



SCIENCE RENDEZVOUS AT ONTARIO TECH PRESENTS: **MAKE A KALEIDOSCOPE**

FROM RECYCLED MATERIALS!

MATERIALS

- Paper towel rolls
- Clear plastic fruit box
- Thin cardboard or empty cereal box
- Aluminum foil
- Coloured paper
- Multicoloured translucent beads or sequins
- Tape
- Glue
- Hot glue gun
- Ruler
- Scissors
- Marker

INSTRUCTIONS

- Use the marker to trace around the end of the paper towel roll on the clear plastic. Do this twice. Using scissors, carefully cut the two clear plastic circles.
- To make an end cap, cut off a 1-inch piece out of the second paper towel roll. Cut the end cap down the middle and fold it over. This piece should fit tightly inside the other paper towel roll. Once you find the right size, use tape to secure the ends.
- Decorate your paper towel roll using coloured paper or markers!
- Measure the length of the decorated tube and subtract one inch from this number.
- Cut out 3 strips of cardboard from the cereal box that are 1 inch wide and as long as the distance measured above.
- Wrap the 3 pieces of cardboard in aluminum foil with the reflective side out. Use tape to keep the aluminum foil in place.
- Tape the three foil-wrapped cardboard pieces together to form a triangle. Insert the triangle into the tube. Then, place one of the plastic circles inside the tube, so it sits on top of the triangle. Use glue to secure it in place.
- Place the second plastic circle on top of the end cap we cut earlier. Secure it with tape. You can decorate the end cap but do not cover the clear plastic piece.
- Add beads or other reflective objects (sequins, mylar or wrapping paper) to the end cap. Carefully insert the end cap into the tube.
- Use your kaleidoscope by looking into one end and carefully rotating the end cap!