

Static Electricity

Static electricity occurs when an object either loses or gains a negative charge. We say that objects that lose negative charges become positively (+) charged overall. We say that objects that gain negative charges become negatively (-) charged overall.



1. Give two reasons why static electricity is similar to magnetism.

2. What happens to an insulator that gains electrons?

3. Why is the balloon attracted to the hair after it has been rubbed on someone's head?

Use the words to help you fill in the gaps: positively charged, electrons, negatively charged.

_____ are transferred from the balloon onto the hair. This causes the hair to become _____ and attracted towards the _____ balloon.

4. What is the difference between a conductor and an insulator?

Give examples to support your answer.

A conductor is a _____

An insulator is _____



Static Electricity Answers

1. Give two reasons why static electricity is similar to magnetism.

Static electricity is similar to magnetism in that it involves charges.

Like charges repel and opposite charges attract.

2. What happens to an insulator that gains electrons?

A material that gains electrons will become negatively charged.

3. Why is the balloon attracted to the hair after it has been rubbed on someone's head?

Use the words to help you fill in the gaps: positively charged, electrons, negatively charged.

Electrons are transferred from the balloon onto the hair. This causes the hair to become **negatively charged** and attracted towards the **positively charged** balloon.

4. What is the difference between a conductor and an insulator?

Give examples to support your answer.

A conductor is a **material that will allow an electrical charge to pass through it e.g. a metal.**

An insulator **is a material that will not allow an electrical charge to pass through it e.g. wood.**

