



Mini Water Wheel

Supplies

plastic lid
scissors
waterproof markers
ruler
hot glue gun
spool
acetate or recycled plastic folder
straw

The water wheel was important to Colonial American life. Before electricity, the colonists needed the mill to grind grains like wheat, corn, and oats.

- 1 Cut out a circle 3 inches in diameter from a plastic lid (8 centimeters). Use waterproof markers to decorate the top of the circle.
- 2 On the underside, divide the circle into 6 even sections. Have an adult help you poke a hole through the center.
- 3 With an adult, hot glue a spool to the underside of circle. Be careful not to glue the hole.
- 4 From the acetate or recycled plastic folder, cut out 6 tabs for paddles. They should measure 1 inch by 1½ inches (1 by 4 centimeters).

5 Bend the tabs slightly at the bottom. Hot glue them to the underside of the circle around the spool. Space them out evenly.

6 Push the straw through the spool and circle. It has to move freely. The straw is the axle. Center your wheel on the straw. Now hold it under running water and see what happens.

Things to Notice

- ≈ Does your wheel spin faster when it is nearer the water source or farther away?
- ≈ How much water do you need to make the wheel turn?

