car than you need to push a bike.
- For every action there is an equal and opposite reaction. A rocket, for example, pushes down on the ground with its engines; the opposite action moves the rocket into the sky.

These principles were very difficult to understand at that time. Only few people really knew what Newton meant.

Newton also devoted a great deal of his life to alchemy. He studied it closely and believed that he was a special person who had magic powers and secret wisdom to change substances and objects. Newton wanted to keep these studies to himself; therefore he did not publish any of his alchemist works. At that time alchemy was a much-discussed topic that not everyone accepted.

Although Newton was one of the great scientists of his time, he based his work on the discoveries of Galileo and other scientists who lived before him. Scientists of following generations admired Newton's work. Albert Einstein, 20th century scientist, thought highly of Newton's work although his theory of general relativity moved away from his ideas.

12. Выполните контрольную работу:

I. Переведите на русский:
1. Albert Einstein is known all over the world as a brilliant physicist and the founder of the theory of relativity.
2. The four basic mathematical operations - addition, subtraction, multiplication, and division have application even in the most advanced mathematical theories.

3. Electronic calculators have made these (and other) operations simple to perform, but these devices can also create a dependency.
4. The order in which we add the numbers makes no difference.
5. If you have difficulties performing the basic operations for simple numbers, one way to improve your skills is to use flash cards.
6. The English system of measures is a collection of measures for length, volume, weight, area, etc. that have their roots in hundreds of years of history.
7. Weight is the measurement of how strongly gravity pulls an object toward Earth.
8. The main advantage of SI is that the rest of the world uses it so we can all communicate in the language of the metric system.
9. Some letters are called constants because they represent numbers with a fixed value that never changes.
10.. The invention of zero and our number system is one of the greatest achievements of the human race.
11.One disadvantage of the English system of measurement is that units within the system can vary from country to country.
12. The greater the mass the more force must be applied to move the object.

II.   Запишите числительные словами:
1) In 1879…   2) 7,845,129   3) 7,000   3) 7.843   4) $4.9   5) In 2008…   6) 3/7   7) 37,423,876

III.   Запишите по-английски:
   1) 6*8=48   2) 20:4=5   3) 7+8=15   4) 78-23=55   5) 61%

IV.   Переведите на английский:
   1. Пятью пять — двадцать пять.
   2. Решите уравнение.
   3. Школьники по всему миру учат таблицу умножения.
   4. Прямой угол равняется 90 градусам.
   5. Второй урок начинается в десять.

V. Выполните тест:
   1).… 3 from 131.
- ○ Divide
- ◉ Subtract
- ○ Multiply
   2) If you divide 4 … 2, the answer is 2.
- ○ in
- ○ by
- ○ into
   3) The British variant of 234 900 is … .

- ○ two hundred and thirty-four thousand nine hundred
- ○ two hundred thirty-four thousand nine hundred
- ○ two hundred thirty-four thousand ninety hundred
    4) I have 174 people on my "Friends" list in this social network.
- ○ one hungred seventy-four
- ○ oh seven four
- ○ one hundred and seventy-four
    5) One inch is ... .
- ◉ 10.6 cm
- ○ 2.5 cm
- ○ 1.3 km
    6) I am not the kind of person who likes to ... sums.
- ○ make
- ○ do
- ○ take
    7) Plus is a mathematical ...
- ○ symbol
- ○ sign
- ○ digit
    8) Do you know the ... table?
- ○ multiplying
- ○ multi
- ○ multiplication
    9) You need to ... more problems if you want to improve your mathematical skills.
- ○ do
- ○ solve
- ○ work out
    10)   Now my favourite subject is ... .
- ○ math
- ○ maths
- ○ mathematic

ТЕМА 2. ОБОРУДОВАНИЕ РАБОЧЕГО МЕСТА

1. safety measures - техника безопасности
2. consequence - последствие

3. to prevent – предотвращать
4. precaution – меры предосторожности
5. maintain – поддерживать
6. first aid – первая помощь
7. dangerous occupation – опасное занятие
8. hazard – риск, опасность
   hazardous - опасный
9. scaffold - рабочая площадка на высоте
10. injure – повреждать, ранить, травмировать
11. ladder- лестница
12. height – лестница
13. equipment – оборудование
14. supervisor – контролер, смотритель
15. wear – износ, ветшание
16. tear – разрыв
17. plug in – включать в сеть
18. power supply – энергоснабжение
19. leakage – утечка
20. exceed – превышать
21. mistake, error – ошибка
22. accident – несчастный случай, происшествие
23. welding – сварка
24. flammable material – горючий материал
25. fire extinguisher – огнетушитель
26. escape route - план эвакуации
27. emergency - крайность, крайняя необходимость
28. protective apparel – защитная одежда
29. harness – ремень безопасности

ГРАММАТИКА

Обороты there is / there are

There is и *there are* используют, когда хотят сказать, что что-то где-то существует, находится, есть, имеется. Перевод желательно начинать с конца предложения. Перевод непосредственно самих оборотов можно опускать.

there is употребляется перед предметами (лицами), стоящими в ед. ч., а *there are* – перед предметами (лицами) во мн. ч.:

There is <u>a computer</u> (ед.ч.) in my room. – В моей комнате (имеется) компьютер.

There are <u>many children</u> (мн. ч.) on the playground. - На детской площадке (находится) много детей.

Построение вопросительных предложений: на первое место выносятся *is* или *are*. Примеры:

Is there a carpet in the bedroom**?**

Are there many windows in the house**?**

Нюансы:

There is **a book** and **exercise books** on the desk.

There are **exercise books** and **a book** on the desk.

ЗАДАНИЯ

1. Прочитайте и переведите текст:

Top 10 Workplace Safety Tips Every Employee Should Know

Workplace safety cannot exist on best practice guidelines and policies alone. A safe working environment is based on how well the people, in both management and on the factory floor, adhere to - and communicate about - safety standards.

The foundation of any successful workplace safety effort is one that encourages employees to identify unsafe behaviors and opportunities for improvement while also making well-informed safety decisions during daily routine tasks.

Here's the top 10 Workplace Safety Tips Every Employee Should Know to help you inform your own workers and create a safe workplace

1) Be Aware Of Your Surroundings

This step requires knowing the potential hazardous areas, and potential hazardous situations. Also, always be alert of machinery.

2) Keep Correct Posture To Protect Your Back

If you work at a desk, keep your shoulders in line with your hips to avoid back problems. If you're picking things up, be careful so your back doesn't get hurt. If possible, always use ergonomic designed furniture and safety equipment so everything you need is within easy reach.

3) Take Regular Breaks

So many work-related injuries and illnesses occur because a worker is tired or not alert to their surroundings. Taking regular breaks helps you stay fresh on the job. One trick to staying alert is to do the most difficult tasks when your concentration is best - in the morning.

4) Use Tools And Machines Properly

Take the proper precautions when using tools, and never take shortcuts. It's a huge safety risk to use scaffolding as a ladder or one tool in place of another for a specific job. Using tools the right way greatly reduces the chance of workplace injury.

5) Keep Emergency Exits Easily Accessible

In case of an emergency, you'll need quick, easy access to the exits. It's also recommended to keep clear access to equipment in case you need to quickly stop them from functioning.

6) Report Unsafe Conditions To Your Supervisor

Your supervisor needs to be informed about any workplace safety hazards or risks. They are legally obligated to ensure their employees have a safe working environment and will take care of the unsafe conditions and make them safe for you

and your coworkers.

7) Use Mechanical Aids Whenever Possible

Instead of attempting to carry or lift something that's really heavy in an attempt to save time a bit during your workday, take the extra minute to use a wheelbarrow, conveyor belt. Too many injury risks are involved with trying to lift something that weighs too much.

8) Stay Sober

Around three percent of workplace fatalities occur due to alcohol and drugs. When a worker's coordination, motor control, concentration or alertness is compromised, this leads to any number of risks for workplace injury and fatalities.

9) Reduce Workplace Stress

Stress can lead to depression and concentration problems. Common causes of workplace stress include long hours, heavy workload, job insecurity and conflicts with coworkers or managers. Take your concerns about workplace stress to your supervisor to see how they might help you address them.

10) Wear The Correct Safety Equipment

If you're not wearing the correct safety equipment for a task, you may get injured. Depending on the job, equipment like earplugs, hard hats, safety goggles, gloves or a face mask greatly reduce the risk of workplace injury.

It's up to managers and business owners to provide their employees with safe workplaces, encouraging them to become active participants in the process. Share with them the workplace injury statistics and the risks their job presents to them. These simple initiatives really do make all of the difference.

2. Прочитайте и переведите текст:

Industrial factories play an important role in the country's infrastructure and economy. They create hundreds of thousands of new jobs while stimulating the market with products and services. But like all workplaces, there's an inherit risk of injury for workers in industrial factories. The good news is that employers can minimize this risk by following some simple steps.

Clean Up Spilled Liquids

Whether it's oil, water or any other liquid, employers should train their workers to clean up any spilled liquids in a timely manner. As you may already know, slip-and-fall accidents are one of the most common types of work-related injuries in the U.S. According to the National Floor Safety Institute (NFSI), more than 8 million people seek medical attention from hospital emergency rooms each year as a result of slip-and-fall accidents.

Maintain Equipment

Another important step towards creating a safe working environment in an industrial factory is to maintain all equipment and heavy machinery. When you're busy running a factory, it's easy to overlook the importance of equipment and machine maintenance. After all, what's the point if maintaining such equipment if it still works and functions as intended? Well, when machines and equipment are not

properly maintained according to the manufacturer's specifications, it can place workers as risk for serious injury or even fatality.

Ventilation

Employers should use proper ventilation in their factories to reduce the risk of respiratory disease and/or illness. This is particularly true if the factory produces airborne contaminants, as such contaminants may accumulate over time to create a dangerous environment for workers. With proper ventilation, however, the risk of injury and illness is significantly minimized.

Eliminate Fire Hazards

Are there fire hazards in your workplace? The Occupational Safety and Health Administration (OSHA) says that all combustible materials should be "*stored in covered metal receptacles and disposed of daily*." If you aren't storing combustible materials in a metal container, or disposing of them daily, you could be violating a federal law while placing workers at risk for injury.

Encourage Injury Reporting

Many employees are fearful of reporting work-related injuries and illness, fearing retaliation by their employer. But when employees don't report incidents, the problem remains unfixed; thus, placing other employees' at risk for the same injury or illness. Employers should encourage workers to report all work-relayed injuries and illnesses to promote a safe working environment.

3. Прочитайте и переведите текст. Соотнесите примеры с условными обозначениями:

Safety at work. Safety signs and colour at work

Safety signs and colour are useful tools to help protect the health and safety of employees and workplace visitors.
Safety signs are used to:
- draw attention to health and safety hazards;
- point out hazards that may not be obvious;
- provide general information and directions;
- equipment must be worn;

- show where emergency equipment is located
- indicate where certain actions are prohibited.

Colour attracts attention and can be used extensively for safety purposes. For example, colour can be used as an additional safety measure to identify the nature of the hazard.

The choice of colour also draws attention to the probability of a hazard. For example, the colour red is used to indicate a definite hazard. A potential hazard is communicated by the colour yellow.

When employees are aware of the hazards around them and take the necessary precautions, the possibility of an injury, illness or other loss is minimized.

However while safety signs and colours are valuable in warning of hazards, they are not substitutes for eliminating or reducing those hazards.

This guideline will help your workplace to effectively use safety signs and colours for the protection of employees and visitors alike.

Warning signs	These signs warn you of a danger or risk to your health: They are made up of a yellow triangle with a black border, and a black symbol. Danger: Electricity
Prohibition signs	These are signs that indicate something that you must not do. They are made up of a red circle border with a line through it, a white background and black symbol. You mustn't touch this machine with bare hands. It's hot.
Mandatory Action Signs	These signs tell you that you must wear some special safety equipment. They are made up of a blue circle, white symbol, with no border. Ear Protection Required Sign
Safety information signs	These signs show where emergency safety equipment is kept. They are made up of a green rectangle, with a white symbol or text. Exit And Evacuation Sign

4. Ответьте на вопросы по тексту из упр. 3:
1. Why do people receive industrial injuries?
2. What can reduce the danger of industrial injuries?
3. Should workers receive training in basic safety?
4. What potential dangers in your laboratory, workshop, or place of work do you face? How is the risk of these hazards reduced? Do you always follow safety instructions?

5. Обсудите инструкции по ТБ, приведенные ниже, и ответьте на вопросы:

1. Wear protective clothing at all times.

2. Keep your workplace tidy.
3. The areas around machines must be kept clear.
4. Tools should be put away when not in use and any breakages reported.
5. Machines should be cleaned after use.

1. Who is this document for?
1. machine operatives
2. managers
3. all employees
4. injured employees

2. Who wrote this document?
1. trade union representative
2. technician
3. manager
4. medical staff

3. What is the writer's intention?
1. to prevent accidents
2. to ensure speedy help for injured employees
3. to protect the company
4. to warn about dangers

6. Переведите письменно текст:

Accident investigation

Whenever an accident occurs that results in an injury (medical case), damage of equipment and material, or both, accident investigation by the manager is required. A written investigation will be completed by the end of the particular shift or business day on which the accident occurred.

In no event should there be a delay of more than 24 hours. Failure to comply with this requirement may lead the manager to disciplinary punishment including discharge.

Without adequate accident investigation data the Company may be subjected to claims (иск), and legal action for which it has no defence.

As a minimum, the accident investigation report will include the following:
1. Name, occupation, and gender of injured worker.
2. Place and date / time of accident.
3. Description of how the accident happened.
4. Causes of the accident - unsafe acts and unsafe conditions.
5. Witness(es) - name and department.
6. Corrective action taken - when.
7. The employee who was injured and any employee(s) who witnessed the incident should be separately interviewed as soon as possible. A copy of the report must be given to the Manager for review. Another copy of the report is

to be kept for a period of not less than the injured employee's length of employment plus five years.

7. Переведите инструкции письменно:

The safety guidelines for factories are similar to the safety guidelines in many other industries. Key factory safety guidelines include:

1. All employees are to wear required safety glasses, and safety clothing for their job while at their workstation.
2. All employees working with moving machinery are prohibited from wearing loose clothing or loose jewelry.
3. All employees working around moving machinery must have long hair tied back where it can not fall forward or be caught in the machinery.
4. All tools will be in use or will be stored at their proper location at all times, no tools are to be left in any location where they are not being used or being stored.
5. All equipment, tools and machinery are to be kept clean and in working condition, with any defects being immediately reported to a supervisor.
6. The instruction manuals for all machinery must be readily available for review.
7. All equipment and machinery is to be shut down when not in use.
8. Fingers and hands must be kept away from moving parts.
9. All machinery is to have the installed safety guards (ограждения).
10. No machinery is to be modified by any employee who is not specifically trained in the technical aspect.
11. All work areas are to be kept properly lit when anyone is working.
12. All work areas are to be kept properly ventilated.
13. All areas of the factory are to be kept clean.
14. Anyone working in the factory under the influence of drugs or alcohol will be immediately terminated.

8. Текст для аудирования:

Fire Safety Measures

Fires are one of the leading causes of home injury and death. Approximately one-half of home fire deaths occur in homes without smoke alarms and most l fires occur during the winter months! That is definitely a sad picture that we can see.

A couple of major reasons for fires to destroy our homes:

- Alcohol use.
- Smoke or toxic gases.

Measures to prevent Fire Hazards:

- Help your parents and your younger brothers or sisters to quickly escape a fire. Despite a fire alarm is a rather load sound, children, teenagers, even some adults can sleep through it. So it's absolutely important to teach everyone at your home how to escape a late-night fire.
- Also make sure the smoke alarms or detectors are in accessible areas in your home, such as the kitchen, and near fireplaces or stoves.

- Install at least one smoke alarm on every floor of your home, including the basement.
- Replace batteries in smoke detectors at regular intervals. Get the alarms checked at least twice a year. You can make it every spring and fall.
- For people with hearing disabilities, special smoke alarms with vibration are available. You can buy these online and through local fire equipment distributors.
- Install new smoke alarms when they are 10 years old or older (sooner if one is damaged or not working).
- Keep a fire extinguisher near the kitchen and have it checked yearly.
- Learn the safety rules for matches, fires, electrical cords, stoves, and chemicals. Keep matches and flames, such as candles, out of the reach of children.
- Ask your parents to buy sleepwear made of flame-retardant fabric. Dress in flame- and fire-retardant clothing. Older adults need to be careful about wearing clothing with loose material that could catch on fire.
- Organize occasional Family Fire Drills with your parents at least twice a year. Plan a fire escape route. Choose a meeting place outside the home where everyone will gather, and be sure no one goes back inside a burning building.
- Know the emergency number for your fire department; Remember to get out first if there is a fire, then call for help once safely outside.
- Teach children who are old enough to understand to stop, drop, and roll if their clothing catches on fire so they can help put out the flames and avoid serious burns and to always keep ways and exits clear of furniture, toys, and other obstructions that could slow your escape process.

Equipments that has the chances of Fire Hazards
Cooking Equipment :
- Keep an eye on anything you're cooking
- Keep non-cooking equipment away from the stove.
- Roll up long sleeves while cooking.
- Store candy or cookies away from the stove so kids won't be tempted to climb on it to get to the treats.

Cigarettes, Lighters and Matches :
Keep the Cigarettes, Lighters and Matches away from fire and out of sight and reach of children. Smoking materials are the leading cause of home fire deaths. The tools used to light them are also a fire hazard. Make sure that cigarette butts are fully extinguished before emptying ashtrays. Never place a cigarette butt directly into a trashcan without extinguishing it with water first.

Fireplaces, and Space Heaters :
Fireplaces should be protected with screens. Have the chimney inspected yearly and cleaned regularly.
When purchasing an electric space heater, look for the safety mark. Keep at least three feet between the heater and anything that can burn. Turn the heater off before falling asleep or leaving the area you are heating.

Wood-Burning Stoves

*   Make sure wood-burning stoves are properly installed. These stoves are not designed to burn trash or other items. Never use gasoline or other flammable liquids to start a stove fire. Burn coal only if recommended by the manufacturer.
*   Remember that wood and coal stoves get very hot. If you have young children living in or visiting your home, supervise them carefully.
    Have chimneys inspected each year and cleaned, if necessary.

Kerosene Heaters

*   Use kerosene only. Never use gasoline in your heater. Gasoline is greatly increasing the risk of fire.
*   Keep the room ventilated (a door open, or a window).

Gas-Fired Space Heaters

*   These heaters should not be used in small areas -- especially bedrooms -- because there is potential for explosion or carbon monoxide poisoning.
*   Follow the manufacturer's instructions. Keep flammable materials away from gas-fired appliances.

Other Hazards :

*   Keep trash cleaned up in attics, basements, and garages.
*   Avoid fireworks. Think of safety first when dealing with fireworks.

Let's make it our responsibility to educate the ones who are ignorant about the hazards caused by fire to avoid any casualties and destruction of our homes and surrounding.

9. Текст для аудирования:

HOW TO TAKE CARE OF PERSONAL SAFETY ON SHIPS?

Travelling on a ship can be fun but it is also dangerous. Marine accidents happen frequently and can be avoided if proper safety procedures are undertaken. To minimize the hazards and injuries while travelling on water, proper precautions must be taken.

Apart from the safety regulations and the safety equipment carried for personnel protection on each ship, there are some safety measures that need to be taken to ensure personal safety on the ship.

Here is a brief overview of them.

Taking Care of Personal Safety on Ships

Personal safety primarily includes the various ways and means which sailors can adopt to stay safe on an individual level, such as careful movement around the ship, moving of heavy cargo, etc. In addition, appropriate use of safety equipment is also a part of personal safety on ships.

*   ### Wearing Protective Clothing

It is imperative to wear comfortable and well-fitted clothes on board a ship as loose clothes can get caught in the machinery and cause injuries. Proper footwear with slip-resistant soles helps in minimizing the risks of slipping and must be worn at all times

on the ship. Apart from these, wearing the appropriate gloves to protect the skin from exposure to heat, chemicals, sharp edges, etc., is a must.

- *Personal Protective Equipment*

  Personal protective equipment includes safety helmets, shoes, goggles, ear-muffs, safety harness, life-jackets, life rafts, etc., which is used to safeguard the individual seafarer from any harm. This equipment is obligatory for ships to ensure that there are no fatalities due to lack of life-saving appliances. The crew also needs to be aware of where the equipment is kept and trained to know how all appliances are to be used. Dust masks are an additional requirement while working in a toxic atmosphere or during the servicing of the ship. All this equipment needs to be checked at regular intervals to ensure that it is functioning properly and should be replaced if it is not.

- *Safety Equipment for the Crew*

  Apart from personal life-saving devices used aboard ships, there are safety equipment for the entire crew, including lifeboats, fire extinguishers, fire suits, emergency medical equipment, and signals for help.
  The crew must be well-trained in using the communication. In addition, the communication equipment must be checked regularly to ensure that it is working.

- *Movement About the Ship*

  On ships carrying heavy cargo, the containers should be securely tied at all times. Sudden lurching of the ships may cause these to dislocate if not tied properly, which can result in major bodily harm.

  Appropriate Use and Placement of Tools
  Portable tools and equipment must be carried with both hands. In case of climbing or descending a staircase, the equipment should be carried in a tool belt or across the body, leaving the hands free. Portable power tools such as drills and welding equipment should be checked before operation and must be used only by professionals.
  Wires can cause shock or sparking, which can lead to fires. Firefighting equipment like portable fire extinguishers must always be kept handy in case of an emergency.

- *Dangerous Cargo*

  Cargo often consists of highly flammable fuels and other such dangerous materials. Such cargoes must be stored away from the passengers. Safety instructions must be followed and the cargo must be labeled according to its nature. The containers must regularly be checked for any leaks as they can prove to be hazardous.
  Goods on the ship, if not kept properly, are at a risk of moving and falling. This can cause passengers to get hurt.

- *Mooring*

  Mooring is the process of anchoring the ship to the docks, using equipment such as ropes, cables, chains, anchors, etc. During this process, the passengers must stay away from the mooring area. While mooring goods and cargo, ropes under tremendous strain can break and cause damage.
  The safety of the ship depends upon the safety of the passengers. Therefore, it is necessary to put your own safety first and take the proper precautions and follow the

rules while travelling onboard a ship. The SOLAS convention of 1914 has been a pathbreaker in this area, emphasising the necessity of maritime safety. The act took ship and seafarer safety to new heights, improved cargo management.

Ship and safety equipment manufacturers in India provide all the required safety gear while travelling on water.

10. **Переведите предложения на русский, используя обороты** *there is/are***:**
1. There _____ two cups of tea on the table.
2. There _____ some milk in the cup.
3. There _____ an orange in the salad.
4. There _____ six balls in the box.
5. There _____ some cheese on the plate.
6. There _____ a blue chair at the door.
7. There _____ five chicks and a hen on the farm.
8. There _____ a table and nine desks in the classroom.
9. There _____ a big window to the left of the door.
10. There _____ three rooms in our country house.

11. Переведите предложения на английский, используя обороты *there is/are:*
1. На улице много машин.
2. В классе есть ваза?
3. В спальне 2 окна.
4. В кабинете 9 парт.
5. В комнате есть книжный шкаф.
6. В классе много портретов?
7. В квартире есть все современные удобства.

12. Опишите свое рабочее место, используя обороты *there is/are.*

13. Переведите текст:
Stay fit
   Make sure you are absolutely fit both physically and mentally before boarding a ship. If you are suffering from any kind of ailment, don't go to the ship without getting it cured. Remember that there is no specialised medical assistance at the sea, and thus you need to be extra careful. Moreover, if you are required to carry any kind of medication to the ship, inform your company's doctor about your current health condition and take a prescription to carry medicines along with you.
Know the laws
   Different countries have different laws and it is obligatory to follow all the rules. For e.g. pirated DVDs are not allowed at Singapore airport, movies/photographs with explicit content are banned in Persian Gulf countries etc.
Know the route
   Ask your company about the shipping routes and ports which the ship will be visiting during its voyage. Be prepared for any kind weather conditions. Leave all

those things, which you would hate to lose, at home. There are high chances of losing valuable things while travelling or on board ships. Stealing on ships is a common thing especially when the ship is at ports.

Know your duties:

Know your duties; these would solve most of the problems. Also, make sure you know and remember your duties for emergency situations. This would avoid a lot of confusion and increase the level of safety on board ship.

14. Выполните контрольную работу:

I. Переведите на русский:
1. Keep matches and flames, such as candles, out of the reach of children.
2. Scaffolds are an integral part of most construction sites and are associated with a high number of injuries.
3. Along with chemicals and welding operations, there is always a possibility of fire on a construction site.
4. The workers must know where the fire extinguishers are and how to use them.
5. In case of an emergency, you'll need quick, easy access to the exits.
6. Earplugs, safety goggles, gloves or a face mask greatly reduce the risk of workplace injury.
7. Never place a cigarette butt directly into a trashcan without extinguishing it with water first.
8. All this equipment needs to be checked at regular intervals to ensure that it is functioning properly and should be replaced if it is not.
9. There are safety equipment for the entire crew, including lifeboats, fire extinguishers, fire suits, emergency medical equipment, and signals for help.
10. Different countries have different laws and it is obligatory to follow all the rules.
11. Notice the number of fatal injuries and falls that happen in areas where there is no fencing.
12. The containers on ships must regularly be checked for any leaks as it can lead to the hazard.

II. Переведите на английский:
1. Переносные электрические приборы должны проверяться перед использованием.
2. Всегда следуйте инструкциям и информируйте вашего руководителя об опасности.
3. Экипаж корабля должен быть осведомлен, где хранится спасательное оборудование.
4. Опасные участки без ограждения следует избегать.
5. Держите горючие материалы вдали от газовых печей.
6. Много несчастных случаев происходит при поднятии тяжелых вещей.

III. Определите время:

1. I was sleeping in the tent yesterday at 12 o'clock. 2. What have you been doing? *3.* My father worked hard yesterday. 4. I am walking in the park now. 5. I've seen this film already. 6. They will have driven 50 miles by 3 o'clock tomorrow. 7. I had seen this picture before. 8. I go to bed every day at 7 o'clock. 9. I'll return tomorrow. 10. Tomorrow at that moment I will be playing with children. 11. I had been reading a book for two hours by 10 o'clock. 12. Should I buy this dress?

IV. Вставьте правильное по смысле слово:

> careful, gasoline, proper, breaks, conditions, escape, stealing, install, ladder, valuable, requirement, injury

1. Fires are one of the leading causes of home _____ and death. 2. It's absolutely important to teach everyone at your home how to _____ a late-night fire. 3. _____ at least one smoke alarm on every floor of your home. 4. Never use _____ or other flammable liquids to start a stove fire. 5. Dust masks are an additional _____ while working in a toxic atmosphere. 6. Be prepared for any kind weather _____. 7. _____on ships is a common thing especially when the ship is at ports. 8. Check the _____ thoroughly before using it. 9. You'll need _____ training before operating some equipment. 10. A construction worker needs to be _____ at all times. 11. There are high chances of losing _____ things while travelling or on board ships. 12. Taking regular _____ helps you stay fresh on the job.

ТЕМА 3. ОБЩЕЕ УСТРОЙСТВО СУДНА

1. vessel – судно, корабль
2. float – плавать, держаться на поверхности
3. distinguish – различать
4. capacity – тоннаж, вместимость, способность
5. fishing boat – рыболовное судно
6. sophisticated – сложный, изощренный
7. cargo – груз
8. gunpowder - порох
9. log raft – деревянный плот
10. nuclear-powered – атомный
11. aircraft carrier - авианосец
12. rowboat – гребная шлюпка
13. to navigate – плавать
    navigator – мореплаватель
14. desert - пустыня
15. mankind, humankind – человечество
16. canoe – каноэ, байдарка
17. slave trade – работорговля
18. to define – определять
    definition – определение

19. (to) sail - парус, совершать плавание
20. goods – товары
21. entertainment – развлечение
22. purpose – цель
23. (im)possible – (не)возможно
24. port of registry - порт приписки

ГРАММАТИКА

Условные предложения 0 типа

a) Повторить образование времен **Present Simple** и **Future Simple** и случаи их употребления, а также образование их отрицательных форм. Знание этого материала нужно для понимания темы условных предложений в английском.

b) Вспомнить из курса русского языка, **что такое главное и придаточное предложение**, а также **что такое условные предложения**. Знание этого также пригодится для понимания темы.

Существует 4 основных типа условных предложений в английском языке: нулевой *(Zero Conditional)*, первый *(First Conditional)*, второй *(Second Conditional)* и третий *(Third Conditional)*. Во всех типах используются разные времена. Рассмотрим самый простой тип условных – это условные нулевого типа типа.

Zero Conditional – условные предложения нулевого типа

Выражают условие, которое всегда будет правдой: научные факты, законы природы, общепринятые истины. В построении таких предложений используется везде Present Simple, поскольку они всегда являются правдой. Zero Conditional образуется по следующей схеме:

Придаточное предложение *(subordinate clause)*	*Главное предложение* *(principal clause)*
Союз **if (если)** + **Present Simple**	**Present Simple**
If the temperature **rises** above zero**,** Если температура поднимается выше нуля,	snow **melts.** **снег тает.**

Условие может быть как в начале, так и в середине предложения. В английском языке мы **ставим запятую**, только когда **условие стоит в начале.** Water boils *(Present Simple)* **if** you heat *(Present Simple)* it to 100 degrees. – Вода закипает, если вы нагреете ее до 100 градусов.
If you **cut** *(Present Simple)* your finger with a knife**,** it **hurts** *(Present Simple).* –
 Если порезать палец ножом, он **болит.**

ЗАДАНИЯ

1. Прочитайте и переведите текст:

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.

Ships and boats have developed alongside mankind. In major wars, and in day to day life, they have become an integral part of modem 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 the 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 ship has its unique own name, as a rule, has 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.

2. Переведите словосочетания на английский:

которые ходят (плавают) -
основанный на... -
рыболовство -
развлечение -
неотъемлемая часть -
рыбацкие лодки -
управлять -
исследования и технологические разработки -
работорговля -
колонизация -
большие расстояния -
авианосец -
парусное судно -
государственный флаг -

обычно -
признавать (допускать, разрешать) -
разрабатывать - _
в крупных войнах -
военные силы -__
перевозить тонны грузов -
мореплаватель - _
изобретение пороха -
цель -
управлять судном -
эпоха мезолита -_
история человечества -
верблюд -
составлять и обновлять -

3. Соотнесите слова и словосочетания в двух колонках:

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
h) billions tons of cargo
i) on water
j) scientific, cultural and humanitarian needs
k) concept to a vessel
l) register of ships

4. Заполните пропуски данными предлогами:
from, by, upon, on, to, for, of, with, because of

1.   A ship floats____water.
2.   Ships are usually distinguished____boats.
3.   Ships may be found____lakes, rivers, and seas.
4.   Ships are used as the transport _____people and cargo.
5.   Fishing boats are used_____million_____fishermen.
6.   Ships were used _____ colonization and the slave trade.
7.   Thor Heyerdahl demonstrated _____tiny boat that it is possible to navigate long distances _____a log raft.
8.   Ships tell the history of mankind _____ Mesolithic canoes _____ nowadays aircraft carriers.
9.   A vessel has its own name, state flag and a port _____ register.
10.   _____a certain similarity _____ desert _____ the sea a camel meta phorically named 'the desert ship'.

5. Переведите на английский:
   1. Корабль это судно, которое ходит по воде.
   2. Корабли осуществляют такие виды деятельности, как перевозка людей и грузов, рыбный промысел и развлекательные круизы, обеспечение общественной безопасности и военные действия.

3. В наши дни суда стали неотъемлемой частью современной торговли и вооруженных сил.

4. Суда играют ведущую роль в научных исследованиях и развитии технологий.

5. Ранее 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.

6. Ответьте на вопросы:
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 purposes have ships served?
7.   What is the difference between 'a ship' and 'a vessel'?
8.   What does each ship have?
9.   Where is this information contained?

7. Раскройте скобки в условных предложениях нулевого типа (*Present Simple* и *Present Simple*).
1. When water temperature (to reach) 100 degrees, this liquid always (to boil).
2. If a small firm (to face) a monopoly, it (to come) into its total power.
3. We _____ (not to use) calculators if we _____ (to write) tests.
4. When you (to heat) ice, it (to melt.
5. It (to get) dark if the sun (to go) down.
6. If we (not to eat), we (to get) hungry.
7. People (to get) fat if they (to eat) too much.
8. If somebody (to drop) this vase, it (to break).
9. If he (to drink) coffee in the evening, he (not to sleep).
10. If I (to be) late, my father (to take) me to school.

8). Переведите условные нулевого типа на английский:
1. Если поэмы интересные, то я читаю их детям.
2. Если у меня есть время, я смотрю романтические фильмы.
3. Если идет дождь, земля становится мокрой.
4. Если он ест много на ночь, он плохо спит.

9. Текст для аудирования:

EXPLORER HEYERDAHL HUNTS
FOR LOST CIVILLZATION 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 clues to a lost civilization which lied buried in a Peruvian city of pyramids.

Archaeologists working in North-Western Pern found that 26 mounds, 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 replica 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.

10. Ответьте на вопросы по тексту:
1. What was Thor Heyerdahl?
2. What was he interested in?
3. Where did he hunt for 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?

11. Найдите синонимы:

1) ship	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) modem	m) needs
7) tiny	g) humankind	14) wants	n) to design

12. Переведите выражения на русский:

a large vessel -

to distinguish from boats -

based on passenger capacity -

a variety of activities -

transportation of people -

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 -

to float on water -

based on size - _

ships may be found on –

 transportation of goods -

entertainment -

day to day life -

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 - _

ТЕМА 4. ИСТОРИЯ СУДОСТРОЕНИЯ

1. facility приспособление, средство
2. shipyard – судостроительная верфь
3. dismantling - демонтаж
4. to assemble – собирать, монтировать
5. planks of wood – деревянные доски
6. mast – мачта
7. hull – корпус, каркас
8. pole - рейка
9. to lash - крепить
10. to mount – устанавливать, монтировать
11. spar – балка, перекладина
12. oar – весло
13. to propel – приводить в движение
14. rectangular – прямоугольный
15. stern - корма
16. rudder - руль
17. thong – ремень
18. cannon - пушка
19. frame – рама, каркас
20. iron – железо
21.steel – сталь
22.internal. inward – внутренний
23.durable – надежный, прочный
24.deck covering – палубное покрытие

25.labour cost - стоимость труда

ГРАММАТИКА

First Conditional – условные предложения первого типа

Выражают вполне реальные и возможные ситуации в будущем. При построении подобных предложений в русском языке мы используем везде будущее время, но в английском **только в результате будет будущее время, а в условии – настоящее.**

Придаточное предложение (subordinate clause)	Главное предложение (principal clause)
Союз **if (если)** + **Present Simple**	**Future Simple (will)**
If you **drink** much coffee, Если ты будешь пить много кофе,	you **will not sleep** at night. то не будешь спать ночью.

You **will find** (*Future Simple*) a good job if you **study** (*Present Simple*) well. – Ты найдешь хорошую работу, если будешь хорошо учиться.

If the weather **is** (*Present Simple*) fine we **will go** (*Future Simple* to the sea. - Если погода будет хорошей, мы поедем на море.

ЗАДАНИЯ

1.Прочитайте и переведите текст:

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 had already knoin how to assemble planks of wood into a ship hull as early as 3000 BC. The oldest ships were built 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 stem-mounted rudder was first developed.

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 18 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 modem cruise ships.

The modem 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 cost, 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.

2. Соотнесите слова и выражения с их переводами:

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 шпангоута
11) advanced shipbuilding technology	k) передовая технология кораблестроения
12) to strengthen the internal frame	l) дополнительная устойчивость
13) stem-mounted rudder	m) обшитый внакрой корпус
14) single square sail	

n)   связывать шесты вместе

3. Вставьте слова по смыслу:

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

1. Both _____ and _____ are referred to as the 'naval sector'.
2. The early Egyptians had already assembled _____   into a ship.
3. These ships had a single _____consisting of two poles _____together.
4. They had a single square_____ _____, and could also be _____ propelled.
5. In the 1st century BC the Chinese built large _____ with multiple _____ and stem-mounted _____.
6. Vikings fastened their clinker-built ____with_____thongs.
7. Northern European ships were built with a straight _____.
8. The Middle Ages 'round ships' were developed with a broad _____ and heavily curved at both ends.
9. In the 18th century _____ was developed because of the introduction of _____.
10. _____ became widely used in ship construction in the 19th century.

4. Ответьте письменно на вопросы по тексту:

1.   What is shipbuilding?
2.   Where does it generally take place?
3.   What is dismantling?
4.   What did the first Egyptian ships look like?
5.   When and where was the first rudder developed?
6.   What facts do you consider to be interesting in Vikings ships?
7.   What caused the development of tumblehome?
8.   What construction material was adopted in the 19th century?

9. Wood didn't continue to be used in shipbuilding later, did it?
10. The global dominating shipbuilding industry is considered to be South America, isn't it?

5. Найдите синонимичные пары:

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
	h) ship construction	18) to propel	r) to introduce
8) to drift	i) dismantling	19) modern	s) to float
9) hull	j) to navigate	20) wharf	t) shipbuilder
10) to lash			

6. Раскройте скобки в условных предложениях первого типа (*Present Simple или Future Simple*).

1. If Peter _____ (come) to my place, we_____ (go) to play in the yard.
2. If Peter_____ (not come) to my place, I _____ (watch) TV.
3. If Frank's parents_____ (have) their holidays in summer, they _____ (go) to the seaside.
4. If they _____ (have) their holidays in winter, they _____ (stay) at home.
5. If the fog _____ (thicken), Harold _____ (put up) the tent for the night.
6. If I _____ (finish) my work, I_____ (go) to the cinema.
7. We_____ (buy) this book if our mother_____ (give) us some money.
8. If we _____ (come) to your place you_____ (show) us your present.
9. I_____ (return) you your book if you_____ (ask) me.
10. If Maria (go) abroad, she (go) to England or America.

7. Текст для аудирования:
Christopher Columbus

300-400 years ago a big part of the world was remaining unknown. But now there seems little more to explore, the wild north was conquered, the jungle was conquered too. And it seems that all the pages of the great book called "The Earth" has been filled in, but exploration still goes on. In the 15th century people knew only 3 continents: Europe, Asia and Africa. They knew nothing about America. The man who was thought to be the discoverer of America was born in 1451 in Italy. His name was Christopher Columbus.

Knowing that the earth was round he decided to reach India by sailing to the west. It was very difficult for him to organize an expedition as nobody wanted to help him. At last the Spanish government gave him some money. In the 1492 he sailed with 3 small ships into the Atlantic ocean. They had been sailing for more than 2 months and at last they saw land. Columbus was certain that the lands he discoveried were part of India and he called these islands "The West Indies". He made 3 voyages to America. His last voyage was made in 1502-1504. After that, heavily ill, he remained in Spain until his death. He died believing that Cuba was part of Asia. These voyages gave Europe the first information about the new world. Many places have been named in his honour. America however was named after another explorer Amerigo Vespucci.

He was born in Florence, Italy, in 1454. He was in Spain at the time of Columbus' first and second voyages. In a letter, written in 1504 and printed in 1505, he claimed to have made four voyages, on the first of which, in 1497, he explored the South American coast. This would make him the first European to land on the American continent, for at that time Columbus had only reached the outlying islands. Most scholars reject his version of this voyage. Vespucci perhaps did accompany a Spanish expedition to South America in 1499, and in 1501 and 1503 he probably went with Portuguese expeditions. Probably he never commanded an expedition himself and, of course, was not the first person to set foot on the continents to which his name is given. Vespucci died in Seville, Spain, in 1512.

8. Выполните контрольную работу:

I. Переведите на русский:
1. Sailing ships as we know them today first made their debut around 3500 BC in Egypt and imperial Rome, where large ships were constructed that could carry loads of up to 1000 tons.
2. One of the well- known vessels of Kiev Russia time was the "lodya": it was an improved boat with wooden planks lashed to its sides.
2. From the 1940's to the present day steel ships have normally been welded as this is a stronger and more reliable way to join metal.
3. The geographic concentration of the large British shipyards in the extreme north of England and in Scotland had protected the shipbuilding industry from the bombing, so it required relatively little reconstruction.
4. In continental Europe and in Japan, shipyards had been important targets for the enemy bombing and when the war ended, the shipbuilding industries lay in ruins.
5. After the war the structure of the shipbuilding industry changed dramatically, as the demand for ships shifted rapidly from cargo ships to larger tankers.
6. China had always had shipyards, but, like the U.S.S.R., it had concentrated on internal markets because it had never had an international merchant fleet.

II. Переведите на английский:
1. Судостроение – это процесс проектировки и конструирования судов.

2. Новгород был центром русского судостроения в 9-10 веках.

3. Развитие судостроения тесно связано с технологическим прогрессом в других отраслях.

4. С 19 века сталь используется вместо железа, т.к. она прочнее.

5. Все грузовые суда делятся на 2 типа: сухогрузы и танкеры.

6. Этот завод получил заказ на строительство броненосца и атомного ледокола.

III. Вставьте правильное слово из предложенных:

> development, specialists, representatives, intensified, Academy, joining, train, electric, navigation, commercial, steam engine, epoch

Russian sailors, shipbuilders, inventors were always the (1) _____ of advanced technical and scientific thought. Russian shipbuilding as well as (2) _____ take their origin from the earliest days of the Russian history. The (3) _____ of Peter the First is the time of regular Navy foundation. It was the time when ship construction was highly (4)_____. It was the epoch not only of the development of ship construction, but building up shipyards, ports and of the growth of a number of skilful (5) _____. The Navigational school and Navy (6)_____were founded for training sailors; the school of Mathematical and Navigational sciences was organized in Moscow to (7)_____ shipbuilders. In 1763 the (8)_____ was invented and its success in industry helped to use it on board ships. As soon as (9) _____ arc was invented it was introduced in shipbuilding for (10) _____ structural parts of ship construction. The (11) _____ of modern military and (12) _____ shipbuilding reflects the progress in other fields and meets the requirements of time.

IV. Грамматика. Условные предложения 0 и 1 типов. Поставьте глаголы в правильном времени. Определите тип условного.

1. If you (to freeze) water, it (to become) a solid. 2. Plants (to die) if they (not to get) enough water. 3. I (to be mad) if Sally (to be) late again. 4. If you (not to hurry), you (to miss) the bus. 5. If you (to mix) red and blue, you (to get) purple. 6. If he (to have) time, he (to finish) that work. 7. If you (to drop) a book, it (to fall). 8. If I (to be) hungry, I (to get) something to eat. 9. I (to go) if she (to invite). 10. He (to survive) if he (to get) proper medical care. 10. The grass (to get) wet if it (to rain). 11. If they (to be) free, they (to watch) their favourite film. 12, If it (not to be) a nice weather, we (not to go) to the sea.

ТЕМА 5. ТИПЫ СУДОВ

1. powerboat – моторная лодка
2. icebreaker – ледокол
3. ferry – паром
4. air-cushion vessel – судно на воздушной подушке

5. cargo ship – грузовое судно

6.merchant ship – торговое судно

7.liquid – жидкость

8.OBO (ore/bulk/oil) ship – нефтерудовоз (универсальное судно)

9.hold - трюм

10.refrigerated ship – рефрижераторное судно

11.quantity – количество

12.LNG carrier (liquefied natural gas) – газовоз

13. chemical carrier – химовоз

14.rowing vessel – гребное судно

15.volatile = летучий, быстро испаряющийся

16.bow- нос (корабля)

17.ramp – наклонная плоскость, пандус

18.destination – назначение

19.displacement - водоизмещение

20.drive – привод

21.drilling floating platform – буровая плавучая платформа

22.gliding vessel – глиссирующее (скользящее) судно

23.fiberglass – стекловолокно

24.propulsion – движущая сила

25.pleasure boat – прогулочный катер

26. self-propelled – самоходный

ГРАММАТИКА

Условные предложения 2 типа

Условные предложения 2 типа состоят из 2-х частей:

- условие – события, которые нереальны или маловероятны;

- основная часть – действие, которое произошло бы, если бы выполнилось условие.

Придаточное предложение *(subordinate clause)*	*Главное предложение* *(principal clause)*
Союз **if (если)** + **Past Simple**	**would (should, could, might)** + **infinitive**
1. **If** they **had** a phone… (Если бы у них был телефон…)	they **would** call you (они бы тебе позвонили)
2. **If** we **went** to this club… (Если бы мы пошли в этот клуб…)	we **would** dance all nigh (мы бы танцевали всю ночь)

Важно! В условных предложения 2 типа глагол *to be* (независимо от действующего лица) имеет форму *were*.

Примеры:

- If they were rich, they would travel. Если бы они были богатыми, они бы путешествовали.

- If she were you, she would do it. Если бы она была тобой (на твоем месте), она бы сделала это.

ЗАДАНИЯ

1. Прочитайте и переведите текст:

General Description of a Ship

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 stem; 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, hi 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.

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.

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 stem and called draught marks. A list or inclination from one side to another, caused by faulty loading, is known as heel.

2. Переведите выражения на русский:

кормовая часть -	носовая часть -
основная палуба -	левый борт -
правый борт -	ряд водонепроницаемых отсеков -
вдоль и поперек судна -	вертикальные стальные стенки -
отверстия для доступа -	люки и трюмы сухогруза -
люки и трюмы танкера -	грузовое помещение для оборудования -
чистое моторное отделение -	марки углубления на ватерлинии -
решетка на палубе –	сильное давление текучей среды -
крен судна -	

3. Прочитайте предложения. Переведите слова, приведенные на русском:

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

4. Соотнесите слова в двух колонках:

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

	m) part below water
	n) list, inclination

5. Дополните предложения. Используйте слова и словосочетания из текста:

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

1.   The main body of a ship is called _____.
2.   The foremost part of the hill 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 port of the deck is called _____and its after raised part is _____.

6. Дополните предложения предлогами in и of.
1.   The main parts _____the hull are: the framing and shell.
2.   A poop is a superstructure _____the after end of a ship.
3.   The engine room is often arranged_____ the stern.
4.   The hull is divided up into a number _____watertight compartments.
5.   _____ liquid cargo vessels the cargo space is divided into tanks.
6.   The part _____   the hull below water is the ship's underwater body.
   7. A ship will incline _____ any direction _____ the process _____loading according to the position _____ the weights placed on her.

7. Согласиться или не согласиться с утверждениями. Используйте клише.
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.

8. Ответьте на вопросы:

1. What 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 diy cargo ships?
5. What tanks are there in diy cargo ships?
6. What are these tanks used for?
7. Can these tanks cany the cargo?
8. What is superstmcture?
9. Where is superstructure located on modem ships?
10. What cargo handling facilities are there on deck?
11. What do we call the forecastle / the poop?
12. What is trim/heel?

9. Прочитайте и переведите текст:

Merchant Ships Types

At present there are about 160 types of ships. Merchant ships can be classified according to what they carry. Most are designed to carry cargo, but a few still carry passengers.

Cargo ships can be divided into two basic types. One type carries dry cargo, the other carries liquid cargo. However, an OBO ship is designed to carry both. Multi – deck vessels are a traditional type of dry cargo ship. The holds divided horizontally by one or two tweendecks t make stowage of individual packages easier. Dry bulk cargo is carried in bulk carriers. They do not have tweendecks as cargo as cargo is carried loose.

Container ships are the most modern type of dry cargo carrier. They carry containers of standard dimensions, consequently stowage is easier. A full load of containers can be put on board within 36 hours. One container can be loaded every two minutes.

Horizontal cargo handling (RO- RO, LO-LO and some other types) is also very economical when trailers can drive on at one terminal and drives off at the other.
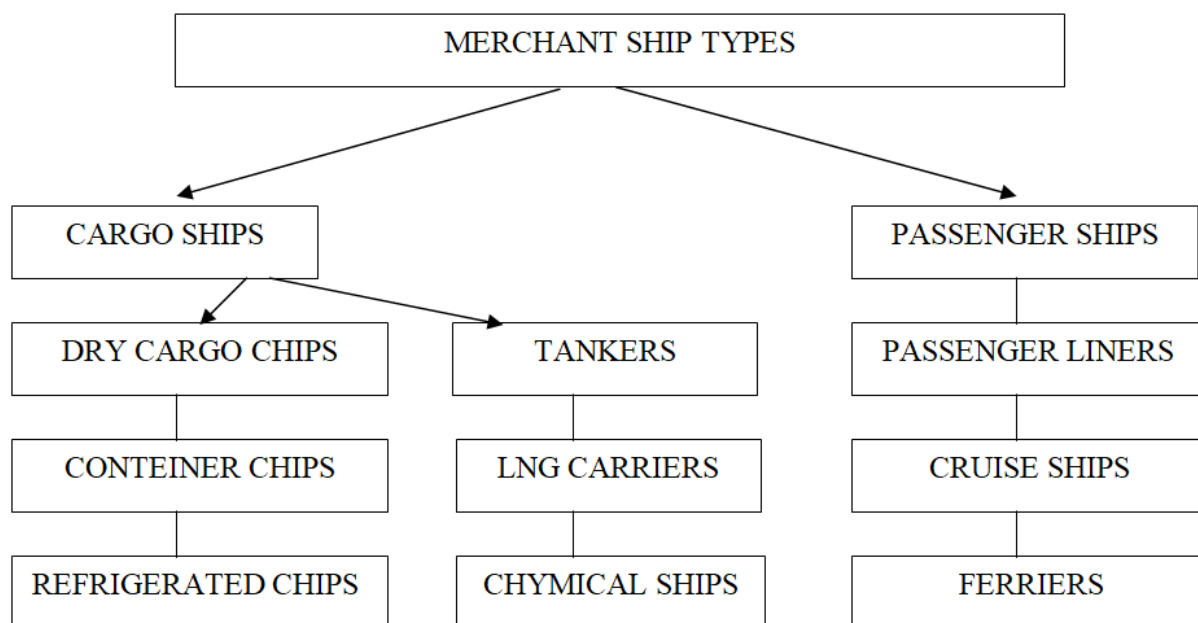
Fruit, meat and dairy products are carried in refrigerated ships. Oil tankers are the most common type of a liquid cargo carrier. They are often very large because huge quantities of oil need to be transported and one large vessel is more economical to operate than two smaller ones.

The other types of liquid bulk carriers of growing importance are gas carriers (LNG) to transport liquefied gasses at very low temperatures and chemical carriers to handle corrosive, poisonous and volatile cargoes.

In comparison with cargo vessels, passenger ships are fewer in number and type. The traditional passenger ship is a passenger liner which can carry cargo as well. Another type of passenger vessels is a cruise ship. They are often converted passenger liners.

Ferries are the most common type of passenger vessels. Many of them are also designed to carry vehicles, therefore they have ramps (doors) at the stern or bow.

10. Перечертите схему и изучите ее:

```
                    ┌─────────────────────────┐
                    │   MERCHANT SHIP TYPES   │
                    └─────────────────────────┘
                      /                      \
         ┌──────────────────┐        ┌──────────────────┐
         │   CARGO SHIPS    │        │  PASSENGER SHIPS │
         └──────────────────┘        └──────────────────┘
            /         \                       │
┌──────────────────┐  ┌──────────────┐  ┌──────────────────┐
│ DRY CARGO CHIPS  │  │   TANKERS    │  │ PASSENGER LINERS │
└──────────────────┘  └──────────────┘  └──────────────────┘
         │                   │                  │
┌──────────────────┐  ┌──────────────┐  ┌──────────────────┐
│  CONTEINER CHIPS │  │ LNG CARRIERS │  │   CRUISE SHIPS   │
└──────────────────┘  └──────────────┘  └──────────────────┘
         │                   │                  │
┌──────────────────┐  ┌──────────────┐  ┌──────────────────┐
│REFRIGERATED CHIPS│  │CHYMICAL SHIPS│  │     FERRIERS     │
└──────────────────┘  └──────────────┘  └──────────────────┘
```

11. Поставьте глаголы в скобках в форму пассивного залога. Переведите предложения:
1) Merchant ships can … according to what they carry. (to classify)
2) Most of them … to carry cargo. (to design)
3) Cargo ship can … into two basic types. (to divide)
4) An OBO ship … to carry both dry and liquid cargo. (to use)
5) The holds … in bulk carrier. (to carry)
6) Dry bulk cargo … in bulk carrier. (to carry)
7) Cargo … loose in bulkers. (to carry)
8) A full load of containers can … on board within 36 hours. (to put)
9) One container can … every 2 minutes. (to load)
10) Transport can … at one terminal and … of at the other. (to drive)

11) Fruit, meat and dairy products … in refrigerated ships. (to carry)
12) Huge quantities of oil need … (to transport).
13) Ferries … also to carry vehicles. (to design)

12. Ответьте на вопросы:
1) Are there about 160 types of ships at present?
2) Can merchant ships be classified according to their overall length?
3) Can cargo ships be divided into 3 basic types?
4) Is an OBO ship designed to carry only dry cargo?
5) Is dry bulk cargo carried in bulk carries?
6) Do bulkers have tweendecks?
7) Are container ships the most modern type of dry cargo carrier?
8) Are fruit, meat and dairy products carrier in refrigerated ships?
9) Are gas carriers designed for transportation of liquefied gas at very high temperature?
10) Can passenger liners carry cargo as well?
11) Are cruise ships the most common type of a passenger vessel?
12) Do ferries have doors at the stern and bow?

13. Выпишите ответы на вопросы из текста:
1) How many types of ships are there in service at present?
2) In what way are merchant ships classified?
3) What are cargo ships?
4) What are passenger ships?
5) What types of cargo handling are mentioned here?
6) What are the ships for carrying liquid cargo?

14. Решите кроссворд:
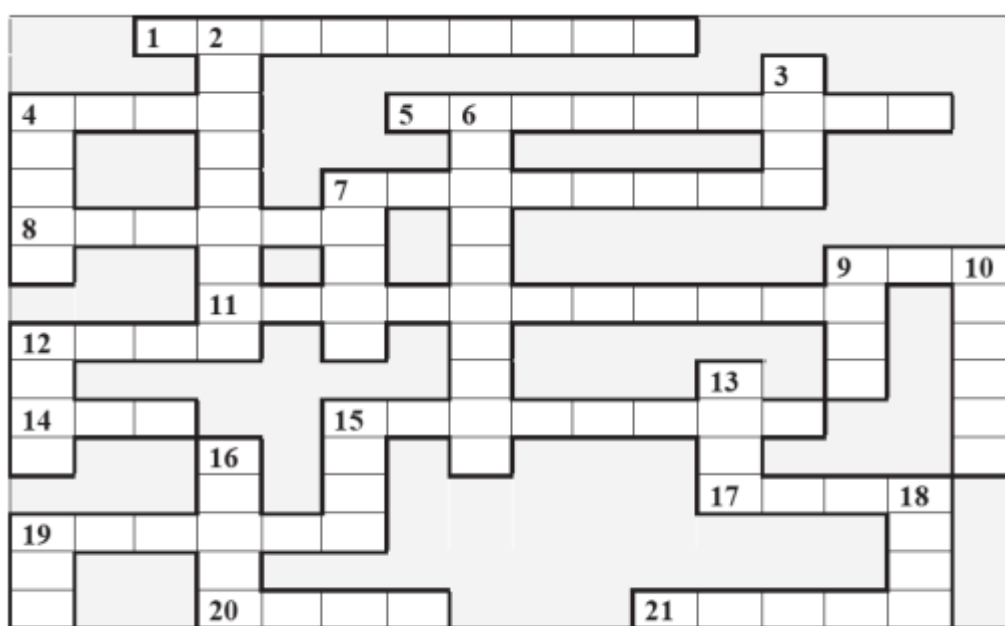
Across:
I. Ахтерштевень (9).
4. Борт (4).
5. Ахтерпик (9).
7. Форпик (7).
8. Руль (6).
9. Море (3).
II. Отсек (11).
12. Танк, резервуар (4).
14. Лед (3).
15. Переборка (8).
17. Киль (4).
19. Днище (6).
20. Трюм (4).
21. Причал (5).

Down:
2. Твиндек (9).
3. Палуба (4).
4. Корма (5).
6. Бак (10).
7. Корпус (5).
9. Форштевень (4).
10. Якорь (6).
12. Дифферент (4).
13. Отметка, марка (4).
15. Ширина (4).
16. Люк (5).
18. Найтовый (4).
19. Нос (3).

15. Переведите предложения на русский:

1. Если бы она рассказала все, он бы помог ей.
2. Она бы надела эта платье, если бы пошла в ресторан.
3. Он бы купил эту машину, если бы она была черной.
4. Они бы не пошли в школу, если бы у них были каникулы.
5. Если бы он не жил в Нью-Йорке, он жил бы в Москве.
6. Она бы пошла в кино, если бы не работала.

16. Раскройте скобки в условных предложениях 2 типа:

1. If he … (be) my friend, I … (invite) him to the party.
2. If I … (be) taller, I … (become) a basketball player.
3. If an asteroid … (hit) our planet, it … (cause) an ice age.
4. John … (travel) around the world if he … (win) a lottery prize.
5. We … (go) to Spain this winter if we … (have) enough money.
6. She … (not mind) if you … (borrow) her car.
7. If you … (move) to another city, I … (phone) you every day.
8. They … (laugh) at me if I … (sing) this song.
9. If we … (have) free time, we … (start) a new hobby.
10. If I … (know) her secret, I … (not tell) it to anyone.

17. Выполните шутливый тест с использованием условных предложений 2 типа:

Personality quiz with second conditional sentences.

Some people are very calm. Others are nervous. Some people can stay calm in a crisis. Other people panic. What about you? Are you a survivor? Try this personality quiz.

1 If you were on a hijacked plane, would you
a) attack the hijackers?
b) sit still and do nothing?
c) scream?
d) try to escape?

2 If you won a million pounds, would you
a) put it all in a bank?
b) spend it as fast as possible?
c) hide it?
d) tell everyone about it?

3 If you were shipwrecked on a desert island, what would you do first? Would you
a) shout for help?
b) build a hut?
c) look for food?
d) look for fresh water?

4 If a robber attacked you a dark street, would you
a) give him the money?
b) grab his weapon?
c) scream?
d) run away?

5 If you smelt smoke in the middle of the night, would you
a) go back to sleep?
b) run into the street and shout 'Fire'?
c) look for the fire?
d) telephone the fire brigade

6 If you saw a car crash, won't you
a) faint?
b) telephone the police?
c) help the people in the cars?
d) walk away?

7 If a dog bit your leg, would you
a) forget about it?
b) kill the dog?
c) go straight to hospital?
d) look for the owner of the dog?

Your score:

1	a) 4	b) 1	c) 3	d) 5
2	a) 1	b) 2	c) 4	d) 5
3	a) 5	b) 4	c) 2	d) 1
4	a) 1	b) 4	c) 3	d) 2
5	a) 4	b) 3	c) 1	d) 3
6	a) 4	b) 2	c) 3	d) 1
7	a) 5	b) 4	c) 2	d) 1

0-10. In a crisis you would be cool and calm. You would survive accidents, hijacks and fires. You're a real survivor because you always think of yourself first. However, perhaps you would have more friends if you thought more of other people.

11-18: You would stay calm in most crises and you would probably survive. But you would also try to help other people and you would risk your own life. A true survivor would only think of herself or himself.

19-25: You aren't really a survivor. You're too emotional. In a crisis you would panic too easily. If you panicked, you wouldn't be able to think clearly.

26-32: You aren't a survivor at all. In a crisis you would try to be a hero. If someone attacked you, you would defend yourself to live to fight another day.

18. Текст для аудирования:

Six Different Types of International Ships

If you are going to work in the shipping sector or have a general interest in sailing the seas then you might want to know what different types of ships there are. You may come across a wide range of different vessels and it's useful to be able to identify them when you are at sea. It is also important to note that safety rules vary a lot depending on what type of ship you are operating. Each type of vessel has its own strict rules that must be followed.

Working on each type of ship can also be completely different, so it's worth doing your research before you apply for a job. For example, working on a fishing vessel is a completely different experience to a cargo ship.

If you are new to the industry then here are some of the main types of international ships that you will probably come across on your travels.

1. Cargo Ships

Cargo ships are generally used to transport cargo safely from one place to another. They will have a ship with a multi-deck or single-deck hull. There are thousands of cargo ships around the world, transporting goods across the globe. They are crucial to international trade. Cargo ships can transport things such as food, petroleum, furniture, metals, clothes and machinery.

2. RoRo (Roll on Roll Off)

Most vehicles that are being transported over water internationally are done on a Roll on Roll off ship. The reason this ship is so popular to transport vehicles is that it's safer and much faster to just drive a car onto the ship than using a crane. Once the cars are aboard, they are braced (прикрепл) to the ship's deck to keep them from moving around while the ship is at sea.

3. Tankers

Tankers are ships that primarily carry huge quantities of liquid. They can carry a wide range of liquids such as oil, water, wine and lots of different chemicals that need transporting. They come in lots of different sizes but some of the larger vessels have the capacity to carry several hundred thousand tons.

4. Passenger Ships

Passenger ships are officially defined as ships that carry more than 12 passengers. If you own a passenger ship then you will need to follow strict safety rules. There have been several disasters with passenger ships lately so the rules have been updated to improve safety. Passengers should be able to travel in a safe and comfortable environment. Passenger ships also include cruise ships.

5. Fishing Vessel

Fishing vessels are boats and ships designed to catch fish and marine wildlife. They are used for leisure purposes but also for commercial fishing. There are millions of fishing vessels being used to catch fish around the world. If you are considering working on a fishing vessel then it is important to know that they are very dangerous. According to the International Maritime Organisation (IMO) there are around 24,000 deaths on fishing vessels each year. All ships engaged in international voyages must install special navigational equipment. This electronic information system can help fisherman avoid bad weather and navigate through international seas.

6. High Speed Craft

High speed crafts are also sometimes called 'fast ferries'. They are mainly designed for civilian use as passenger ferries. They also include hovercrafts, catamarans and hydrofoil boats. High speed crafts are able to go faster because they use air pressure and powerful turbines.

19. Текст для аудирования:
Cruise vessels

Cruise vessels are designed to provide transport and entertainment services to passengers. These vessels provide luxurious services for people traveling by sea. To ensure the comfort of the passengers the engine noise level and vibrations ought to be minimal. The motions of the vessel should be limited to ensure the comfort of the

passengers. Cruise vessels are designed for pleasure voyages and the vessel's equipment are considered to be crucial for the travelling experience.

Cruising has over the last several decades played a major role in the tourism industry with millions of tourist using this service to travel worldwide. Cruise ships pick passengers from their original port, travel them to other destinations across the globe and then return them to their original port. Unlike ocean liners that transport passengers from one port to another.

Cruising was initiated in the mid twentieth century across the Atlantic Ocean where crossing the ocean took more than four days. This led to the development of luxurious services to increase their advantage against other ocean liners. The vessels provided entertainment services, dining and movie theatres. The transport business offered by the ocean liner crashed in the 1960's with the invention of passenger aircrafts.

Most travelers shifted from using ocean liners to planes for their transport services. In the 1980's the cruising services started gaining popularity and this saw the increase of cruise vessels. The cruising sector grew at an average rate of eight per cent per a year. The first cruise vessels were small in size but have seen the dramatic increase in the size of the vessels to become the world's largest passenger vessels. This period saw the development of fly cruise options, increased ship capacities, variable cruise durations and price options.

The fly cruise option is the most attractive feature of cruise holidays where travelers are able to travel to their destination and get the chance to spend some time exploring surrounding cities. This allows them to interact with different cultures. Most cruise vessels operated the Caribbean island, Mexico and Alaska and were later adopted all over the world. Some countries such as the Antarctica have adopted cruising as the only mode of travel due to their climate.

Present day vessels are much more like floating five star hotels with complete hospitality staff and the ship's crew. There are several types of cruise vessels which mainly depend on their purpose and navigation ability. There is the river/barge cruise vessel which are smaller vessels compared to the large cruise liners. These vessels take different forms where they can be high-tech vessels or paddleboats. The vessels carry up to four hundred and fifty passengers and try different occupations like fishing.

These cruise vessels are a common phenomenon across American rivers like the Mississippi. The sailing or yachting cruises are smaller vessels with a capacity of under 150 passengers. Large cruise liners accommodate a large number of passengers around 1500.
These vessels offer the passenger a number of luxurious facilities like the swimming pool and Jacuzzis among others. The vessels are used by tourists who visit major tourist attractions around the globe. The large size of these vessels makes it almost impossible to dock in every destination they arrive. These vessels also have a large workforce which ensures the comfort of the passengers.

20. Выполните контрольную работу:

I. Переведите на русский:

1. Ships are divided into different types and classes according to the purposes for which they are built, type of drive, speed at sea, placing of the hull etc.
2. OBO ships can carry practically any types of cargoes, including refrigerated goods and liquids.
3. Roll-on/roll-off ships, designed for the carriage of vehicles, are always distinguished by large doors in the hull and by external ramps.
4. A junk is a Chinese sailing ship used in ancient times in Chinese waters and characterized by a flat bottom and two or more masts.
5. A Liner is a large passenger ship, usually running on a regular schedule and it may be used as a cruise ship.
6. Tankers are specially designed to carry liquids (mainly oil products) and their construction is entirely different from that of dry cargo ships.

II.Найдите русские эквиваленты:

1) surface	a) нос (корабля)	13) include	m) дно
2) drive	b) погружаться	14) pump	n) существовать
3) origin	c) вес	15) size	o) давление
4) carry	d) управлять	16) bulker	p) форма
5) depth	e) размер	17) comparison	q) плот
6) divide	f) производитель	18) raft	r)происхождение
7) weight	g) спуск на воду	19) operate	s) накачивать
8) exist	h) включать	20) bottom	t) привод
9) move	i) ядовитый	21) plunge	u) двигаться
10) shape	j) поверхность	22) pressure	v) навалочник
11) manufacturer	k) перевозить	23) bow	w) глубина
12) poisonous	l) сравнение	24) launch	x) разделять(ся)

III. Раскройте скобки в условных предложениях 2 типа:

1. If you (be) more attentive, you (have not) so many mistakes. 2. If we (have) more time, I (tell) you more about it. 3. If I (to see) her, I (to be) glad. 4. I (help) you if you (trust) me more. 5. If people (have) wings, they (can fly). 6. 5. If you (not to work) systematically, you (to fail) the exam. 7. The children (be) better swimmers if they (go) swimming more frequently. 8. If it (not be) Mary, we (not, know) the truth. 9. I (to visit) the Tretyakov Gallery every year if I (to live) in Moscow. 10. If I (be) you, I (not worry) about going there. 11. I (may give) you some money If I (have) any. 12. If she (to know) English, she (to try) to enter the university.

IV. Поставьте правильные типы кораблей:

bulkers, LNG carriers, canoes, cable layers, cruise ships, scientific bathyscaphes, refrigerated ships, ferries, chemical ships, life boats, icebreaker, diesel submarines

1. Rowing vessels: _____, _____. 2. Passenger ships: _____, _____. 3. Tankers: _____, _____. 4. Dry cargo ships: _____, _____. 5. Diving vessels: _____, _____. 6. Specialty ships: _____, _____.

V. Переведите выражения на англглийский:

1) авианосец 2) современный военный корабль 3) линкор 4) яхта 5) моторная лодка   6) сторожевой корабль 7) рыболовное судно   8) речное судно   9) парусное судно   10) буровая плавучая платформа 11) несамоходное судно 12) атомная подводная лодка 13) ролкер   14) однокорпусное судно 15) галера 16) спортивный катер 17) прогулочный катер 18) судно на воздушной подушке 19) ныряющее судно 20) сжиженный природный газ

6. ЭКОЛОГИЯ. ЗАГРЯЗНЕНИЯ МОРСКОЙ СРЕДЫ

1. increase/decrease - увеличиваться/уменьшаться
2. environment – окружающая среда
3. marine species – морские виды
4. fuel – топливо, бензин
5.grounding – посадка на мель
6. discharge -разгрузка
7. pollution – загрязнение
8. emission – выпуск, эмиссия, выход
9. threat - угроза
10. harmful – вредный
11. reduce – ограничивать
12. improve – улучшать
13. consumption – потребление
14. disease – болезнь
15. spill – пятно
16. oversight – контроль, надзор
17. approach – подход, приближение
18. accident – несчастный случай, происшествие;
    accidental – случайный
19. to cause – причинять
20. to impact - воздействовать
21. alteration – изменение
22. significant - значительный
23. consider – считаться
24. devastating - разрушительный

ГРАММАТИКА

Direct and indirect speech. Sequence of tenses
(Прямая и косвенная речь. Согласование времен)

Повествовательное предложение

При переводе из прямой речи в косвенную соблюдаются следующие правила:
1. После главного предложения ставится союз ***that (что).***
2. Местоимения меняются по смыслу.

3. Если глагол в главном предложении стоит в **настоящем** (Present) или **будущем времени** (Future), то глагол в косвенной речи остается в том же времени, что и был в прямой:
Прямая речь: He <u>says (has said, will say)</u> **I sent** them the parcel on Monday'.

Косвенная: He <u>says (has said, will say)</u> **that he sent** them the parcel on Monday.

Помимо *to say* в словах автора могут употребляться и другие глаголы: to declare, to announce, to state, to explain, to agree, to answer.

4. Если глагол в главном предложении стоит в прошедшем времени (Past), то соблюдается последовательность времен:

- Present Indefinite → Past Indefinite:
John <u>said</u>, 'I **like** Moscow'. → John said that **he liked** Moscow.

- Present Continuous → Past Continuous:
He <u>said</u>, 'I **am having** a great time'. → He said that he **was having** a great time.

- Present Perfect → Past Perfect:
I <u>said</u>, 'John **has gone** to Moscow'. → I said that John **had gone** to Moscow.

- Present Perfect Continuous → Past Perfect Continuous:
She <u>said</u>, 'I **have been waiting** for you since 5 o'clock.' - She said that she **had been waiting** for **me** since 5 o'clock.

- Past Indefinite → Past Perfect:
She <u>said,</u> 'My parents **studied** at Minsk University'. → She said that her parents **had studied** at Minsk University.

- Past Continuous → Past Perfect Continuous
My brother <u>said</u>, 'I **was working** at five o'clock'. → My brother said that **he had been working** at five o'clock'.

- Future Indefinite → Future-in-the-Past Indefinite:
He <u>said</u>, 'I**'ll see** you at school tomorrow'. → He said that he **would see** me at school **the next day**.

5. Наречия меняются так:

here → there
today → that day
ago → before
this→ that
these → those
now → then
tomorrow → the next day
yesterday → the day before

last year → the previous year

6. Восклицания опускаются.

7. Если в словах автора **после слова** *to say* **стоит дополнение**, оно → **в** *to tell*: He said to me, 'My brother works at the factory'. – He told me that his brother worked at the factory.

Если это приказ: She said to him, '**Come** at 5 p.m.' → She told him **to come** at 5 p.m.

Если это просьба, то *to say →to ask:* I said to her, 'Give me a cup of tea'. → I asked her to give me a cup of tea.

Вопросительные предложения:

1. Вопросительный знак опускается. Вопросительный порядок слов заменяется на порядок слов повествовательного предложения:
He asked me, 'Where is Petrov?' → He asked me where Petrov was.

2. Когда вопрос начинается со вспомогательного или модального глагола, то косвенный вопрос присоединяется к главному предложению при помощи союзов *whether/if (ли):*
He asked me, 'Have you got your letter?' → He asked me **whether (if)** I had got my letter.

ЗАДАНИЯ

1. Прочитайте и переведите текст:

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.

Oil spills

Oil spills have devastating effects on the environment. Crude oil contains polycyclic aromatic hydrocarbons (PAHs) which are veiy 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 earned, modem 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.

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.

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.

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.

2. Переведите выражения на русский:

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 -
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 -

3. Переведите выражения на английский:

загрязнение от судоходства -
рост проблемы -
увеличение движения в портах -
влиять на биологическое разнообразие -
оставаться на многие годы -
восприимчивость к болезням -
неправильный репродуктивный цикл -
владелец танкера -
исследовать случаи разлива нефти -
столкновение -
взрыв -
соглашение -
балластные воды -
откачивать морскую воду -

загрязнение воздуха и воды -
представлять растущую угрозу мировому океану -
нефтяные пятна -
разрушительный эффект на окружающую среду -
проблемы развития -
по явному количеству -
перевозимая нефть -
международная федерация владельцев танкеров по вопросам загрязнения -
посадка на мель -
повреждение корпуса судна -
танкер с двойным корпусом -
пакеты документов по вопросам строжайшей защиты окружающей

способствовать равновесию и балансировке корабля -
балластная и льяльная разгрузка -
вызывать проблемы со здоровьем -
приводить к заболеваниям рака и различным опухолям -
управление морским топливом -
цель снижения потребления топлива
повышать затраты -
отслеживать потребление топлива -

среды -
перевозка вредных организмов -
распространение человеческих болезнетворных организмов -
сброс в прибрежные воды -
источники загрязнения -
выхлопная эмиссия -
выброс серы в воздух -
многоуровневый подход -
использование топлива -
улучшать надзор за потреблением топлива -
увеличить правительственное давление -

4. Поставьте в пропуски предлоги, где это необходимо:

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. Modem 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.

5. Ответьте на вопросы:

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 problems and adversely affecting sea animals, aren't they?

6.   What do exhaust emissions result in?
7.   What is the average percent of air pollution coming 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?

6. Прочитайте и переведите диалог:

Inspector: Good afternoon. I am an inspector of Marine Pollution Control Department. The point is that we have found a big oil spill on the water surface not far from your ship.

Chief Engineer: I'm afraid, you're mistaken, Inspector. Out ship has got all the necessary facilities to prevent any pollution.

Inspector: It's all very good. Perhaps I'm wrong, but I'm on duty to check all the possible sources of pollution. D'you keep an Oil Record Book?

Chief Engineer: Yes, certainly. Here you are.

Inspector: Oh, yes, according to your entries[3] you have had no spillage for a long time.

Chief Engineer: By the way, I can show you our International Oil Pollution Prevention Certificate. And you can make a tour of the ship to make sure that there are no traces of oil spill or oil leakage. Have you taken oil samples from that area?

Inspector: Yes, we have.

Chief Engineer: Then I'll ask you to take samples of oil from our tanks and the analysis will show you if those samples are identical or not.

Inspector: Thank you for your assistance, Sir.

7. Найдите в диалоге следующие фразы:
1.   Вы не правы.
2.   У нас есть все необходимое оборудование для предотвращения любых загрязнений.
3.   Посмотрите наш журнал нефтяных операций.
4.   Пройдите по нашему судну.
5.   Убедитесь, что нет никаких следов разлива и утечки топлива.
6.   Возьмите образцы топлива из наших танков.
7.   Сравните образцы топлива из наших танков с образцами топлива с места разлива.

8. Прочитайте и переведите диалог:

Chief Engineer: Good morning, will you take a seat, please.
Inspector: Good morning. It's the second time that I have the pleasure of seeing you.

Chief Engineer: I have invited you to inspect our vessel as they may lay charges to our ship for our having allegedly spilled fuel oil. Yesterday the cast inspector came on board our ship and carried out an investigation.

Inspector: How did they explain the purpose of their investigation?

Chief Engineer: They suspected that our ship had poured out oil into the water. The spill was noticed from the coast guard helicopter.

Inspector: Did they take samples of oil from the ship's tank?

Chief Engineer: Yes, they did. They hinted that the coast guards were checking 5 or 6 ships in this very area.

Inspector: What do the pilots report?

Chief Engineer: They report that they have seen traces of oil on the ladder.

Inspector: Is it really oil?

Chief Engineer: No, it isn't oil. There are remains of an old cargo of sugar left from the last voyage. When they are raw they remind of molasses.

Inspector: I must have scrapings of this substance. They will be analyzed in my office. Well, may I see the vessel's Oil and Ballast Pumping Record Book?

Chief Engineer: Here you are. As you can see 6 days before the incident 2 vessel's sump tanks were washed and filled with sea water. Then the water contaminated with heavy oil fuel was passed through the separator in the engine room.

Inspector: It seems to me the analysis made by the Port Authorities has not proved your fault.

Chief Engineer: So far they abstain from arresting our vessel.

Inspector: That's a good sign. I think the Authorities are awaiting the results of the laboratory tests before deciding whether to lay charges. So, let's hope for the best.

9. Ответьте на вопросы по диалогу:

1. Who noticed some oil spillage not far from the vessel?
2. What do the pilots from the coast guard helicopter report?
3. Were the coast guard inspectors checking only this vessel?
4. What do they suspect?
5. Is it really oil on the vessel's ladder? What is it in fact?
6. What can the Inspector read the vessel's Oil and Ballast Pumping Record Book?
7. Has the analysis made by the Port Authorities proved the fault of the vessel?
8. What other tests must be made before taking the final decision?

10. Переведите предложения из прямой речи в косвенную:

1. "I am planning to go to Kenya," Sally said.
2. "I take my little sister to school every day," little Anthony said.
3. "You may take my textbook," Nonna said.
4. "They are playing in the gym now," Nick said.
5. "I don't like chocolate," Mary said.

6. "My sister is ready to go" Helen said.
7. "My mother usually goes shopping on Saturday," the girl said.
8. "The birds build their nests among the trees," the teacher said.
9. "I am not married," Jimmy said.
10. "I can't read these books. I don't like them," Petra said.

11. Текст для аудирования:

Some Solutions To Reduce Ocean Pollution Today

Oceans serve humanity in countless ways—from providing food to enabling commerce. Each year, human activity destroys marine life in some way, polluting the oceans. It becomes complicated to ignore the gravity of ocean pollution, even for the most skeptical!

By simply changing a few habits in your daily life, you can help reduce plastic waste more than you think. Here are some solutions to reduce the Ocean pollution

1 Use a reusable bottle

Plastic bottles are present in very large quantities in our oceans. Different kinds of plastic can degrade at different times, but the average time for a plastic bottle to completely degrade is at least 450 years. It can even take some bottles 1000 years to degrade.

For example, sea turtles mistake floating plastic bags for jellies, and birds will often mistake plastic for fish eggs. A dead albatross found on a Hawaiian island had 119 plastic bottle caps in its stomach. A dead whale found on a North American beach had a body full of plastic. Reusing plastic bottles can significantly reduce Ocean pollution and energy usage.

2 Refuse plastic dishes and bags...

Plastic forks, knives and spoons may be convenient, but they have a bad influence on our oceans. In fact, six million tons of non-durable plastics are discarded every year. "Non-durable" means that the plastic has a useful life of less than three years.

While efforts are being made to remove trash from the oceans, improve recycling systems, and innovate barriers to prevent plastic from getting into waterways, we can all take action in our daily lives to stop plastic waste at the source. France became the first country to ban plastic bags and plates.

3 Recycle Properly

- *Find ways of recycling different materials*: Many materials can be recycled, such as paper, plastic, metal and glass. Other items such as furniture, electronic equipment, building material and vehicles can also be recycled but many people don't often think to do so.
- *Buy products that can be recycled:* When shopping at the supermarket, buy products that can be recycled easily such as glass jars and tin cans.
- *Buy products that have been made from recycled material*: You can tell if a product is eco-friendly by looking at the label on the packaging.
- *Avoiding buying hazardous material.*

4 Picking up trash on the beach

Some people don't care about the beaches. The process is simple, easy, and a great lesson for the entire family!

Along with the beach towels and umbrellas, bring along something to keep your trash in. Some beaches offer picnic benches and areas to snack.

Not everyone has a perfect memory and may forget about their waste or it may have been blow away from them by the wind. If you find someone else's trash on the beach, be kind and pick it up.

5 *Reduce energy use*

Current increases in temperatures are threatening marine life. Carbon dioxide from burning fuels is making our oceans more acidic.

There are many simple ways you can reduce your energy use. Ride a bike, walk or use public transportation. Use high efficiency appliances in your home. Turn off appliances when they aren't in use.

6 *Use less fertilizer*

When fertilizers are used in gardening and agriculture, eventually ends up in the ocean. One of the most devastating pollutants are the nitrogen (азот) and phosphorus found in our fertilizers.

7 *Avoid Products Containing plastic parts*

Tiny plastic particles have become a growing source of ocean plastic pollution in recent years.

These parts can now be found in the worlds oceans, trapped in sea ice, floating in the water and being consumed by all of marine life. Avoid products containing plastic by looking on the labels of your products.

8 *Buy ocean-friendly products*

Avoid products produced through harmful methods. For example, avoid jewelry made of coral or sea turtle shell. These products are directly linked with the destruction of entire ecosystems.

12. Выполните контрольную работу:

I. Переведите на русский:
1. Water pollution is one the main environmental issues that we are facing, as more than 70% of the Earth's surface is water-covered.
2. Human activity is the main reason for water pollution and natural phenomenon - such as landslides and floods - can also contribute to degrade the water quality.
3. Another source of water pollution is the fuel burning, causing air pollution like acid rain which then flows to streams, lakes, seas and oceans.
4. A lot of diseases result from drinking or being in contact with contaminated water, such as diarrhea, cholera, typhoid, dysentery or skin infections.
5. Ships can pollute the oceans in many ways: spills from oil and chemical tankers, exhaust emissions, cargo discharge, noise pollution and ballast water.
6. Ships produce carbon dioxide emissions that significantly contribute to global climate change and acidification.

7. According to the investigation some cruise ships are more polluting than entire cities; one big cruise ship emits as many pollution as a million vehicles in a day.

8. Noise pollution from the ships affects the marine animals and mammals whose sensitive hearing gets harmed, often leading to their death and damage of the whole eco-system.

9. Collisions and accidents are also a reason or oil pollution; since oil is heavier than water, it does not degrade quickly leading to problems for marine creatures and plants.

10. Some solutions to reduce ocean pollution: using reusable bottles, refusing plastic bags, buying eco-friendly products, picking up trash on the beaches, using less fertilizers.

II. Переведите на английский:

1) распространение вредных микроорганизмов 2) посадка на мель 3) углекислый газ 4) владелец танкера 5) судоходство 6) увеличение движения (трафика) в портах 7) откачивать морскую воду 8) отслеживать потребление топлива 9) биологическое разнообразие 10) использовать повторно 11) ограничивать 12) перерабатывать 13) прибрежные территории 14) морские виды 15) поверхность воды 16) предотвращать 17) утечка нефти 18) человеческое здоровье 19) источник загрязнения 20) потребление топлива 21) отказываться от пластиковой посуды 22) избегать вредных продуктов

III. Поставьте реплики в правильном порядке, чтобы воссоздать диалог:

(a) - Inspector: Thank you for your assistance, Sir. Goodbye!

(b) - Chief Engineer: Then I'll ask you to take samples of oil from our tanks and the analysis will show you if those samples are identical or not.

(c)- Inspector: It's all very good. Perhaps I'm wrong, but I'm on duty to check all the possible sources of pollution. Do you keep an Oil Record Book?

(d) - Chief Engineer: By the way, I can show you our International Oil Pollution Prevention Certificate. And you can make a tour of the ship to make sure that there are no traces of oil spill or oil leakage. Have you taken oil samples from that area?

(e) - Inspector: Good afternoon! I am an inspector of Marine Pollution Control Department. The point is that we have found a big oil spill on the water surface not far from your ship.

(f) - Chief Engineer: Yes, certainly. Here you are.

(g) - Inspector: Yes, we have.

(h) - Chief Engineer: I'm afraid, you're mistaken, Inspector. Out ship has got all the necessary facilities to prevent any pollution.

(i) - Inspector: Oh, yes, according to your entries (записи) you have had no spillage for a long time.

IV. Найдите в диалоге ответы на следующие вопросы и выпишите их:

1. Why has the Inspector come on board the ship?

2. What proofs did the chief engineer present that their ship is not to blame for the oil spill?

ТЕМА7. РЯДОВОЙ СОСТАВ МОРЕПЛАВАТЕЛЕЙ. МОРСКИЕ ПРОФЕССИИ

1. seafarer – моряк, мореплаватель (синон. seaman, sailor)
2. rank – звание, чин, рядовой состав
3. circumstance – обстоятельство
4. mate=assistant - помощник
5. to supervise – наблюдать, надзирать
6. engine room – машинное отделение
7. gear – приспособление, прибор
8. officer – должностное лицо, служащий
9. to watch – нести вахту, наблюдать
10. to maintain – поддерживать
11. junior/senior – младший/старший
12. nautical – мореходный, морской
13. carpenter – плотник
14. merchant marine – торговый флот
15. able seaman – матрос 1-го класса
16. helmsman - рулевой
17. to be in charge with – быть ответственным за
18. apprentice – практикант, ученик
19. aboard – на борту
20. wiper – дворник
21. chief cook – шеф-повар
22. to assign personnel – назначать персонал
23. oiler – смазчик
24. storage - хранение

ГРАММАТИКА
Abbreviations in Shipbuilding

Сокращение	Расшифровка	Перевод
AS	Annual survey	Ежегодное освидетельствование
AUX	Auxiliary engine	Вспомогательный двигатель
BC	Bulk Carrier	Навалочное судно (балкер)
BHP	Brake horse power	Эффективных лошадиных сил
BLT	Built	Год и место постройки
CAP	Capacity	Ёмкость

CBM (CUM)	Cubic metre	Кубический метр
CP (C/P)	Charter Party	Чартер
DBDS (Double/Double)	Double bottom / double sides	Двойное дно и двойные борта
DD	Drydocking	Доковое освидетельствование
DIMS	Dimensions	(Главные) размерения
DISPL	Displacement	Водоизмещение
DWCC	Deadweight cargo capacity	Грузоподъемность
DWT	Deadweight	Дедвейт
FT	Foot / feet	Фут (футы)
GR	Grain	Зерновая (при обозначении вместимости)
GRC	Greek	Греческий
GRT	Gross register tons	Брутто регистровых тонн
HR	Hour	Час
ICE STR	Ice strengthened	С ледовыми подкреплениями
IGS	Inert Gas System	Система инертного газа (противопожарная, на танкерах)
INT (P)	Intermediate Survey (passed)	Промежуточное освидетельствование (пройдено)
HO/HA	Holds/Hatches	Трюма/люки
KN (K)	Knots	Узлы
KW	Kilowatt	Киловатт
LCT	1. Landing Craft 2. Locally controlled tonnage	1. Десантное судно 2. Флот (судно), контролируемый местным судовладельцем
LOA	Length over all	Длина наибольшая
LR (LRS)	Lloyd's Register of Shipping	Регистр судоходства Ллойда
M/E	Main engine	Главный двигатель
MRS (RS)	Maritime Register	Морской Регистр судоходства

	of Shipping	(РФ)
MT (MTS)	Metric tons	Метрических тонн
MTR	Metre	Метр
MV (M/V)	Motor vessel	Теплоход
NM	Nautical Mile	Морская миля
NRT	Net register tons	Нетто регистровых тонн
PPT	Prompt	Незамедлительная (о сдаче)
SBT	Segregated ballast tanks	Изолированные балластные танки
SDBC	Single deck bulk carrier	Однопалубный навалочник (балкер)
SID или SINGLE	Singledecker	Однопалубное судно
SQMTR	Square Metre	Квадратный метр
SS	Special Survey	Очередное освидетельствование
SS P	Special Survey passed	Очередное освидетельствование пройдено
StSt или SS	Stainless Steel	Нержавеющая сталь
TKS	Tanks	Танки
TWEEN	Tweendecker	Твиндечное судно
TWPH	Tonnes of water per hour	Тонн воды в час (условная производительность насоса)
WOG	Without guarantee	Без гарантии

ЗАДАНИЯ

1. Прочитайте и переведите текст:

SEAFARER'S PROFESSIONS AND RANKS
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.

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.

Deck department

Chief Officer / Chief Male. 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 cany 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 cany 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 watchstauder, a day worker, or a combination of these roles. At sea an AB watchstauder'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.

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 'Chiefs 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. He 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 cany out a one-year training on board ships, executing tasks of an officer-of-tlie-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.

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.

2. Переведите на английский следующие выражения:

to be responsible for -	to be in charge of-
to carry responsibilities -	to be held under the direction -
to supervise -	under the supervision -
seafarer -	seaman -
sailor -	rank -
profession -	occupation -
licensed position - _	personnel -
staff-	crew -
sophisticated equipment -	beach support equipment -
different devices and equipment -	navigational equipment on the bridge -
firefighting devices -	assistant -

professional skills -
mate -
able seaman -
master -
captain -
voyage charts and plans -
watch -
bridge watch -
navigation watch –
gangway watch -
watch rotation –
nickname –
lookout –
a one-year training cookie -

second-in-command -
ordinary seaman -
safety and security of a ship -
duties and responsibilities -
to provide assistance -
cargo watch -
officer-of-the-watch -
anchor watch -
security-related watch -
to stand a watch -__
helmsman -
to splice wire and rope -
to sweep and wash the deck –
to keep machinery lubricated -

3. Переведите на английский следующие выражения:

быть ответственным -
наблюдать -
проходить под руководством -
капитан -
курсант -
матрос 1-го класса -
боцман -
дворник -
насосчик -
главный инженер -
стюард -
повар -
помощник стюарда -
стоять на вахте -
якорная стоянка -
смена вахты -
сохранность навигационных карт -
широкое разнообразие мореходных профессий -
благосостояние экипажа -
иметь документ торгового моряка -
круглосуточное присутствие -
направлять -
инструктировать -
нанимать -
обслуживать оборудование -
подчиняться -

отвечать -
надзирать -
мореходные профессии -
помощник капитана -
матрос -
матрос 2-го класса -
плотник -
смазчик -
имеющий лицензию экипаж -
нелицензированный член экипажа -
шеф-повар -
вахта -
вахтенное время -
проходить практику -
исполнять обязанности вахтенного офицера -
разрабатывать маршрут -
безопасность и сохранность судна -
прозвище -
обязанности вахтенного –
профессия первого уровня -
под наблюдением старших офицеров -
инспектировать –
готовить пищу -
назначать персонал -
выполнять обязанности -

4. Прочитайте и переведите диалог:

Bunker Supplier: Good morning, Chief. The bunkering boat will be brought alongside your ship by 8 a.m. Are you ready to bunker?
Chief Engineer: Yes, we've got everything ready.
Bunker Supplier: Into what tanks are you going to take the diesel oil?
Chief Engineer: Into the aft tanks. One of them is empty and the other is filled partially. We'll start pumping into the port tank.
*Bunker Supplier:* Well, what's its capacity?
Chief Engineer: Its capacity is 100 tons. Let's check both tanks right away.
Bunker Supplier: O.K. Please, send a competent person to do this.
Chief Engineer: Certainly. I'll send my third engineer. He is skilful. And he'll do all necessary preparations according to the international regulations.
Bunker Supplier: O.K. Thank you. Good-bye.

5. Решите кроссворд:
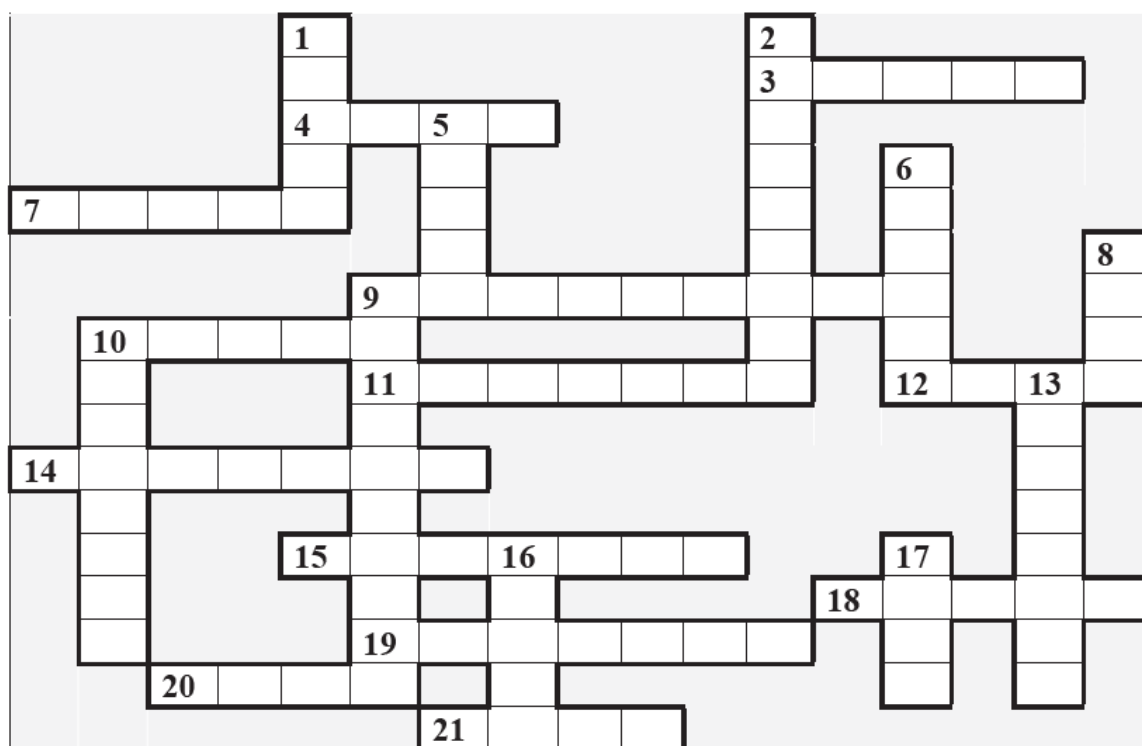
Across:
3. He keeps machinery lubricated (5).
4. The upper part of the hull (4).
7. The period of time from midnight till morning (5).
9. The officer in the Engine Department (9).
10. It is often phonetically confused with the word 'ship' (5).
11. A position aboard fuel tankers (7).
12. Just the same as profession or occupation (4).
14. The head of the Deck Department (7).

15. A member of the Steward's Department assisting with servicing of meals (7).
18. Navigation ... - the period of a caretakiug time (5).
19. The highest responsible officer on the ship (7).
20. The same as 'officer' (4).
21. A staff of a vessel (4).

Down:
1. The same as 'apprentice' (5).
2. Phonetically pronounced 'bosun' (9).
5. Carpenter's nickname (5).
6. The ship's highest responsible rank (6).
8. A member of the Steward's Department directing the preparation of meals (4).
9. Deck Cadet (10).
10. The same as 'sailor' or 'seaman' (8).
13. ... school - school where further seafarers are trained (8).
16. A junior member of the Engine Department (5).
17. A reservoir aboard the ship (4).

6. Текст для аудирования:

Impressions of a seaman

Having seen the majority of compositions, I have noticed that many write and travel and about trips. I wish to write in this composition about my travel — my work as a seaman.

My vessel on which I began to work as an 4th Engineer is the tanker "FRONT ALFA". In May I departed to Singapore to join the vessel crew. When for the first time I saw the vessel as we approached it in a boat, I was amazed by its size. Its length is about 2.5 football grounds and height approximately as a ten floor house. From Singapore the vessel sailed to Angola and then to France. For the first time in my life I passed the Equator. It was amazing to understand that in the summer in Africa it is cold and in the winter warm.

The vessel crew consisted of 24 people of different nationalities, the majority of them Filipinos. They madly like fishing. One evening they caught a shark about two meters long and very tasty they prepared it.

From France our vessel went through the Suez Canal and well-known presently the Adamsky gulf, through Somalia. The vessel fortunately was not exposed to attacks by pirates. Having passed this unsafe area, we went to Thailand.

In Thailand after already three months of my stay on a vessel I had the first possibility to go a shore. After only a few hours on shore, I was presented with unforgettable impressions. I very much liked the culture and architecture of this country.

From Thailand the vessel went to Nigeria. On the way to Nigeria my contract came to an end. And some more members of the crew disembarked with me in Cape Town in the Republic of South Africa. I had the possibility to look at the unfinished stadium in which next year there will be the World Championship of

football. Cape Town is a very beautiful and modern city. I recommend to all the necessity to visit this city.

I was very glad to return home because I had not seen more than four months all my close and native people. I hope my next voyage will give me new impressions and I can visit more countries new to me.

7. Выполнить контрольную работу:

I. Соотнесите название профессии с соответствующими обязанностями:

1) captain
2) deck cadet
3) chief officer
4) third assistant engineer
5) second officer
6) forth engineer
7) third officer
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

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;
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;
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

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serving meals and etc.;

s) he directs and participates in the preparation and serving of meals and etc.;

t) his role consists of cleaning and assisting with the preparation and serving of meals.

II. Прочитайте и переведите диалог:

Chief Engineer: We need 300 kg of lubricating oil.
Bunker Supplier: What kind of oil do you want?
Chief Engineer: We want to supply Shell Meline 30 lubricating oil. We have once purchased it and I don't want to mix it with oil of another grade.
Bunker Supplier: I see. We can supply you with the oil you ask for.
Chief Engineer: All right. Let's arrange for the delivery then.
Bunker Supplier: Well. We can bunker you just at this berth. When d'you want us to start?
Chief Engineer: We are ready to start bunkering right away. We are pressed for time.
Bunker Supplier: As you like. See you soon. Good-bye.

III. Ответьте на вопросы по диалогу:

1. Why does the Chief Engineer want to get only Shell Meline 30 grade of oil?
2. Where will the ship be bunkered from?
3. Why do they want to start bunkering right away?

ТЕМА 8. СОВРЕМЕННЫЕ КОМПЬЮТЕРНЫЕ ТЕХНОЛОГИИ В СУДОСТРОЕНИИ

1	emerge	появляться
2	attempt	попытка, пытаться
3	ability	возможность
4	add, addition	добавлять, добавление
5	merge	сливаться (=соединяться)
6	digital	цифровой
7	cognitive	познавательный, когнитивный
8	consumer	потребитель
9	competitive candidate	конкурентноспособный кандидат
10	impact	влияние
11	include	включать
12	remote	отдаленный, дистанционный

13	application	применение
14	benefit	выгода, польза
15	generation	поколение
16	artificial intelligence	искусственный интеллект (ИИ)
17	interact	взаимодействовать
18	affect	влиять, затрагивать
19	touchscreen	сенсорный экран
20	advertisement, ad	объявление, реклама
21	cashpoint	банкомат
22	bar code	штрих-код
23	store	хранить
24	amount	количество

ГРАММАТИКА

Согласование времен. Повторение переходов времен

	Простое	Длительное	Завершенное	Заверш. длительн.
	Indefinite	Continuous	Perfect	Perfect Continuous
Present	I write (я пишу, вообще, обычно)	I am writing (я пишу сейчас)	I have written (я уже написал)	I have been writing (я пишу некоторое время)
Past	I wrote (я писал вчера)	I was writing (я писал в тот момент)	I had written (я написал уже к тому моменту)	I had been writing (я писал к тому моменту некоторое время)
Future	I $\frac{shall}{will}$ write (я буду писать завтра)	I $\frac{shall}{will}$ be writing (я буду писать в тот момент)	I $\frac{shall}{will}$ have written (я напишу уже к тому моменту)	I $\frac{shall}{will}$ have been writing (я буду писать к тому моменту некоторое время)
Future in the Past	I $\frac{should}{would}$ write	I $\frac{should}{would}$ be writing	I $\frac{should}{would}$ have written	I $\frac{should}{would}$ have been writing

ЗАДАНИЯ

1. Прочитайте и переведите текст:

COMPUTERS IN EVERYDAY LIFE

We are now living in what some people call the digital age, meaning that computers have become an essential part of our lives. Young people who have grown up with PCs and mobile phones are often called the digital generation.

When you buy groceries at a supermarket, a computer is used with laser and barcode technology to scan the price of each item and present a total. Barcoding items (clothes, food and books) require a computer to generate the barcode label.

With the help of computers people can look up common symptoms in the Internet before coming into a doctor's office. This allows the patients to understand the problem better and make an independent decision.

The computers can store huge amounts of medical data. Many of the modern methods of scanning are based on the computer technology. The infrared cameras & sophisticated computers are used for obtaining high-resolution images.

In banks, computers store information about the money held by each customer and enable staff to access large databases and carry out financial transactions at high speed. They also control the cashpoints,

In libraries and bookshops computers can help you to find the book you want as quickly as possible. Most television advertisements and many films use graphics produced by a computer.

2. Задайте письменно не менее 5 вопросов (любого типа) к тексту из упр.1.

3. Прочитайте и переведите текст:

THE LANGUAGE OF COMPUTERS

50 years ago people hadn't even heard of computers and today we cannot imagine life without them.

Computer technology is the fastest-growing industry in the world. The first computer was the size of a minibus and weighed a ton. Today its job can be done by a chip the size of a pen head. And the computer revolution is still going on. Very soon we'll have computers that we'll wear on our wrists or even in our glasses and earrings. Such wearable computers are being developed in the USA.

Japan's biggest mobile phone company has just realized its cleverest product - a mobile phone that allows you to surf the Internet as well as make calls. Soon they will be able to buy cinema tickets and manage their bank accounts.

The next generation of computers will be able to talk and even think for themselves. Of course, they will be still a lot simpler than human brains, but it will be a great step forward. Such computers will help to diagnose illness, find minerals, understand and control the world's money markets, identify criminals and control space travels.

Computer revolution is changing our life and our language too. We are constantly making up new words or giving new meanings to old ones.

4. Ответьте письменно на вопросы по тексту из упр. 3:

1. What size was the first computer?
2. What types of computers are being developed in the USA now?
3. What are people using the phone for?
4. What will the next generation of computers be able to do?
5. How is the computer revolution changing our life?

5. Соотнесите выражения и их переводы:

1. electronic device
2. to carry out the program
3. by means of automation
4. a set of instructions
5. to refer to as
6. to create the computer software
7. to perform the task
8. processing of information
9. to convert data into information
10. raw material
11. in the digital form
12. to store information in files

a) называть что-либо
b) в цифровой форме
c) обработка информации
d) создавать программное обеспечение для компьютера
e) выполнять задачу
f) набор инструкций
g) хранит информацию в файлах
h) преобразовывать данные в информацию
i) посредством автоматизации
j) выполнять программу
k) электронное устройство
l) сырой материал

6. Переведите текст письменно:

Technology Trends You Need to Know to Work in Any Industry

1. Internet of Things (IoT)
   One of the biggest tech trends to emerge in recent years is the Internet of Things. Simply put, the Internet of Things (abbreviated IoT) is the idea that all technological devices can be connected to the Internet and to each other in an attempt to create the perfect union between the physical and digital worlds.
2. Machine learning
Another exciting emerging technology is machine learning, which is essentially a computer's ability to learn on its own by analyzing data and tracking repeating patterns. For example, social media platforms use machine learning to get a better understanding of how you're connected with those in your social network. They do this by analyzing your likes, shares and comments and then serve you that content first.
3. Virtual reality (VR)
   Virtual reality has been a popular component of video games for several years and this trend is continuing to expand. In addition to video games, Companies

adopt this technology to help them engage customers more effectively and optimize their sales and marketing efforts. It's also a potentially useful tool for learning and is increasingly being adopted by educational organizations.

4. Touch commerce

Being able to buy anything you want with the touch of a finger may have seemed like a fantasy a few years ago, but it's now a reality. Merging touchscreen technology with one-click shopping, touch commerce allows consumers to buy products easily from their phones. In such a way customers are able to buy everything from clothes to furniture with just a fingerprint.

5. Cognitive Technology

Cognitive technologies have a broad range of applications. For example, the cognitive technology includes things like natural language processing (NLP) and speech recognition. Combined, these different technologies are able to automate and optimize a lot of tasks that were previously done by people, including certain aspects of accounting and analytics.

Staying up to date on the latest trends will give you a better understanding of your chosen industry and make you a more competitive candidate. Moreover, this knowledge might open up new doors within your field and others.

7. Переведите предложения из прямой речи в косвенную:

1. My friend said, "This exercise is very easy".
2. She said to me, "I have never been here before".
3. I said to her, "Translate these texts".
4. He has just said, "I want to discuss the problem".
5. She will say, "I'll go home tomorrow".
6. He said, "I was here yesterday".

8. Переведите текст:

Industrial automation

Industrial automation is the use of computers, robots and information technologies for handling different processes in an industry to replace a human being. It is the second step beyond mechanization in the scope of industrialization.

Earlier the purpose of automation was to increase productivity and to reduce the cost associated with human operators. However, today, the focus of automation has shifted to increasing quality and flexibility in a manufacturing process. In the automobile industry, the installation of pistons into the engine used to be performed manually with an error rate of 1-1.5%. Presently, this task is performed using automated machinery with an error rate of 0.00001%.

Advantages:

-Lower operating cost: automation excludes healthcare costs and paid holidays, different bonuses and pension coverage associated with a human operator.

- High productivity: automation fulfills the aim of the company by allowing the company to work for 24 hours in a day 7 days in a week and 365 days a year.

- High flexibility and accuracy. Adding a new task requires training with a human operator, however, robots can be programmed to do any task.
- High safety. Industrial automation can make the production line safe for the employees by using the work of robots in hazardous conditions.
<u>Disadvantages:</u>
<u>-High Initial cost. The initial investment associated with the shift from a human production line to an automatic production line is very high. Also, some costs are connected with training employees to handle this new sophisticated equipment.</u>

9) Текст для аудирования:

Robots are mechanical helpers of humans, that are capable to perform operations, according to the program installed in them. Nowadays, due to the scientific-technical progress, the elaboration of robots can significantly change human's way of life.

I think that no one could describe the future without robots that demonstrate the achievements of scientists and engineers in this field.

And although, there are still a lot of problems to be resolved, I think we can already say with confidence that in the next 20 years better and cheaper technologies will appear in this field, that will lead to the creation of a market of robots of different purpose. This means that the androids (and other robots) will live and work among us, entertaining us and helping us in our everyday physical and intellectual labor.

Like in the American cartoon "Futurama" that shows the Earth in 3000 year. People and robots live there jointly. Of course, it's just a fable, but it's really interesting point. It can really lead to thinking that robots will rule the world!

Sooner or later, robots will become an integral part of our everyday life, like computers or mobile phones.

On the other hand, the level of development of robots depends on perfection in areas such as, for example, human speech recognition or artificial intelligence, and they have not had significant progress for several years. Until the experts of this field will not find a new paradigm, robots will not learn to perform complex actions. The future is for robotics, but it will take a few decades.

10. Выполните контрольную работу:

I. Переведите на русский:
1. For centuries people have dreamed of having a perfect slave to do their work for them.
2. The truth is that computers allow us to access the latest information very quickly.
3. Today the virtual reality (VR) technology is applied to advance fields of medicine, engineering, education, design, training, and entertainment.

4, There are a number of serious concerns about dangers in the growth of IoT, especially in the areas of privacy and security.

5. IoT devices are a part of the larger concept of home automation, which can include lighting, heating and air conditioning, media and security systems.

6. A *barcode* is a method of representing data in a visual, machine-readable form.

7. *The Three Laws of Robotics* are a set of rules formulated by the science fiction author Isaac Asimov.

II. Переведите на английский:

1. Невозможно переоценить преимущества компьютерных технологий в современной жизни.

2. Наука и производство, торговля, банковская система и медицина невозможны без компьютеров сейчас.

3. Искусственный интеллект - это система или машина, которая может обучаться и имитировать человеческое поведение.

4. Термин «робот» был придуман чешским писателем Карелом Чапеком в 1920 г.

5. Машинное обучение и искусственный интеллект используются в технологиях умного дома.

6. 3D-технологии все часто в центре внимания крупных российских промышленных выставок.

III. Вставьте подходящие по смыслу слова:

remote, data, substitute, social, cashpoint, digital, enterprises, employees, bank, opportunities, generation, customers

Robots (1) _____ human actions. The rapid growth of the (2)_____ world brings with it lots of challenges and (3) _____ for science and economy. Not only (4) _____ , but also companies have recognised the benefits of (5) _____ work. (6) _____ are angry when a *(7)* _____ fails to give money and cuts their (8) _____ balance. Our company has *(*9*)* _____ centers in different locations around the world. Many (10) _____ are investing in big data technologies. Today's teenagers are the first (11) _____ whose lives are saturated by mobile technologies and (12) _____ media.

9. ОРГАНИЗАЦИЯ СУДОРЕМОНТА

1. lifecycle – жизненный цикл
2. shipowner – судовладелец
3. shipwreck – кораблекрушение
4. dimension - измерение
5. blueprint – светокопия, синька

6. plumbing – водопроводная система

7, dry dock – сухой док

8. conversion – изменение, реконструкция

9. pierside – на пирсе

10. sandblasting - пескоструйная очистка

11. sustain – выдерживать, испытывать

12. life expectancy - предполагаемая средняя продолжительность жизни

13. plywood – фанера

14. lifespan – продолжительность жизни

15. rotting – гниение

16. to scuttle – затоплять (корабль)

17. breakwater - волнорез

18. scrapyard - скрапный двор

19. mold – шаблон

20. afloat - на плаву

21.significance - значение, значимость

22. to launch - спускать на воду, запускать

23. rust – ржавчина

24. overview – беглый обзор

25. auxiliary – вспомогательный

26. replacement parts – сменные части

27. power supply – электропитании

28. wash water – промывочная вода

29. compressed air – сжатый воздух

30. discharge – разгрузка, выгрузка

ГРАММАТИКА

Неличные формы глагола

Non-finite forms of a verb (Неличные формы глагола)

Есть 3 типа неличных форм – infinitive (инфинитив), gerund (герундий), participle I, II (причастия I, II).

1. Infinitive – ***инфинитив*** (с частицей «to» или без «to») – это неопределенная форма глагола, отвечающая на вопросы «Что делать?», «Что сделать?»

I like to read. – читать («что делать?»).

He wants to buy (купить – «что сделать?») a book.

Инфинитив без «to»:

- после модальных глаголов can, may, must, а также после вспомогательных глаголов shall/will, should/would.

You may (-) come in.

I must (-) do my work.

- после некоторых глаголов: to hear, to see, to make, to let, to help, to feel и пр.:

<u>Let</u> me (-) <u>think</u>.
He <u>made</u> me (-) <u>write</u> it.

2. Gerund (*герундий*) - отглагольное существительное с окончанием –ing:
She likes <u>swimming</u> (плавание).
I am fond of <u>reading</u> (чтение).
Отвечает на вопрос «что»?
Важно:
- Если инфинитив оканчивается на немое –е, то перед окончанием –ing оно опускается.
Пример:to write – writing
- Если односложный инфинитив оканчивается на одну согласную, которой предшествует одна гласная, то конечная согласная удваивается.
Пример: to sit – sitting

3. Participle I, II.
- Participle I (причастие настоящего времени) – инфинитив +ing. Отвечает на вопросы «Какой?», «Что делая?»
Look at a man <u>sitting</u> («какой?») at the window.
<u>Knowing</u> («что делая?») English well, he translated the text.

- Participle II (причастие прошедшего времени) – для правильных глаголов добавляется окончание -ed; для неправильных – это 3-я колонка из таблицы неправильных глаголов. Отвечает на вопрос «Какой?»
<u>Broken</u> («какая?») car – сломанная машина.
<u>Illustrated</u> («какой?) magazine – иллюстрированный журнал

ЗАДАНИЯ

1. Переведите текст:

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 vaiy 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 then 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.

2. Переведите на русский:

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 -

3. Переведите на английский:

проходить несколько стадий -
военно-морской архитектор -
судно строится на судоверфи -
суда заканчивают свой срок службы   многими способами -
после начального чернового наброска -
проект более сложных судов -
длиться от нескольких месяцев -
иметь большое значение -
строительство начинается с корпуса -
когда судно получает официальное название -
основной ремонт выполняется в сухом доке -
по мере старения судна -
прочность корпуса подвержена

отношения между судовладельцами и проектировщиками -
судно спускается на воду -
спецификация -
создать проектную схему -
улучшать проект на каждой стадии -
включать планировку парусов -
корпусной материал и размеры судна -
строить по шаблону -
водружение надстройки -
судно на плаву -
периоды снижения рабочего состояния -
требовать постоянного обслуживания -
осмос и гниль -
сесть на мель или затонуть в море -

гниению -
искусственный риф -

4. Вставьте в пропуски подходящие слова:

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 shipowners, 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 diydocks and pierside are suitable for _____ and conversion.
13. Repair and maintenance include removing _____ on the hull. _____ and repainting the hull.
14. Ships _____ major damage can be repaired or converted.
15. A life _____of a ship can last between 20 and 100 years.

5. Ответьте на вопросы по тексту:

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?

6. Найдите пары слов с одинаковым значением:

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

7. На основе данных глаголов составьте форму герундия и переведите.
Примеры: *to retell – retelling – пересказ; to swim – swimming – плавание.*
to collect, to read, to smoke, to get, to finish, to prepare, to play, to register, to tell, to translate, to indicate.

8. Выпишите из данных предложений неличную форму глагола и укажите, какая именно это форма – инфинитив, герундий или причастие 1, 2.
1. He will write to his parents tomorrow. 2. I enjoy playing football. 3. The performed work showed good results. 4. She likes to get presents. 5. I noticed a letter lying on the table. 6. Smiling, he handed her a bouquet of flowers. 7. His car needs washing. 8. A broken cup laid on the floor. 9. He promised to telephone or write.

9. Текст для аудирования:

Flagman of the Russian shipbuilding

The middle of the 19th century was a crucial moment for Russia. The defeat in the Crimean War (1853-1856) clearly demonstrated that Russia could retain the status of a great maritime power only subject to reorganization of its navy and reconsideration of its shipbuilding.

A private enterprise of Matvey Egorovich Karr, a first order merchant, and Mark Lvovich Makferson, a naval architect and engineer, appeared to be riding this wave. Starting from its establishment on 26 May 1856 (13 May according to the Old Style) Baltiysky Zavod mastered new designs of merchant and naval ships subsequently built by other shipyards.

Baltiysky Zavod's main profile was the construction of metal ships for the Russian Navy as well as steam engines and other marine equipment. 30-40 years

prior to the development of submarines construction and combat tactics all over the world, Baltiysky Zavod built a submarine designed by Ivan Aleksandrovsky (1866) that complied with almost all the above requirements. The ironclad gunboat Opyt was built in 1862 and became the first Russian ship made completely of steel..

In the 70s of the 19th century the ironclad floating battery ship Admiral Lazarev was built marking the start of construction of ironclad ships in Russia. The Russian Navy operated the frigate as long as four decades.

The first Russian steam engine of 5300 BHP was built in 1877. Baltiysky Zavod pioneered the serial construction of ships (the Pobeda class war cruisers, ironclads). The Bars and the Morzh class submarines were as good as the best foreign prototypes. The experience and knowledge available with the engineers of Baltiysky Zavod (1900) paved the way to the famous Rubin Design Bureau (1938).

Baltiysky Zavod also built the first Russian dreadnoughts – the Petropavlovsk (Marat) and the Sevastopol (Parizhskaya Kommuna) battleships in the beginning of the 20th century.

In the 1920s Baltiysky Zavod was one of the pioneers in the USSR to resume the construction of merchant ships (wood cargo vessels, cargo and passenger motor vessels, diesel icebreakers) followed by naval orders. Within one decade 32 merchant ships were built.

Before and after the War

During the Great Patriotic War Baltiysky Zavod had to meet the frontline needs. The shipyard established mass production of ammunition and was involved in ship repair, construction of mine sweepers, barges and cutters for the Ladoga Road of Life. A half of the 15 thousand workers went to war, only about 6000 people returned home.

After the Great Patriotic War the shipyard started the construction of cargo and cargo/passenger ships (tankers, reefers, dry cargo ships, chemical carriers, polar icebreakers, research ships).

The construction of the Pekin class tankers (with displacement of 40 thousand tons) and the Sofia class (with displacement of 62 thousand tons) in the 60s was an important milestone for the shipyard.

Second generation of nuclear powered icebreakers

From 1974 to 1992 a series of nuclear powered icebreakers of the second generation were built. The lead ship named the Arktika reached the North Pole during Arctic navigation in 1974. The icebreaker Rossiya commissioned in 1985 opened the series of modernized icebreakers of the second generation. The construction of the icebreaker 50 Let Pobedy was completed in 2007. The ship is the nowadays world's biggest icebreaker boasting 20 thousand tons displacement and 14 decks.

In the 80s a series of Project 1144 (the Orlan) heavy nuclear powered battlecruisers were built (the Admiral Ushakov, the Admiral Lazarev, the Admiral Nakhimov). The last warship of the series (the Piotr Velikiy) built in 1998 is second to none as far as equipment and weaponry are concerned.

Baltiysky Zavod executed the largest international surface shipbuilding order in April 2004 by building a series of frigates for the Indian Navy.

Recent and current projects

Baltiysky Zavod delivered two diesel electric icebreakers – the Moskva and the Sankt-Peterburg in 2008 and 2009. Those were the first diesel electric icebreakers built in Russia for the last 30 years.

In 2009 the shipyard started the erection of the hull of the world's first floating nuclear power plant – the Akademik Lomosov. This project is quite unique as well as many other products made by Baltiysky Zavod. The nuclear power plant currently undergoes final outfitting.

There are other unique ships being built by Baltiysky Zavod. The smaller slipway (slipway B) is occupied by the world's largest diesel electric icebreaker – the Viktor Chernomyrdin (Project 22600).

The hull of the nuclear powered 60 MW icebreaker Arktika (Project 22220) is built on the bigger slipway (slipway A). This will be the largest and most powerful icebreaker in the world. An order for two more Project 22220 sister ships was placed with Baltiysky Zavod in 2014.

During its 150 year history Baltiysky Zavod built about 600 naval & merchant ships and submarines.

10. Выполнить контрольную работу:

I. Переведите предложения на русский:
1. Place vessel in dry dock and subsequently remove from dock on completion of work.
2. All dry dock work to be submitted for inspection of Russian Maritime Register of Shipping.
3. During the dry dock period connect shore-to-ship power supply cable and supply the vessel with power throughout the repair period.
4. Connect any supply compressed air to ship if required.
5. Remove rust and old paint from submerged section of hull using a power tool, and paint

II. Переведите на английский:
1. Поместите судно в ремонтный док.
2. Для починки нужен сухой док.
3. Настоящий ремонт потребует пару недель в сухом доке.
4. Отличительной особенностью гавани является наличие сухого дока и мастерской для легкого ремонта и технического обслуживания
5. Сухой плавучий док для ремонта судов обслуживается российскими специалистами.

III. Выпишите из данных предложений неличную форму глагола и укажите, какая именно это форма – инфинитив, герундий или причастие 1, 2.

1. The dancing girls are our students. 2. He can speak French. 3. Smoking is forbidden. 4. The book discussed yesterday was interesting, 5. The man smoking a pipe is my brother. 6. It was an untidily written letter. 7. He forgot to wind the watch when he went to bed. 8. He finished reading the newspaper. 9. A parcel sent from Paris will be in London in some days.

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