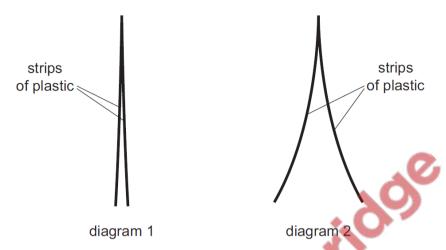
Electrostatics – 2019 June

1. 0625/11\$12\$13,21,22,23/M/J/19/No.30,27

Diagram 1 shows two thin, uncharged strips of plastic.

Diagram 2 shows the same strips after they have been rubbed with a dry cloth.



Which row describes the charge on the strips after rubbing, and the force between the strips after rubbing?

| | charge on strips | force between strips |
|---|------------------|----------------------|
| Α | opposite | attraction |
| В | opposite | repulsion |
| С | the same | attraction |
| D | the same | repulsion |

2. 0625/22/F/M/19/No.29

A metal sphere is charged by induction. There are four stages W, X, Y and Z in this process.

- W a charged rod is brought near to the sphere
- X the sphere is earthed
- Y the charged rod is taken away from the sphere
- Z the earth connection is removed

In which order are the four stages carried out?

A
$$W \rightarrow X \rightarrow Y \rightarrow Z$$

$$\textbf{B} \quad \textbf{W} \, \rightarrow \, \textbf{X} \, \rightarrow \, \textbf{Z} \, \rightarrow \, \textbf{Y}$$

$$\textbf{C} \quad Z \,\rightarrow\, W \,\rightarrow\, X \,\rightarrow\, Y$$

$$\textbf{D} \quad X \, \rightarrow \, Z \, \rightarrow \, W \, \rightarrow \, Y$$