

WINTER PAPER SCIENCE EXPERIMENTS

Cut, stick, play and learn!



What's in the pack?

1. Snowflake Spinners

Scissors

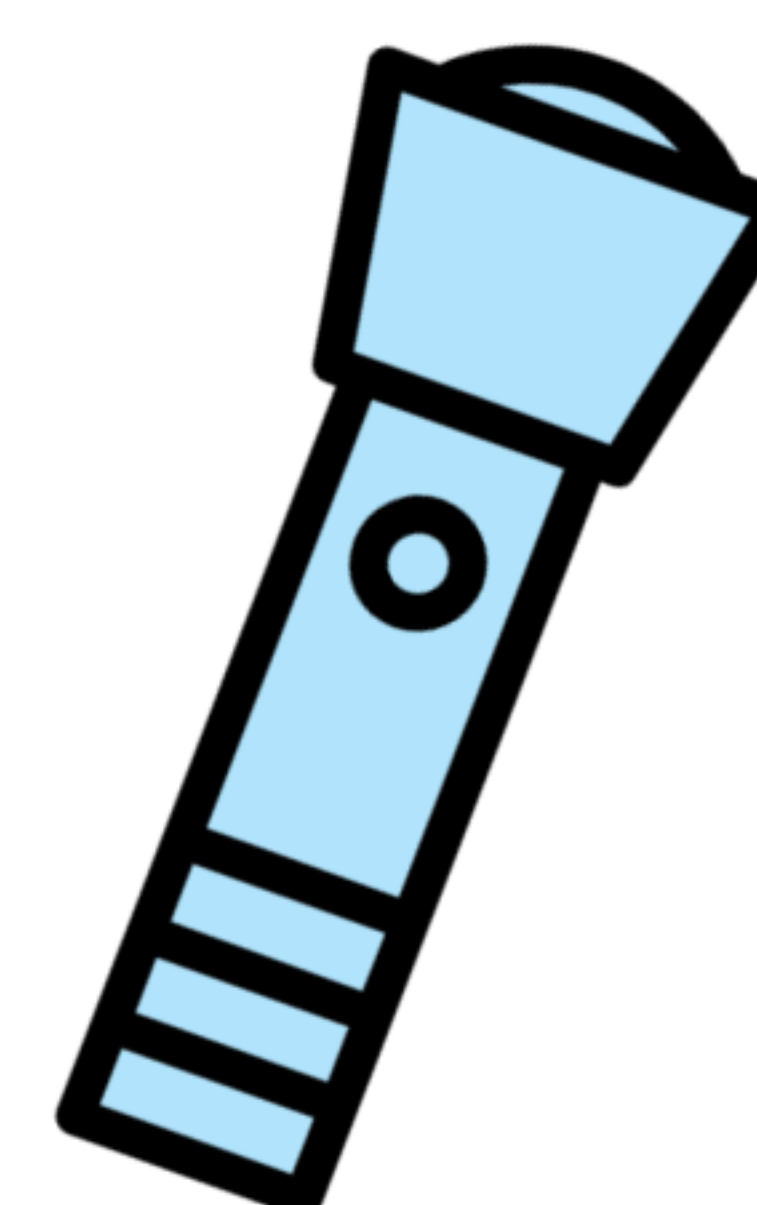
Paperclips



2. Magic Opening Snowflakes

Scissors

Container of water



3. Penguin Shadow Puppet

Scissors

Torch



4. Jumping Snowflakes

Balloon

Scissors

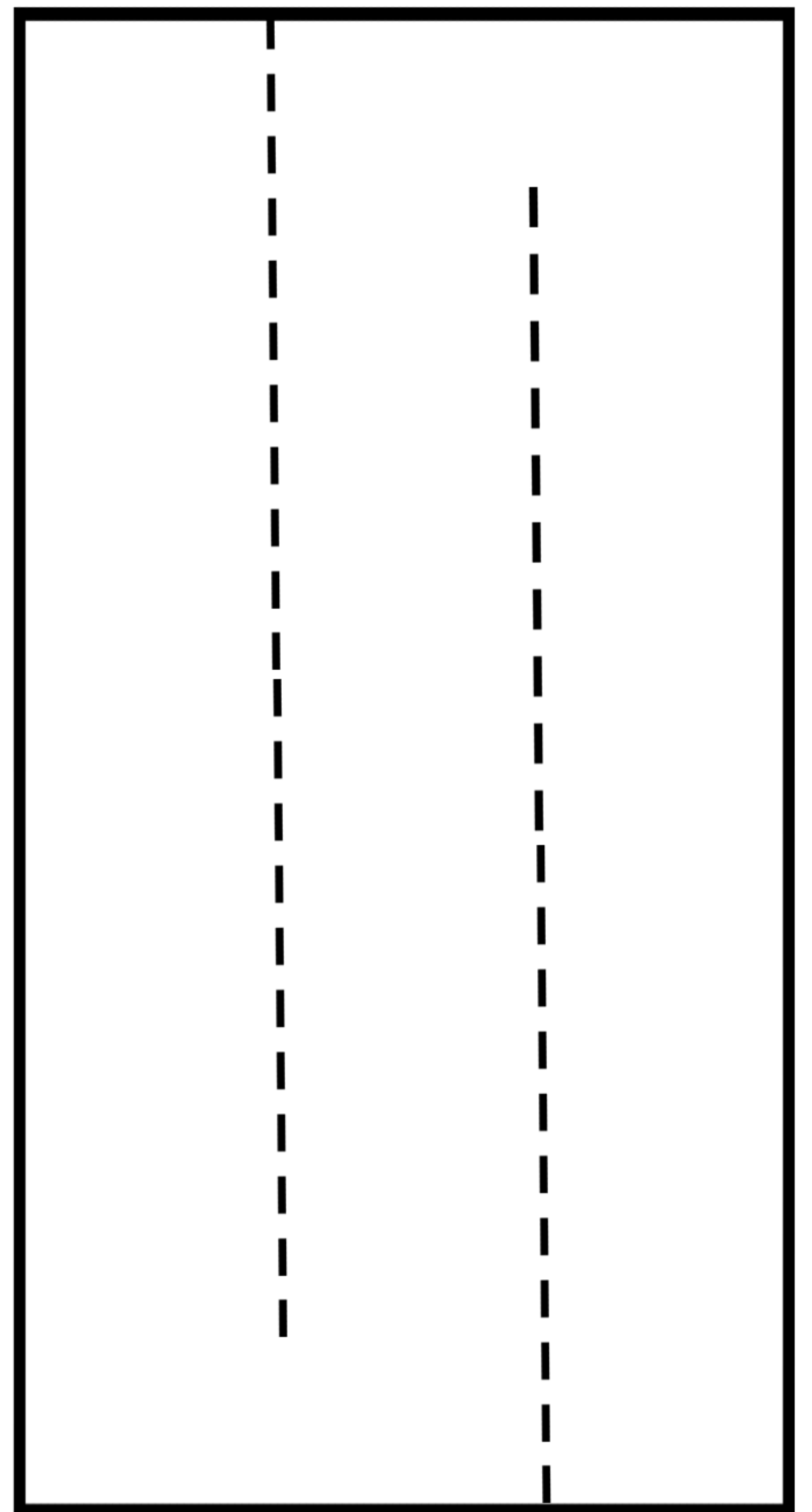
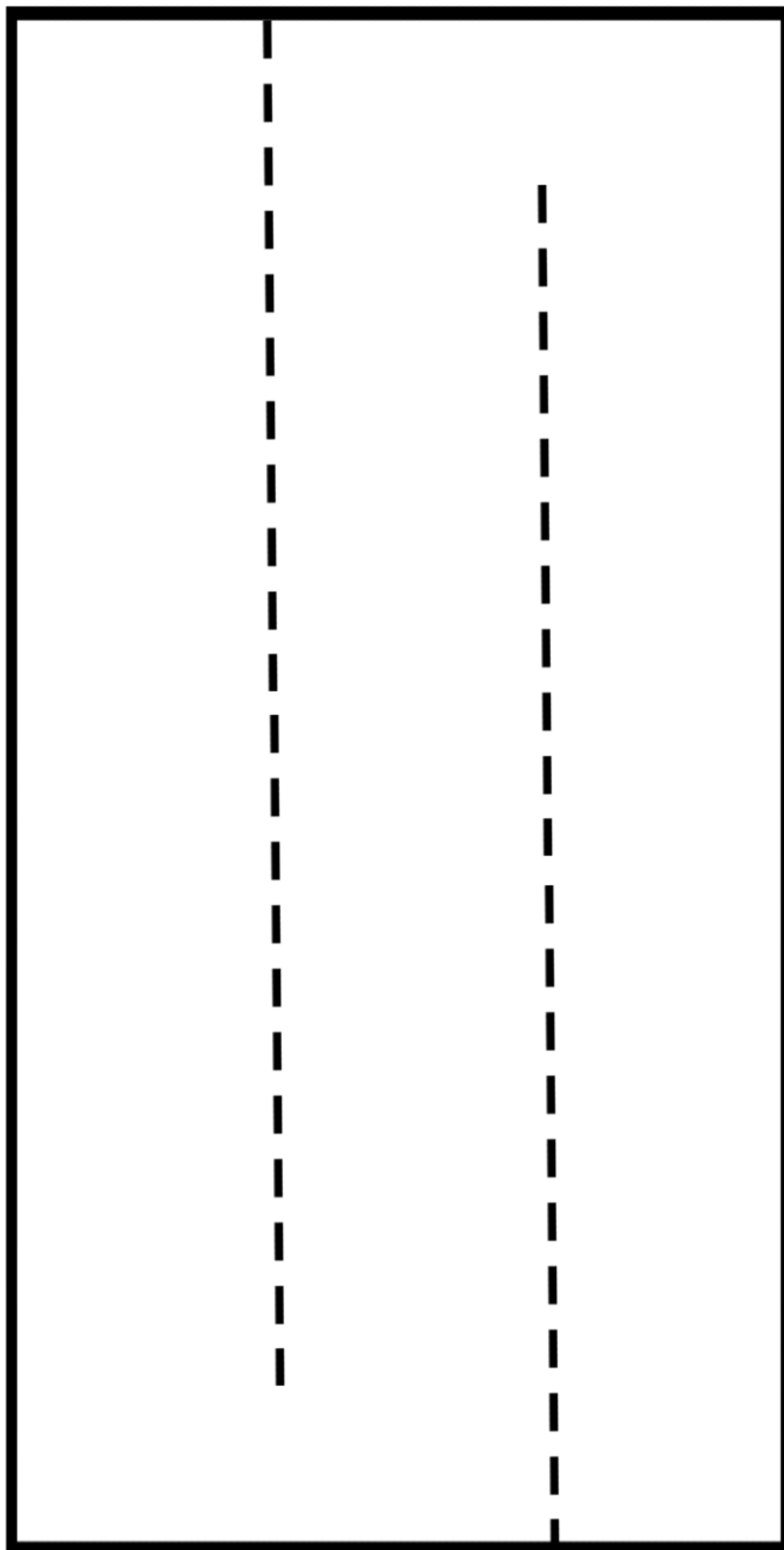
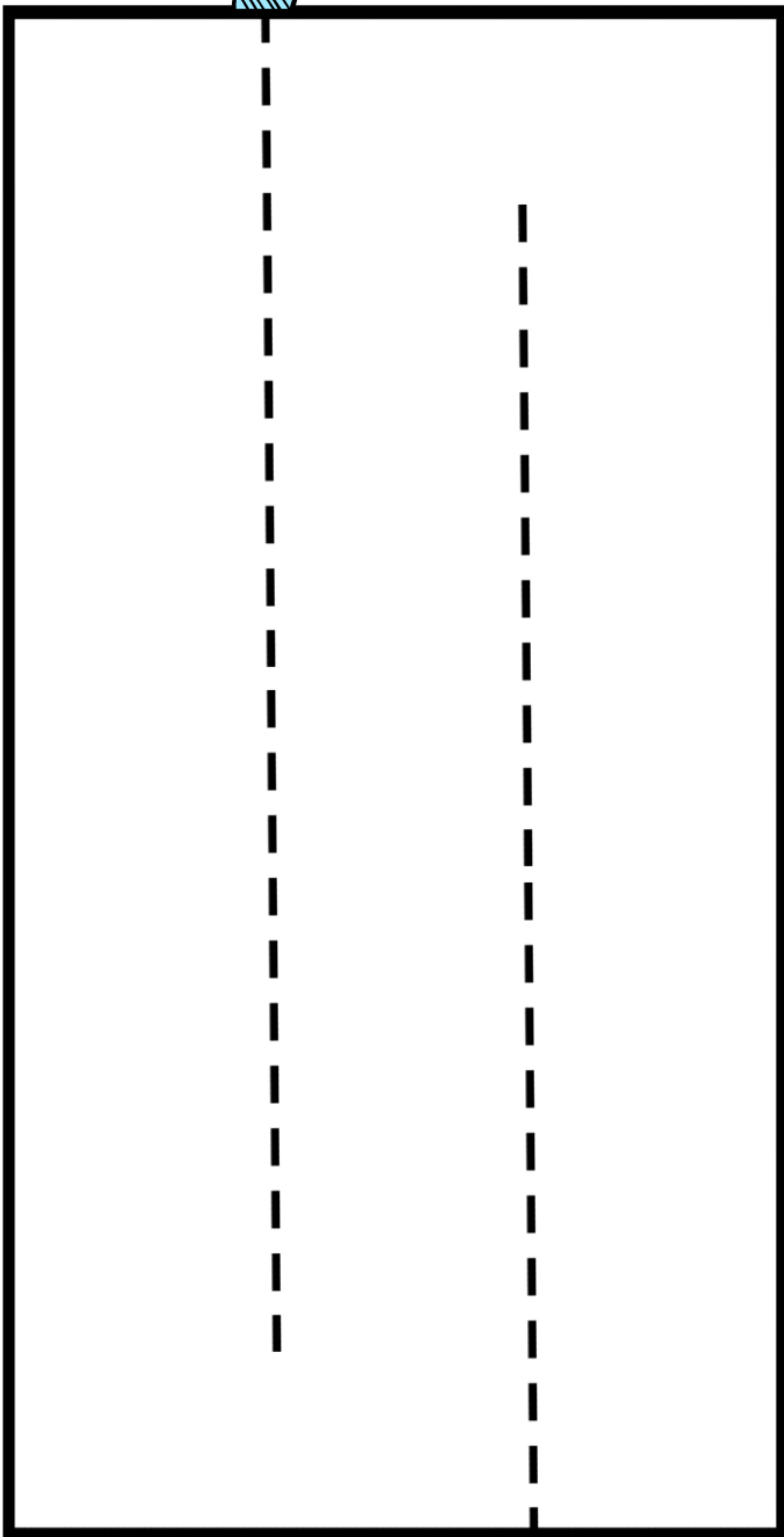
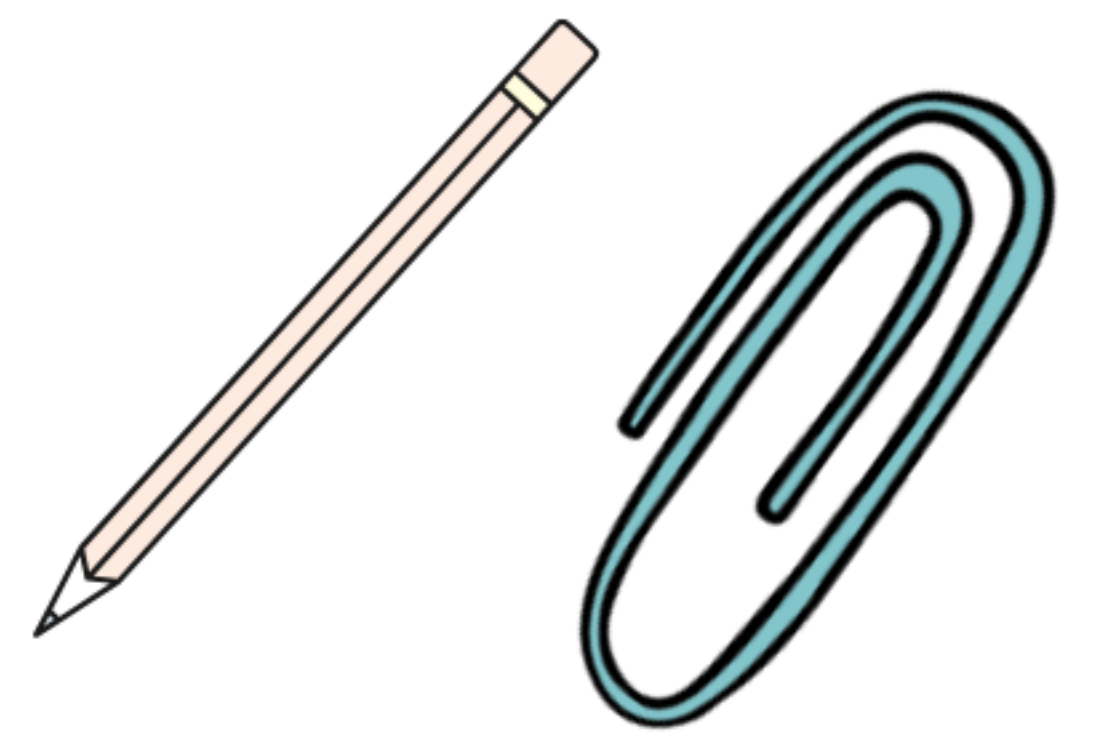
5. Water Drop Maze

Water



Adult supervision required. You are responsible for your own safety.
www.sciencesparks.com

PAPER SNOWFLAKE TEMPLATE



Supplies needed:

Scissors

Paperclip

Instructions

Carefully cut out the three rectangle shapes above.

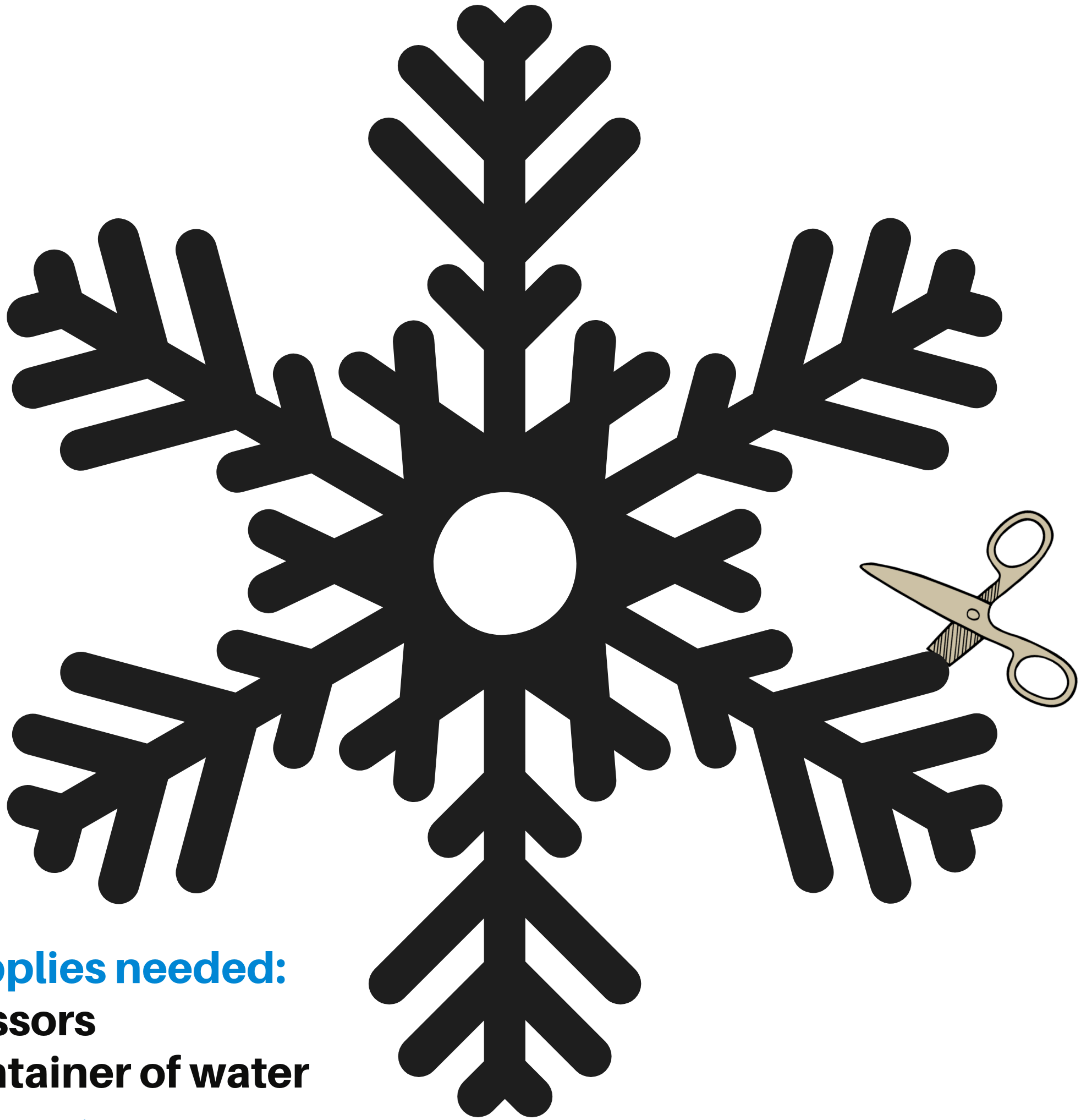
Cut down the scissor lines and fasten the two ends together with a paperclip.



More fun

Experiment with bigger and smaller spinners and different types of paper.

MAGIC OPENING SNOWFLAKE



Supplies needed:

Scissors

Container of water

Instructions

Carefully cut around the large snowflake

Fold up the extended parts around the centre.

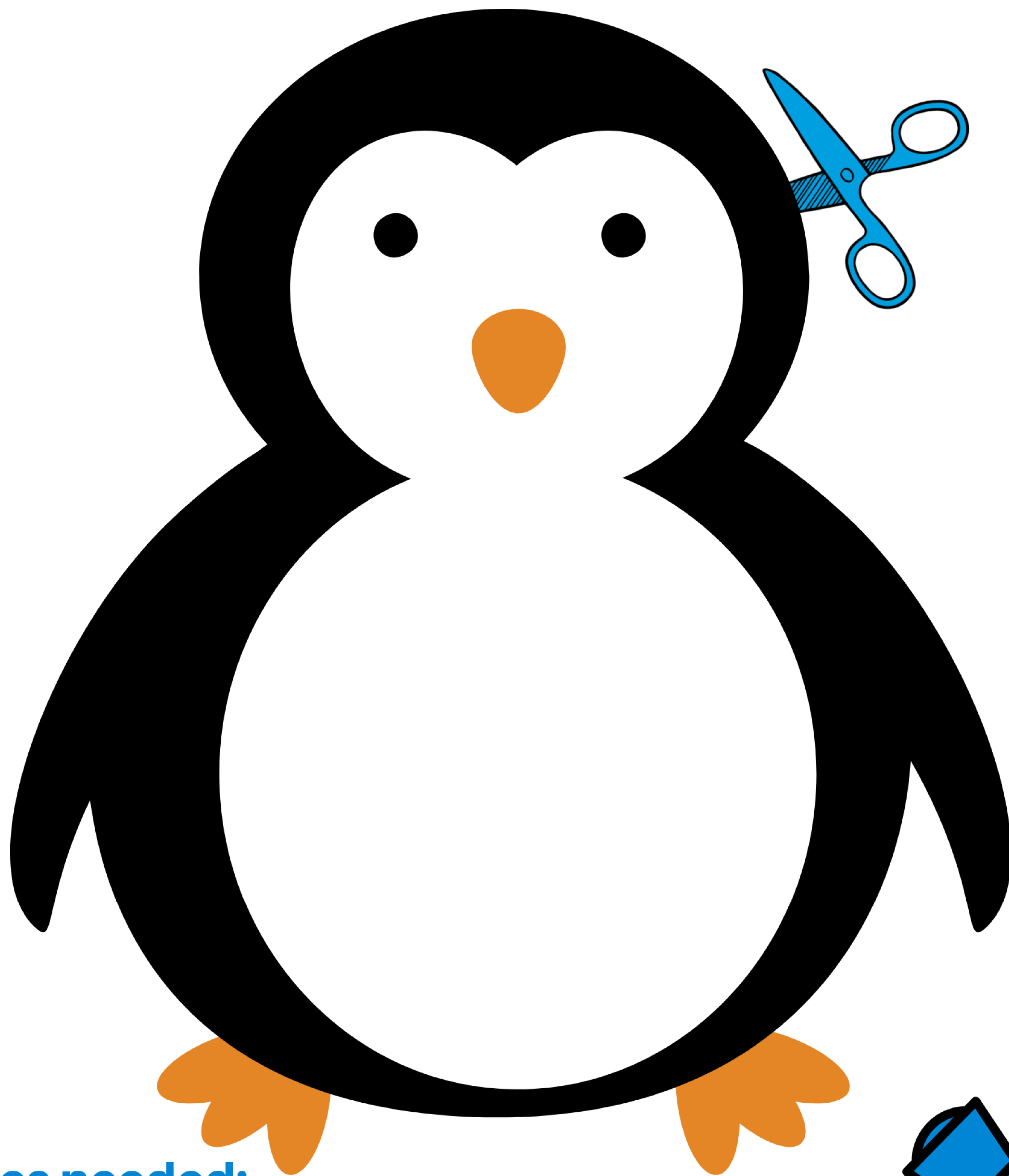
Place on the surface of the water and watch as the snowflake opens.

What's happening?

Paper is made of lots of fibres, as they absorb the water they swell and the paper expands, which makes the snowflake open up.



Shadow Puppet



Supplies needed:

Scissors

Torch

Instructions

Carefully cut around the penguin

In a dark room hold the torch behind the shadow puppet.



What's happening?

Shadows are made when an object blocks light. The object blocking the light must be opaque or translucent for a shadow to form.

Jumping Snowflakes

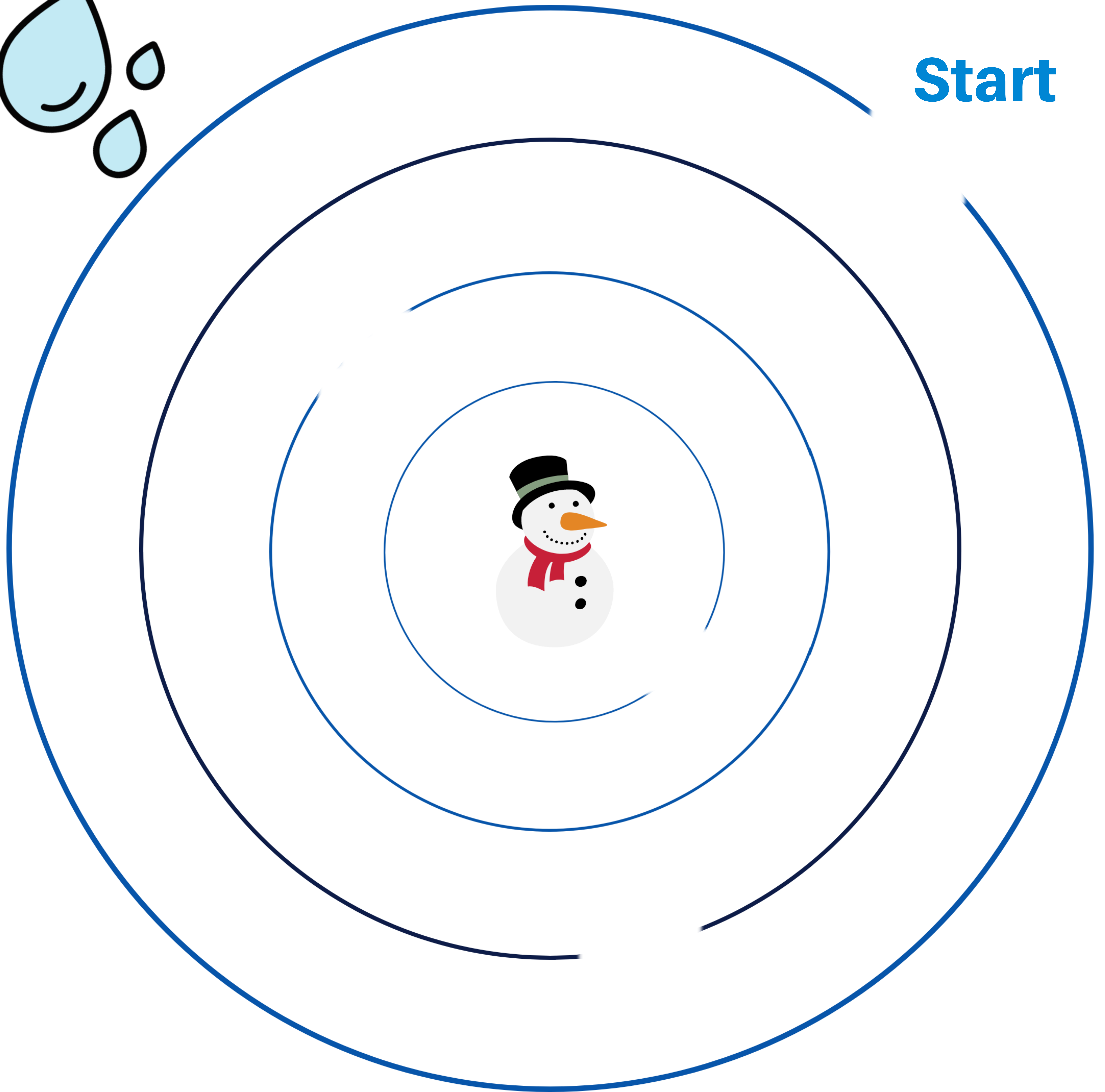
**Cut out the snowflakes and place on the floor.
Rub a balloon on your hair and then hold over the
snowflakes.
The snowflakes will jump up to the balloon.**



Water Drop Maze



Start



Instructions

Place a drop of water at the start point and rotate the paper to move the water through the maze towards the snowman.



More ideas

Try with a thicker liquid, is it easier?