

Lesson 12: Student's worksheet

Testing for continuity in power cords

1. You are provided with a power cord labelled **A**, **B**, **C**, **D**, **E** or **F**.
Check the label of the cord and tick the corresponding box below.

Cord **A** ☐Cord **B** ☐Cord **C** ☐Cord **D** ☐Cord **E** ☐Cord **F** ☐

2. You will be provided with the multimeter set to continuity test mode by your teacher.
Using the multimeter, carry out each of the test described in the table below, and tick the appropriate boxes in each row.

Test	Is a beep sound heard?		Is the cord safe for use?	
	Yes	No	Yes	No
1) Touch the test probes with the live wire and the live pin of the plug.	☐	☐	☐	☐
2) Touch the probes with the neutral wire and the neutral pin of the plug.	☐	☐	☐	☐
3) Touch the test probes with the earth wire and the earth pin of plug.	☐	☐	☐	☐
4) Touch the test probes with the live wire and the neutral wire.	☐	☐	☐	☐
5) Touch the test probes with the live wire and the earth wire.	☐	☐	☐	☐
6) Touch the test probes with the neutral wire and the earth wire.	☐	☐	☐	☐

3. Based on your results, tick the option which best describes the cord given to you.

1. The power cord is good. ☐
2. The live wire is not continuous. ☐
3. The neutral wire is not continuous ☐
4. The earth wire is not continuous. ☐
5. There is a short circuit between the live wire and the neutral wire. ☐
6. There is a short circuit between the live wire and the earth wire. ☐
7. There is a short circuit between the neutral wire and the earth wire. ☐