Section 1: What Makes Circuits Work?

Read the Information pages and answer these questions.

1. Explain what a complete circuit is. ____________________________________________________________

2. Why won't an incomplete circuit work? ____________________________________________________________

3. Name 2 sources of power. ____________________________________________________________

4. If you are using more than one battery in a circuit, how should they be connected?

Activity: Click on the green arrow and complete the activity.

5. How many working circuits did you find? ________________________________

Quiz: Take the 5-question quiz and record your score here. ______________________

Section 2: Conductors and Insulators

Read the Information pages and answer these questions.

6. What is a conductor? ____________________________________________________________

7. What is an insulator? ____________________________________________________________
8. Why are wires typically coated with plastic?

9. What type of material are most conductors?

10. What is graphite?

**Activity:** Click on the green arrow and complete the activity.

11. Fill in the chart with all of items from the activity.

<table>
<thead>
<tr>
<th>Conductors</th>
<th>Insulators</th>
</tr>
</thead>
</table>

**Quiz:** Take the 5-question quiz and record your score here.

**Section 3: All About Switches**

Read the Information pages and answer these questions.

12. Why are switches useful?

13. Explain how a switch works.

14. Name 2 types of switches.

15. List 5 items that have switches.

**Activity:** Click on the green arrow and complete the activity.

16. Fill in the chart with all of items from the activity.
No Switches | One Switches | Many Switches

Quiz: Take the 5-question quiz and record your score here.

Section 4: Changing Circuits
Read the Information pages and answer these questions.

17. What happens when you add more bulbs to a circuit? Why does this happen?

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

18. What happens when you add more batteries to a circuit? Why does this happen?

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

19. How does the length of the wire affect the circuit?

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________
Activity: Click on the green arrow and complete the activity.

20. What is a fair test? ____________________________________________________________
____________________________________________________________________________

Quiz: Take the 5-question quiz and record your score here. _______________________

Section 5: Circuit Diagrams

Read the Information pages and answer these questions.

21. Draw the components for a circuit diagram.

<table>
<thead>
<tr>
<th>Name the Component</th>
<th>Diagram of Component</th>
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<tbody>
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Activity: Click on the green arrow and complete the activity.

Quiz: Take the 5-question quiz and record your score here. _______________________

22. Draw a working circuit diagram of how a doorbell works. Use the correct diagram pictures for the components.