

Electricity Grade 4 Lab Practical

Teacher's Answer Key

This is your chance to see how well your students have picked up on important key concepts, and if there are any holes. Your students also will be working on their homework assignment as you do this test individually with the students.

Materials:

- AA battery case
- 2 AA batteries 4
- alligator wires
- switch
- LED
- 1.5-3VDC motor

Lab Practical: Ask the student *Note: Answers given in italics!*

Design and build a simple series circuit which lights up an LED and includes a switch. *Battery connects to the LED, which connects to the switch, which connects back to the battery pack. When switch is thrown, LED lights up.*

Design and build a simple parallel circuit which powers both LED and motor at the same time. *Battery connects to the motor which connects back to the battery pack. Also LED connects to both terminals on the back of the motor. When batteries are in the case, both LED and motor should work.*

Explain how electrical energy can be converted to light or motion. *Any electrical circuit that involves turning a motor on or lighting up an LED.*

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Student Worksheet

This is your chance to show how much you have picked up on important key concepts, and if there are any holes. You also will be working on a homework assignment as you do this test individually with a teacher.

Materials:

- AA battery case
- 2 AA batteries 4
- alligator wires
- switch
- LED
- 1.5-3VDC motor

Lab Practical:

Design and build a simple series circuit which lights up an LED and includes a switch.

Design and build a simple parallel circuit which powers both LED and motor at the same time.

Explain how electrical energy can be converted to light or motion.