



#YGKMUSEUMFROMHOME

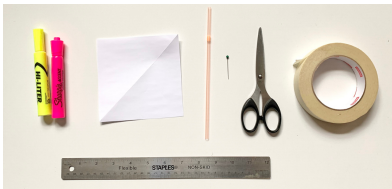
# SPINNING PINWHEEL!



## MATERIALS

### WHAT YOU'LL NEED

- A square piece of paper
- Markers OR pencil crayons OR crayons
- Ruler
- Scissors
- Hole punch OR Pen
- Pin OR paper clip
- Straw OR dowel
- Tape



### LEARNING CORNER

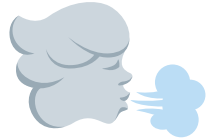
A **simple machine** is a device that makes work easier by decreasing the amount of force needed.

The **wheel and axle** is one type of a simple machine.

The **wheel** rotates on the **axle** to make it easier to move an object.

Where can you find an example of a wheel and axle in your house?

Pinwheels are a toy that use a wheel and axle to create movement. Create your very own pinwheel toy and explore how this type of simple machine works!



### BIG QUESTION

How can we create a pinwheel that spins?



Step by step activity instructions on next page.



### BONUS QUESTIONS!

What happens when you blow closer to or further away from the pinwheel?  
Where can you find the wheel and axle?



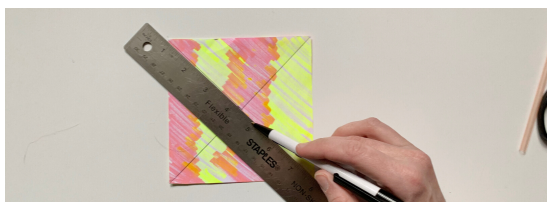
# SPINNING PINWHEEL

## PREPARE THE PAPER

1. Colour both sides of your paper.



2. Draw a line from one corner to the other corner with a ruler. Repeat this on the other corners.

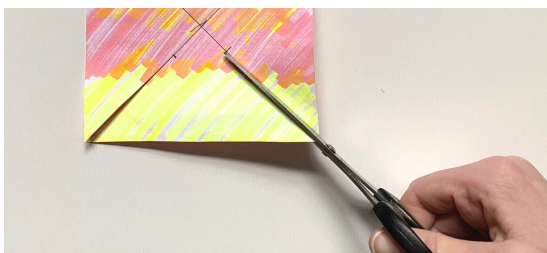


3. Measure 2.5 cm out from the middle of the X on each line. Make a mark.



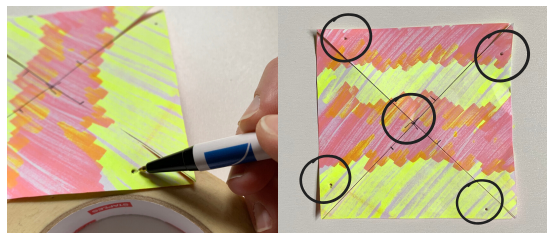
## CUT

4. Cut along each line until you reach the mark.



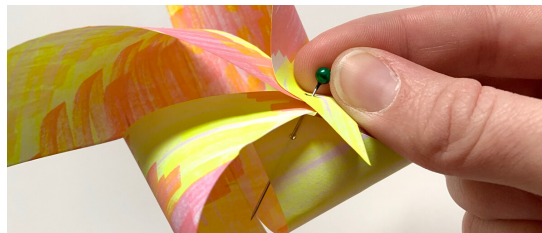
## PUNCH

5. Punch a hole in the middle and on every other point.



## ASSEMBLE & TEST

6. Collect the outside holes and insert the pin into them.



7. Place the pin through the middle hole.

8. Carefully insert the pin through the straw. Secure with tape.



9. Test your pinwheel! Blow on it or hold it in the wind. Does it work?