

# Circuit Quiz Game

## INTRODUCTION

A fun, versatile quiz game can easily be made using the concept of a complete simple circuit. The game board consists of a column of questions opposite a column of answers. If the correct match is made, a bright light bulb shows you have the right idea.

## MATERIALS

Cardstock  
2 Batteries  
2 Battery Holders  
4 Alligator Clips  
1 Flashlight Bulb  
1 Bulb Holder  
Aluminum Foil  
Tape  
Plastic Film

## WHAT TO DO

1. Using an 8 ½ by 11-inch piece of cardstock, punch five evenly spaced holes down the length of the page ¾ of an inch from the side. Do the same on the opposite side so that the holes line up with each other.
2. Cut the plastic film into a 6 ½ by 11-inch piece and use tape to secure it to the cardstock game board between the two sets of holes. On the film next to each hole on the left write a question or one half of a matching pair (suggestions include multiplication problems or state and capitals or anything else.) Next to the holes on the right side write the answers or remaining halves, but jumble the order so that questions' correct answers are not directly across from them.
3. Cut the aluminum foil into half-inch wide strips and stretch the strips shiny side down across the back of the game board to connect question holes with the appropriate answer holes. Use tape to secure the foil to the cardstock, but also to cover it completely to avoid any direct contact with other foil strips.
4. Cover the back of the game board (the answer key) with another piece of cardstock and secure it with tape.
5. Connect two batteries in series by snapping their holders together and connect one alligator clip to each end of this battery assembly. Connect the other end of one of the alligator clips to a light bulb in a holder and attach a second alligator clip to the other side of the bulb holder.
6. There should be two alligator clips ends left and they are used to touch the foil-covered holes on the game board for a question and its answer. If the clips touch a question hole and the correct answer hole, the bulb will light! The game can be used to test anything from state capitals to multiplication tables because new questions and answers can be written on the plastic film. And the foil strips can be rearranged to keep the quiz-takers on their toes.

## QUESTIONS TO ASK STUDENTS

1. Why does the bulb light up when the correct answer is chosen?

## SOURCE

“Power Up.” Sandra Markle, Atheneum: New York, 1989 p.24