

Safety

■ There is little chance of electrical shock — the voltage is too low--!





Engagement

UFO ball activity!

Questions:

- How does it work?
- Can you make it work with all of your group members?
- What is required to make it light and make noise?



Exploration – Part I

Make the light bulb light up'

• Rules:

- Everyone needs to participate.
- Everyone needs to have an opportunity to touch the materials.
- All ideas are treated with respect.



Exploration — Part II

- Rearrange the materials to find other ways to light up the bulb.
 - Record at least 2 ways that it lights the bulb and two ways that it does not.
 - Here are symbols that represent the materials you have :

Wire =

Bat /

Bulb =



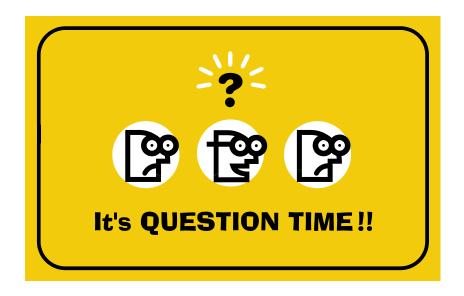


*Handout



Investigate!

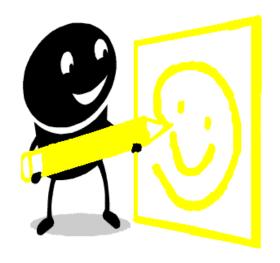
- Write 2 questions that you would like to investigate about your system.
 - Then discuss your questions with your group members.





Investigate!

- Then select, as a group, 2 questions and discuss ways to test that questions.
 - Test your questions and on the back of your paper draw diagrams of your own investigation



Explanation

- Students will list a sample of there findings on the board. Make sure to use the symbols learned.
- Each group will share there questions, their experimental design to answer one of those questions, and their findings with the class.



Elaboration

- Examine a flashlight
 - Make a sketch of the flashlight showing the circuit that exists when the bulb is lit.
 - Can you light the flashlight bulb with your wire and battery?
 - How many wires are used to make this circuit?





Evaluation

Now let's see what you've learned!

