



Explain how each phenomenon occurs in terms of electron flow. You can use the diagrams to help your explanation.

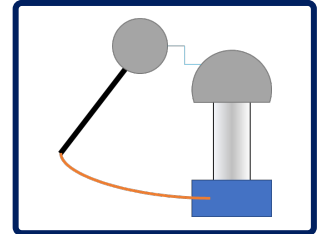
Static wand

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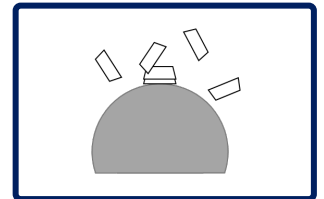
Cupcake cases

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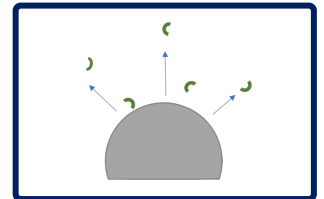
Polystyrene chips

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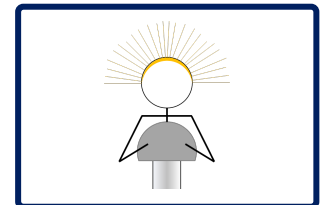
Hair standing on end

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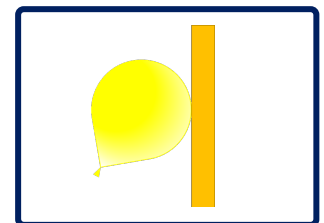
Balloon sticking to wall

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Lightning is an example of static electricity on a very large scale. Explain how lightning occurs.

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Explain how each phenomenon occurs in terms of electron flow. You can use the diagrams to help your explanation.

Water is a polarised molecule; that means it has a positively charged side and a negatively charged side.

Water molecules will rotate and spin when placed near a charged object.

If you charge up a balloon on a piece of wool and hold it near a tap with water gently flowing, what do you think will happen to the stream of water?

Write your prediction below.

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Now try it for yourself and write what you observe below.

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Explain why your observation occurred.

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Static electricity is less likely to be observed in humid conditions. Suggest why higher humidity decreases the effects of static electricity.

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