

JAF 02 REVISION LESSON

Task 1: Give a short definition of:

Circuit

Nuclear energy

Insulator

Inertia

Task 2: Complete the extract using suitable verbs:

The core function of a GPS receiver is to _____ you to locate your precise geographical position. To _____ the device to function, it receives at least 3 signals simultaneously from the GPS constellation – 30 dedicated satellites which _____ receivers can function anywhere on Earth. To _____ errors, this device is designed to receive four separate signals.

Task 3: Translate into English:

Co se týče materiálů, máme pro vás dva návrhy.

Přístroj byl zničen do takové míry, že se nedal opravit.

Do jaké míry se ještě bude rozpočet upravovat?

Nebyla jsem zvyklá mluvit tímto dialektem.

Kdysi si četl horoskopy, ale teď už je nesnáší.

Zvykáme si na drsné klima této země.

Měsíc působí na Zemi určitou silou.

Newtonovi následovníci dokázali zakreslit pohyb planet.

Task 4: Complete the sentences with suitable conjunctions:

Doctors' salaries have risen substantially, _____ nurses' pay has actually fallen.

You can't get the job _____ you've got experience.

The invention is ingenious, _____ there is still room for improvement.

_____ wet leaves on the line, this train will arrive an hour late.

Bring a map _____ you get lost.

The team continued with their experiments _____ the lack of finances.

Task 5: Rewrite the sentences using modal verbs:

It's prohibited to use this equipment outside the lab.

It was not a good idea to use the equipment outside the lab.

But it was necessary to use the equipment outside the lab.

Maybe the scientist has already published her results in a journal.

It's highly probable that the scientist has published her results in a journal.

It's surely not possible that she has published her results.

Task 6: Rewrite the sentences using passive voice:

They conducted extensive research into renewable energy sources.

They are conducting extensive research into renewable energy sources.

They have conducted extensive research into renewable energy sources.

They will conduct extensive research into renewable energy sources.

Task 7: Complete the gaps with suitable words:

In 1678 the Dutch scientist Christian Huygens was the first to _____ that light travels in waves. Since then the work of Albert Einstein and James Maxwell has revealed that light actually _____ of particles known as photons and travels in electromagnetic waves. Light seems to travel in straight lines. If you shine a flashlight in the dark, for example, the _____ of light appears to be straight. In contrast, sound waves travel in every direction. We can hear people on the other side of a wall but cannot see them.

In certain situations light diverges from a straight path. When it falls on an object, most is either _____ (in the case of an opaque object such as wood or metal) or passes through (in the case of a transparent object such as water or glass). The remainder of the light is reflected. It is reflected light that changes direction. When light is reflected off a smooth surface, it changes direction in a regular way, that is, the angle that is reflected _____ the angle at which it strikes the surface. If the surface is _____, light is reflected in many directions.

Certain silver compounds (like silver bromide) reflect almost all the light that falls on them and are accordingly used for mirrors. The image that is reflected in a flat mirror is identical to the original object, even in size, except that the image is _____. This is because light on a flat surface changes direction.

When light passes from one transparent medium to another, it changes speed and direction. This process, called refraction, explains the _____ shortening of a person's legs or the bending of a stick in water.

Light is a form of energy that can be _____ into heat. You can _____ this by using a magnifying glass to concentrate the sun's rays on a piece of paper and burn a hole in it. It is this light energy from the sun that warms the earth and enables living things to grow. Plants get light energy directly from the sun. Animals get it from the plants they eat.