Name:	Class:	Date given:
		Date due in:

Static Electricity

1. Use the words from the box to complete the gaps in the paragraph below. [13]

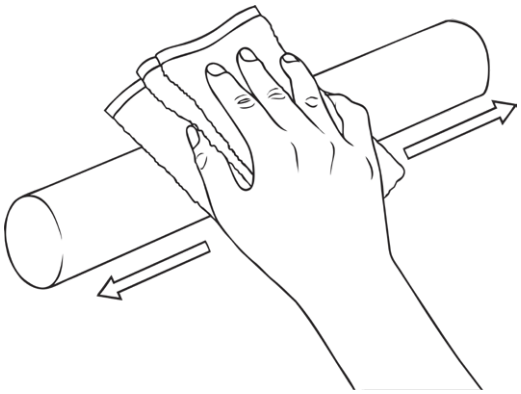
atoms	negative	
friction	equal	loses
move	insulating	positive
electrons	oppopsite	protons
gains	fixed	

_____ contain _____ charges and _____ charges. The positive charges are called _____. The negative charges are called _____. Electrons can _____, however the positive charges are _____.

If two _____ objects are rubbed together the force of _____ can cause the electrons to be scraped off one object and left on the other object.

The object which _____ electrons becomes negatively charged. The object which _____ electrons becomes positively charged. The two objects will have _____, but _____ charges.

Rubbing a plastic rod with a cloth causes electrons to move from the cloth to the rod.



2. Label the charges on the cloth and the rod using a + for a positive charge and a – for a negative charge. [2]

3. Draw arrows between the pairs of particles to show which way they will move when they are within their electric fields. [3]

a.

b.

c.

4. Describe the movement of charged particles, as you have labelled in question 3. [2]

Learning Outcomes (tick if achieved)

Q1	I can describe an atom in terms of charged particles	
Q2	I can identify where positive and negative charges occur	
Q3	I can describe the behaviour of charged particles	

Static Electricity **Answers**

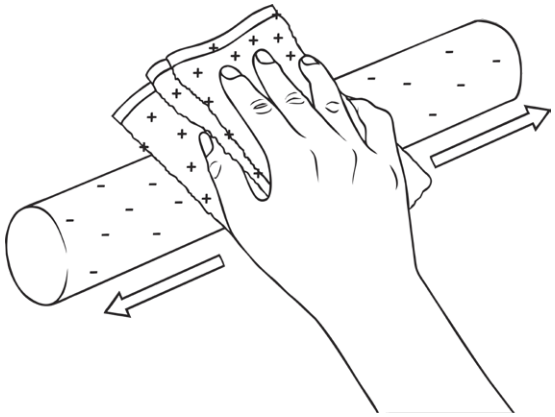
1. Use the words from the box to complete the gaps in the paragraph below. [13]

   ATOMS contain **POSITIVE** charges and **NEGATIVE** charges. The positive charges are called **PROTONS**. The negative charges are called **ELECTRONS**. Electrons can **MOVE**, however the positive charges are **FIXED**.

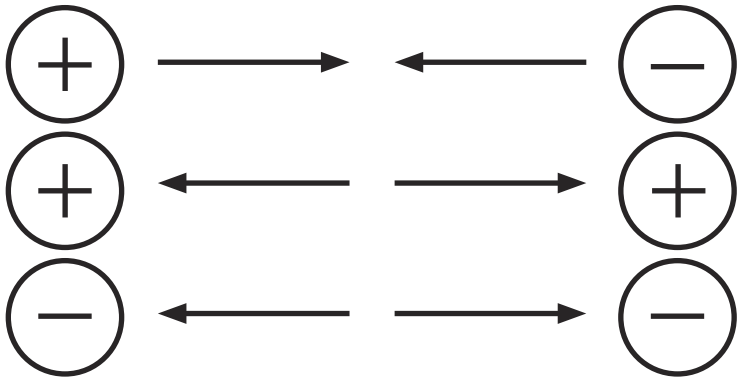
   If two **INSULATING** objects are rubbed together the force of **FRICTION** can cause the electrons to be scraped off one object and left on the other object.

   The object which **GAINS** electrons becomes negatively charged. The object which **LOSES** electrons becomes positively charged. The two objects will have **EQUAL**, but **OPPOSITE** charges.

2. Label the charges on the cloth and the rod using a + for a positive charge and a – for a negative charge. [2]



3. Draw arrows between the pairs of particles to show which way they will move when they are within their electric fields. [3]



4. Describe the movement of charged particles, as you have labelled in question 3. [2]

   opposite charges attract

   same/like charges repel