



# Circuits and Conductors

## Learning Objective:

To investigate the purposes of conducting and insulating materials.



Can you  
remember what  
the terms  
**CONDUCTOR**  
and **INSULATOR**  
mean?



**BACK**



**NEXT**



**What materials is  
this plug made  
from?**

**Why do you think these materials have been chosen?**

**Discuss your ideas.**

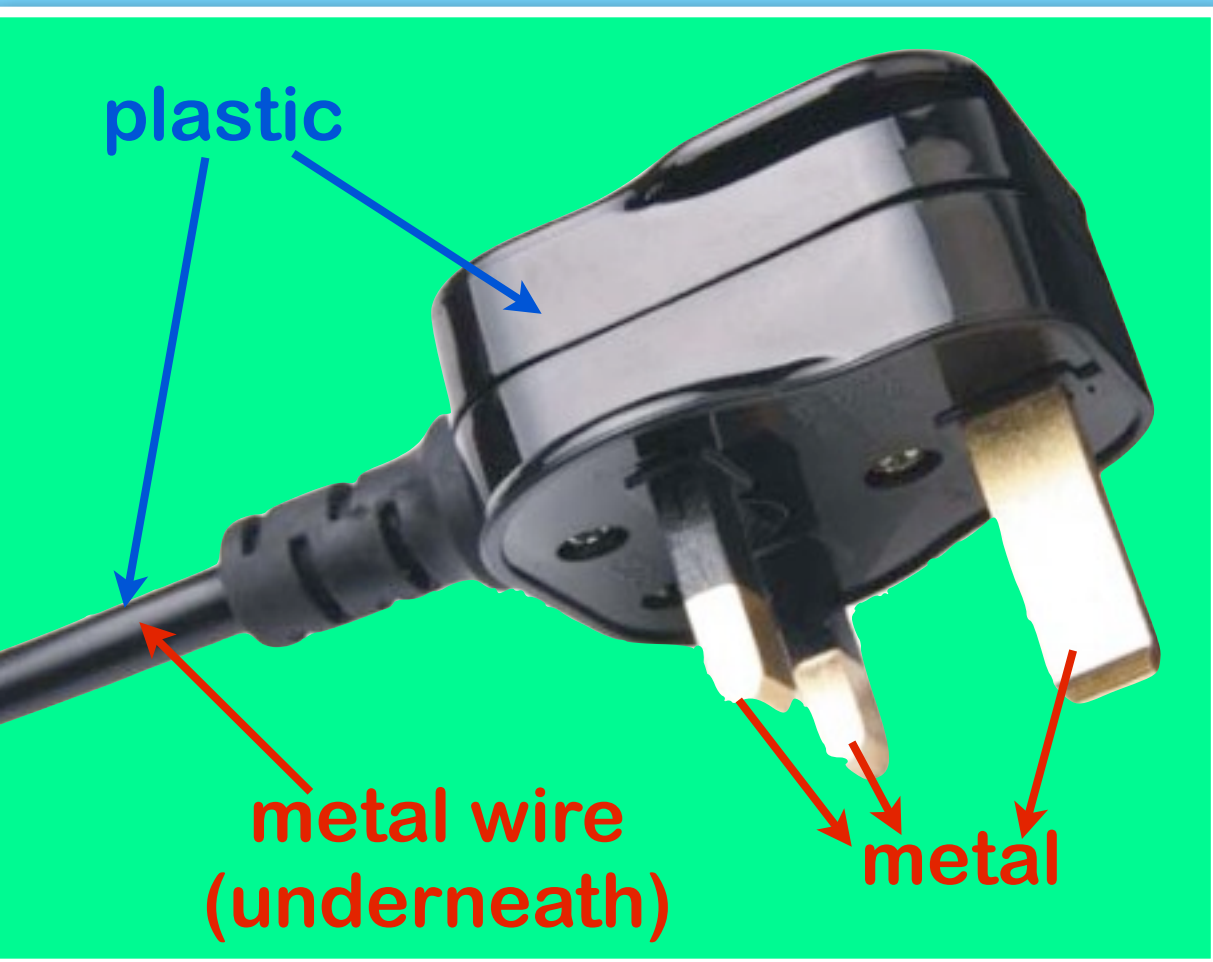
**BACK**



[www.planbee.com](http://www.planbee.com)



**NEXT**



A plug needs to be able to conduct electricity to the appliance it is charging so that the circuit is complete. However, mains electricity is dangerous and if we touch the live wire we will get electrocuted. The plastic casing around the plug means that we

can touch it because plastic is an insulator and stops the electricity passing through it. The same applies for the plastic casing around the wire. If the metal of the wire was left uncovered, it would be very dangerous. The three metal pins of the plug are also conductors and allow electricity to pass through them to complete the circuit.

**BACK**



**NEXT**





**Think,  
pair, share  
your ideas.**

**Can you think of any other  
appliances that have  
conductors on the inside and  
insulators on the outside?**

**BACK**



**NEXT**



**What ideas did you come up with?**



**BACK**



[www.planbee.com](http://www.planbee.com)



**NEXT**