***1) Прочитайте и переведите следующие интернациональные слова:***

atom /' /, characteristics / ' s/ chemist /' /, electron / ' /, element /' /, form / : /, gas / /, gaseous /' /, group /gru:p/, mass / /, molecule /'m l kj l/, structure /'str kt /, physics / ' /, philosophy / ' /, proton /' /, reality / ' /, physics / ' /, crystal /'kr stl/.

***2) Прочитайте и запомните следующие английские слова. Сравните их с русскими словами, имеющими тот же корень:***

|  |  |  |
| --- | --- | --- |
| concept | /' / | **понятие (ср. концепция)** |
| contain | / 't / | **содержать (ср. контейнер)** |
| contain**er** | / ' / | **контейнер** |
| identi**fy** | / ' / | **устанавливать (ср. идентифицировать)** |

**identification / ' e / установление (ср. идентификация)**

|  |  |  |
| --- | --- | --- |
| object | /' / | **предмет (ср. объект)** |
| pack | /' / | **упаковывать (ср. паковать)** |
| pack**ing** | / / | **упаковка** |

***3) Прочитайте следующие слова, найдите их в тексте и запомните***

***значение:***

|  |  |
| --- | --- |
| according to | **согласно ч-л, по** |
| air | **воздух** |
| angle | **угол (*матем*.)** |
| amount *n.,v*. | **количество, величина; доходить до...** |
| call | **называть** |

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|  |  |
| --- | --- |
| change *n.,v.* | **изменять; изменение** |
| charge | **заряд** |
| common | **обыкновенный, распространенный** |
| compound | **соединение** |
| consist of | **состоять из** |
| con'vert | **превращать** |
| define | **определять** |
| definite | **определенный** |
| definition | **определение** |
| de'gree | **степень, градус** |
| example | **пример** |
| exist | **существовать** |
| fill | **наполнять** |
| flow, flowing | **течь, течение, поток** |
| iron | **железо** |
| keep (kept, kept) | **держать, сохранять** |
| kind | **род, сорт, вид** |
| liquid | **жидкость** |
| matter | **материя, вещество** |
| to measure, v, | **измерять, мера** |
| measure, n. |   |
| to move | **двигаться** |
| oil | **нефть** |
| to occupy | **занимать место, пространство** |
| particle | **частица** |
| possible | **возможный** |
| resist | **оказывать сопротивление, затруднять** |
| shape | **форма** |
| space | **пространство** |
| solid state | **твердое тело** |
| state | **состояние** |
| steam | **пар; выпускать пар** |
| stone | **камень** |
| substance | **вещество** |
| thick | **густой** |
| thin | **жидкий, текучий** |
| viscosity | **вязкость** |
| volume | **объем; громкость** |
| zero | **нуль** |

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***4) Переведите словосочетания на русский язык:***

*1.common (****обычный****)****→****metals, compound, liquid;*

2.atmospheric , isothermal, thermodynamic **→***changes*(**изменения**);

3.organic, meteoric **→***matter*(**вещество**);

4.ideal, heavy (**тяжелая**) **→***liquid*;

5.atomic, electronic, critical, isomeric, normal **→***state (****состояние****)*;

6.absolute, molecular, nominal **→***volume(****объем****)*;

7.condensed, working, atmospheric **→***steam (****пар****)*;

*8.according to (****согласно ч****-****л****)****→****the new theory, this definition;*

9.crystalline, radioactive **→***substanc*e;

10.static, dynamic, temperature **→***characteristics.*

|  |  |  |
| --- | --- | --- |
|  | **Запомните выражения:** |   |
|   | that is why | **вот почему** |
|   | similar to | **похожий на** |
|   | on one hand | **с одной стороны** |
|   | on the other hand | **с др.стороны** |
|   | neither …nor | **ни …, ни** |

***5) Прочитайте и переведите текст. Запомните выделенные слова.***

**TEXT A**

**FORMS OF MATTER**

1. **Matter**is the physical substance that everything in the world is made of. Matter is everything that occupies the space. All matter has a mass, which is the measure of the

particles, atoms and molecules, they consist of. Particles can be grouped together in many different ways, bearing the **structure**of matter. That is why, so different kinds of matter exist. All kinds of matter can be

**classified**if they are solid, liquid or gas. Solid, liquid, gas and plasma are called **physical**states of matter. According to scientific **definition**, plasma is a substance similar to a gas that has almost no electric charge. This characteristics of plasma is used in plasma screens and plasma displays: a mixture of gases is put between two sheets of glass. This produces a very clear picture which can be looked at from almost any angle. Iron and stone, oil and water, air and steam are the examples of different states of matter.

2.A **solid object**can keep a definite shape and a definite volume. A liquid also has a definite volume, but it will take on the shape of any **container**into which it is poured (**наливать**). A gas, on the other hand, has neither a definite shape nor a definite volume. If some air is let (**впускать**) into a container, it will fill the whole space **uniformly**(**равномерно**).

3.A liquid is a substance that moves more **freely**than a solid, but not as freely as a gas. The tiny particles that make up liquid have more energy than the particles of solids, but less than gases. The ability of a liquid to resist flowing is called its viscosity. **Thick**liquids like syrop have a higher viscosity and flow slowly, whereas **thin**running liquids like water have a lower viscosity. In this case the substance flows more freely than a solid but less freely as a gas.

4.One kind of matter may be in all three principal states. Water is a common example. **Usually**water is a liquid, but at low **temperatures**it goes into its solid state (called ice), and at a **higher**temperatures it becomes steam, which is the name for the **gaseous**state of water.

5.We usually think of air as a gas, but at about 300 degrees below zero it turns into (**превращаться**) a **bluish**liquid. Iron, **commonly**seen in the solid state, becomes a liquid in a foundry (**литейный цех**) and is a gas in the sun and in the stars (**звезды**), where the temperature is many thousands of degrees.

**ПОСЛЕТЕКСТОВЫЕ УПРАЖНЕНИЯ**

***1)Проанализируйте состав выделенных слов. Найдите в тексте примеры наречий, прилагательных в сравнительной степени.***

***2)Переведите следующие словосочетания на английский язык:***

**1.твердое, газообразное, молекулярное, жидкое → *состояние*;**

**2.густое, жидкое → *вещество*;**

***3.определенный → объем, вид, пример;***

***4.обычный → пример, объем, температура***

**5.высокая, низкая, характерная *→вязкость***

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***3) Ответьте на вопросы по тексту А:***

***(Cледите за структурой утвердительного предложения: подлеж.---***

c**каз**.--- **доп**.)

1.What is matter ? (Matter is …)

2.What is a mass? (A mass is …)

3.What are the four physical states of matter ? (The 4 physical states of matter are …)

4.Why do different kinds of matter exist ? (Different kinds of matter exist as …)

5.What kind of substance is plasma? (Plasma is …)

6.Can a solid object keep a definite volume ? (A solid can/cannot…

7.Does a gas have a definite volume and shape ? (A gas has/has no…)

8.What is velocity ? (Velocity is …)

9.What states of water do you know ? (The states of water are …)

10.In what state is iron in the sun ? (Iron is …)