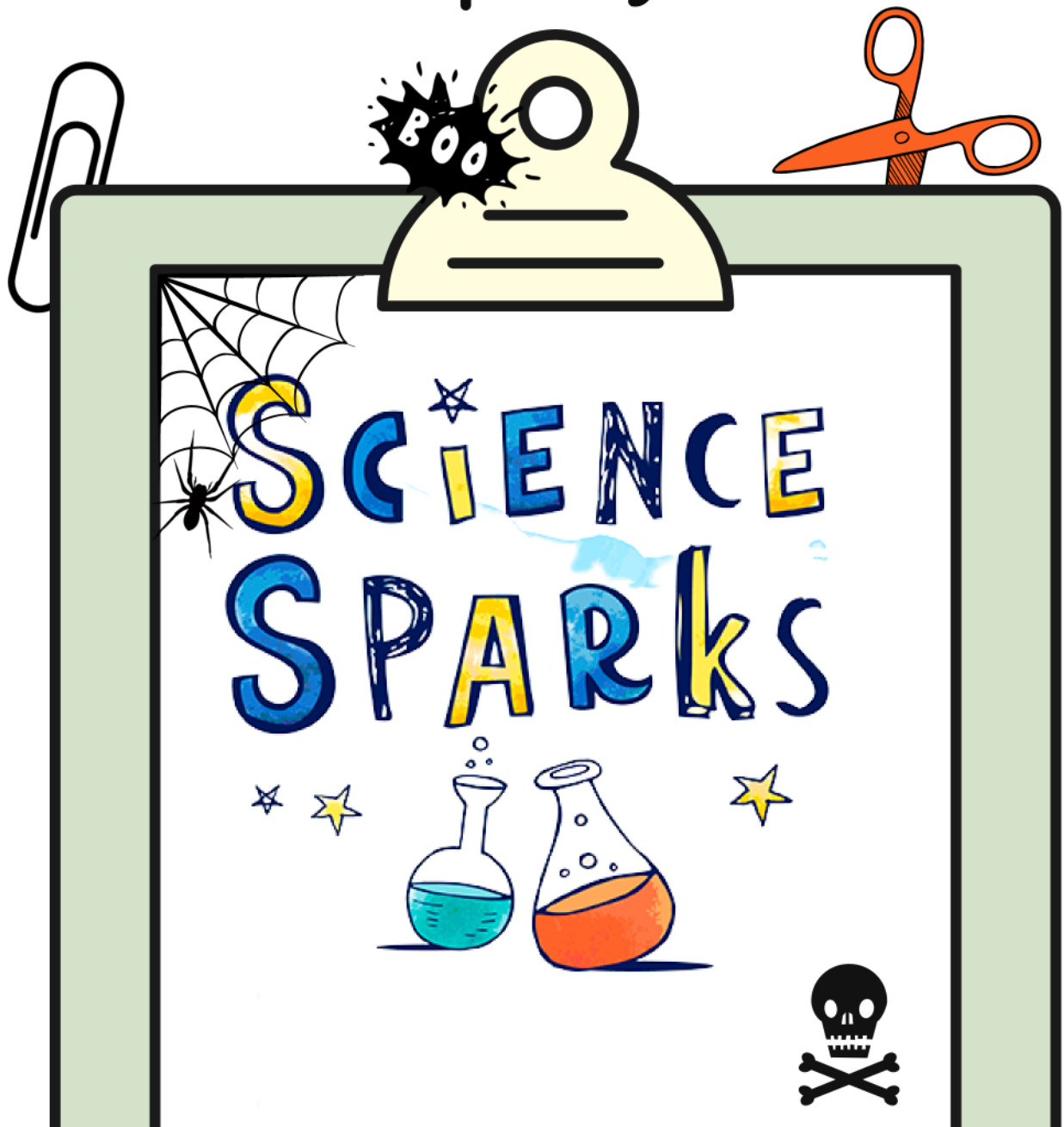


HALLOWEEN PAPER SCIENCE EXPERIMENTS

Cut, stick, play and learn!



What's in the pack?

1. Spinning Spiders

Scissors

Paperclips



2. Magic Opening Ghosts

Scissors

Container of water



3. Shadow Puppet

Scissors

Torch



4. How Strong

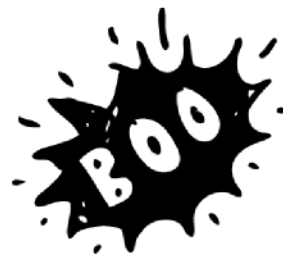
Glue/tape

Mini Pumpkin



6. Water Drop Maze

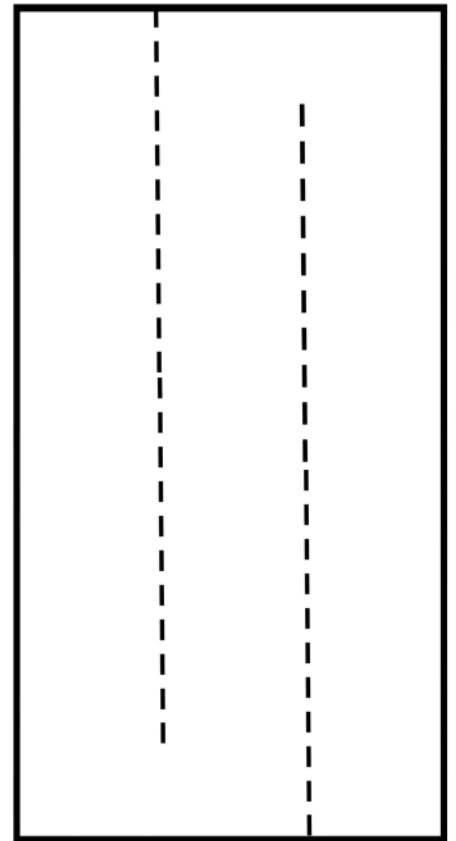
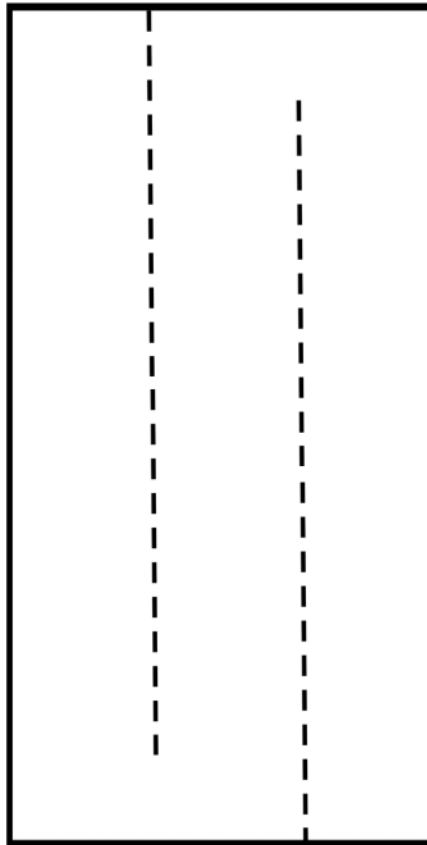
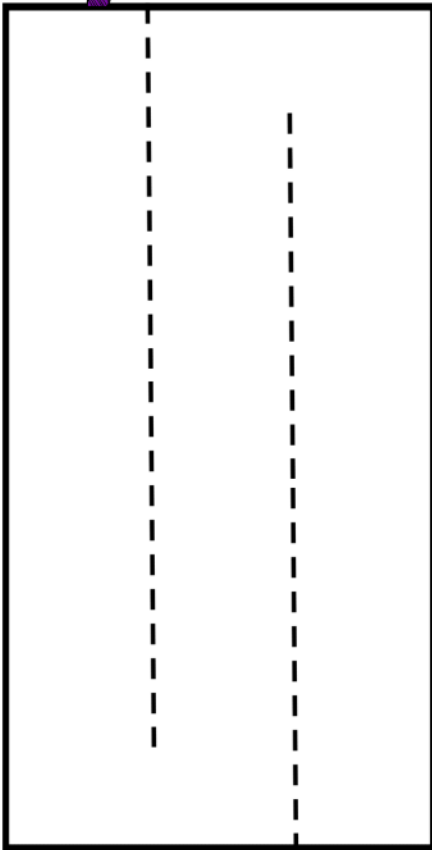
Water



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

SPINNING SPIDERS

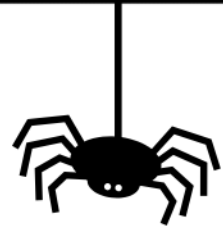
TEMPLATE



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 GHOST



GHOST



Supplies needed:

Scissors

Container of water

Instructions

Carefully cut around the large ghost.

Fold up the arms, legs and head.

Place on the surface of the water and watch as the ghost 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 ghost open up.

Shadow Puppet



Supplies needed:

Scissors

Torch

Instructions

Carefully cut around the pumpkin.

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.

How Strong?



Build a square, triangle and circular column. Stand them upright and place a mini pumpkin on top. Can any of them hold it without collapsing?

Square Column

Cut along here

Fold here

Fold here

Fold here

G L U E / T A P E H E R E

Cut along here

How Strong?

Triangle Column



Cut along here

Fold here

Fold here

G L U E / T A P E H E R E

Cut along here



**Fold, glue or tape and
balance a mini pumpkin
on top**



How Strong?

Circular Column



Cut along here

G L U E / T A P E H E R E

Cut along here

What's happening?

You should find the circular column can hold the most weight. This is because it doesn't have any edges so the weight of the mini pumpkin is shared evenly by the circle.

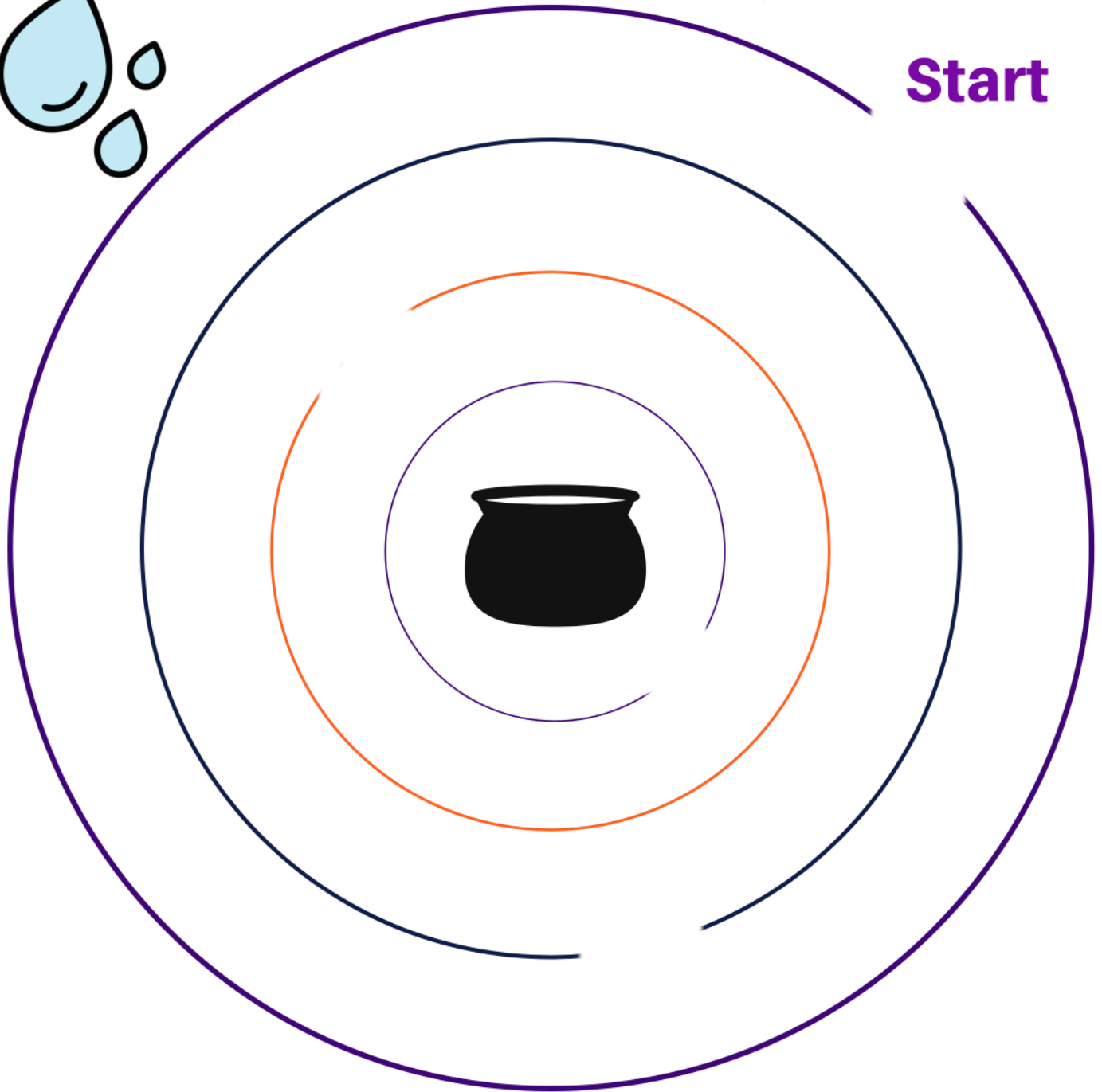


The square and triangle support the books on their edges and corners meaning they collapse sooner.

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 cauldron.



More ideas

Try with a thicker liquid, is it easier?