

## Hey, Can you light a light bulb? Can you make it bright?

### What you need:

- Find the following stuff (if you can not find some stuff, ask someone like a parent or teacher to help). If you are working with other people make sure that everyone has their own stuff.
  - Flashlight bulb (1.5 Volt)
  - Battery (C size works well)
  - One nail (approximately 3 inches), penny, and washer
  - Approximately 6 inches of string, ribbon (shiny is best), piece of cardboard, and piece of plastic.
  - A few toothpicks and Q-tips
  - Special foil (approximately 6 in. x 6 in.). A piece of aluminum foil will also work if a teacher is not around to give you the special foil.
- Gather this stuff to share in your group.
  - Masking tape, Markers, Paper, Scissors, Extra Batteries (D and AA work well)

### What to do:

- Using the stuff you gathered, light your light bulb.
- Write down any thing you observe. Share your observations if you are working in a group.
- What is the smallest amount of stuff needed to light your light bulb?
- What stuff works to light the light bulb? Divide your stuff into two piles for stuff that work to light the light bulb and stuff that does not work. Does everyone have the same stuff in their piles?
- "Now that you have it light, make it bright?"
- Does the size of the battery make a difference in how bright the light is?
- Try lighting a bunch of light bulbs at the same time.
- How many different ways can you do this? Are the lights always the same brightness?
- Make something fun with your stuff.

### Safety Note:

- Drop anything that gets hot! (try again when stuff cools off)

