

Kaleidoscope Making

A kaleidoscope is a tube which contains objects that are reflected by mirrors. Work together with your family to make a kaleidoscope.

Materials

- Paper towel or toilet paper tube
- Rubber band
- Black construction
- Paper
- Plastic wrap
- Colored plastic wrap or transparent objects
- Wax paper
- Aluminum foil

Instructions

1. First decorate the outside of a paper towel or toilet paper tube. Maybe you will want to write all the names of your family members.
2. Cut a piece of black construction paper that is 15cm wide and as long as the tube you are using. Roll the construction paper and place it in the tube so it lines the inside.
3. Cut a piece of reflective material 11.5 cm wide and as long as the tube you are using. Fold the reflective material into a long triangle by making a fold 3.5 cm from a long edge, another fold 3.5 cm from the first fold, and the third fold 3.5 cm from the second fold. Place the folded reflective material inside your tube. (The construction paper should be outside of the reflective material.)
4. Cut a 10 cm square piece of wax paper and a 10cm square piece of plastic wrap. Place the piece of plastic wrap over one end of your tube. Place a few transparent objects or colored wrap in a dip in the center of the plastic wrap. Secure this "sandwich" to the tube on top of the extra wax paper and plastic wrap. You may want to cut a circle of black construction paper slightly larger than the open end of the tube, put a hole in the middle with a hole punch and then tape the circle to the end of your kaleidoscope. This will keep the inside materials from falling out.
5. Point your kaleidoscope towards a light source. Look through the open end. Turn your kaleidoscope. What do you notice about the patterns? Add or remove objects from your kaleidoscope as you choose.