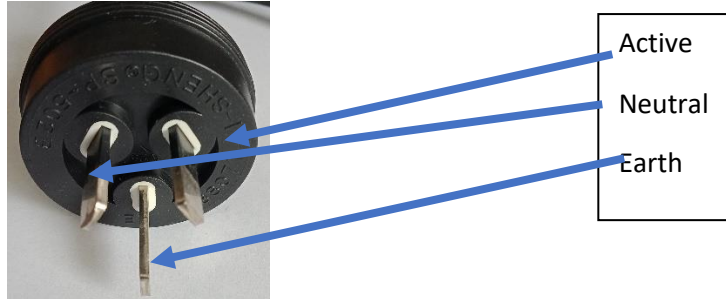


## Chapter 8 Answers

1. What is the frequency of mains power in Australia?

**50 Hz**

2. Identify the pins on the 3-pin plug.



3. Complete the following table. What voltages would you expect when measuring between the following points?

Active and earth	<b>240 V</b>
Active and neutral	<b>240V</b>
Neutral and earth.	<b>0</b>

4. 240v lead wiring colours changed. What are the current wiring colours?

	Old colours	New colours
Active	Red	<b>Brown</b>
Neutral	Black	<b>Blue</b>
Earth	Green	<b>Green and yellow</b>

5. What is the purpose of having an earth pin on the plug?  
**Ground the chassis of metal equipment to prevent shock to the user.**
6. How does a fuse work?  
**The extra current through the fuse heats the fuse to melting point and breaks the current path.**
7. What is the equipment that is replacing fuses on mains power and how do they work?

### **RCB or residual circuit breakers**

8. On which lead would the isolation switch be included and why?

**Active so when the power is turned off, the equipment is completely isolated.**