



DIY Kaleidoscope

The Kaleidoscope is now a popular toy but was first used to study light, symmetry and pattern. It was invented by Sir David Brewster in 1816.

It became instantly popular at that time as an educational toy!

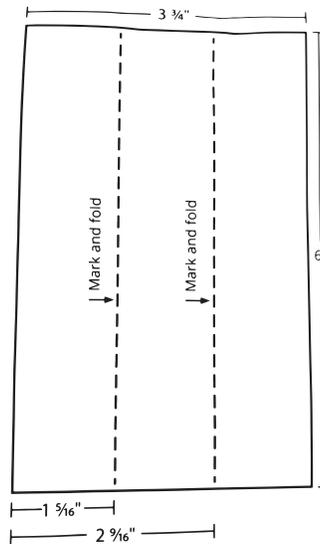
The word kaleidoscope comes from a Greek phrase meaning "to view a beautiful form".

Decorate the long cardboard tube wrapper with markers or crayons. Let dry as needed.

Using a ruler and pencil, measure a rectangle $3\frac{3}{4}$ " by 6" out of the construction paper. Cut the rectangle out and carefully adhere the aluminum foil to the paper with glue. Once the glue has dried, trim the excess foil.

Measure and mark two lines along the foil as shown to the right. Fold the aluminum foil along the two lines. Tape together the edges that meet to form a triangle.

Trim cardboard tube to match the length of the aluminum foil triangle. Insert the triangle into the tube and fasten corners with glue.



YOU'LL NEED

- Construction paper
- Empty paper towel roll
- Aluminum foil
- Tape
- Ruler
- Pencil
- Crayons/Markers
- Glue
- Scissors

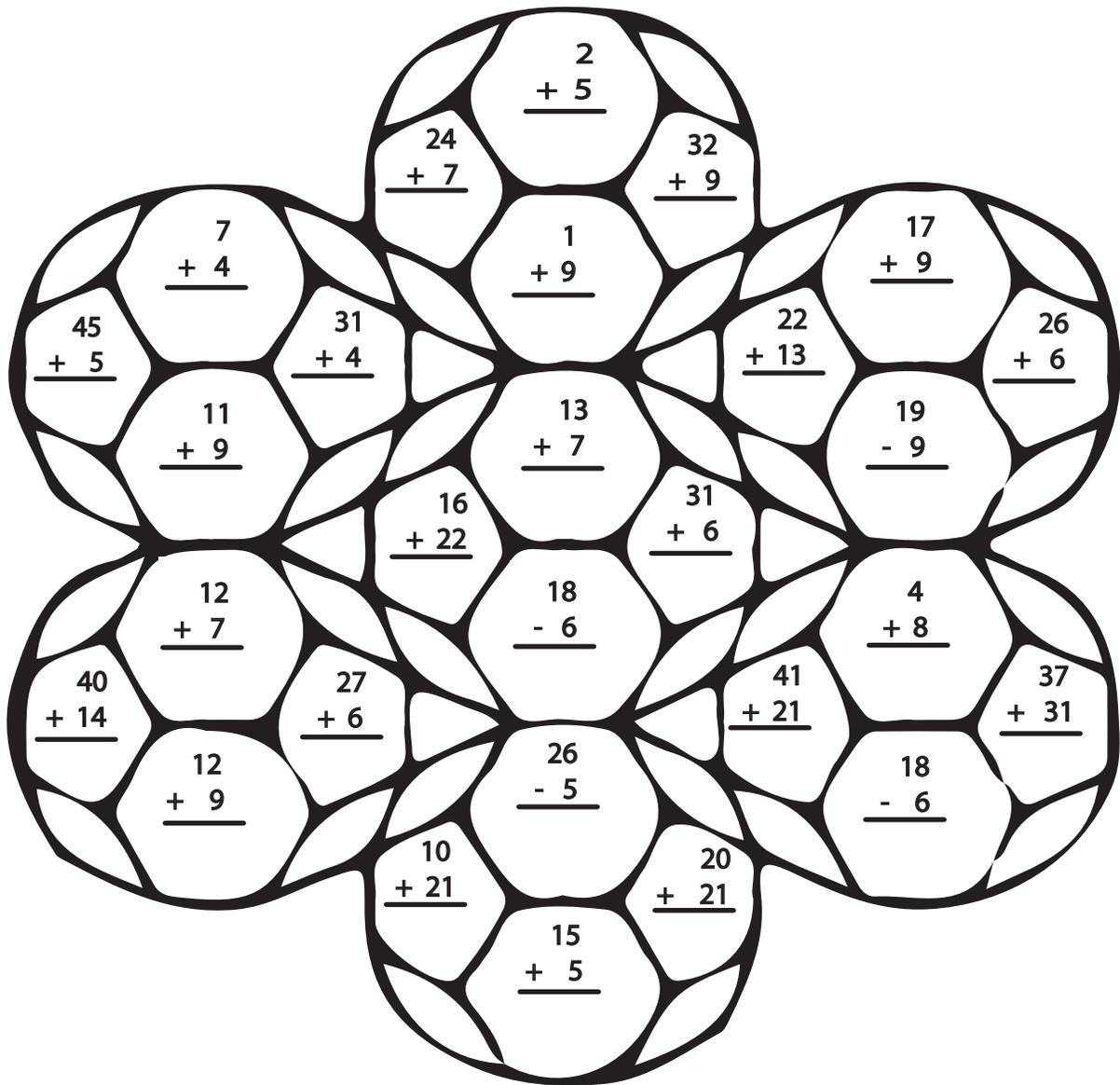
A kaleidoscope without an end is actually called a **teleidoscope!** Keeping your diy kaleidoscope open-ended allows for more chances for discovery than your standard self-contained kaleidoscope.



CITIPARKS

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Kaleidoscope Math



Solve the problems.

If the answer is between 1 and 30, color the shape red.

If the answer is between 31 and 99, color the shape blue.

Finish by coloring the other shapes with the colors of your choice.

Extra: Name two numbers that when added together equal 27.