Mini Wind Powered Boats

Sections





Challenge Areas



COMMUNITY

CREATIVE

Scout Method Elements





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YOUTH LEADING, **ADULTS SUPPORTING**





NATURE AND THE OUTDOORS









SPICES Growth Areas



The Adventure

Use your construction skills to make a marble run with or against your patrol and race to see who can make their marble take the longest to get down the run.

Plan

- 1. Investigate how sail boats work and how they move. What determines their direction and speed of travel?
- 2. Investigate density and floatation. Why do some objects float, and others don't? Make sure to investigate corks and if they float.
- 3. Read the safety information and discuss with your leaders or another appropriate adult what safety equipment, precautions, and supervision may be required. Ensure that you have these safety measures in place before starting the 'Do' section. A risk assessment should also be completed.
- 4. Communicate with your patrol members and leaders to see what equipment that you need to bring.

Do

- 1. Secure three corks side by side using two rubber bands.
- 2. Cut out and decorate a sail. Think about what side and shape you would like your sail and what might work best but also be creative. Consider what material you want to make your sail out of. Paper is easiest but you could also use fabric.
- 3. Attach your sail to a skewer mast by making holes in your sail or using sticky tape.
- 4. Get an adult to help you insert your mast and sail into the middle cork. Make sure it is secure in the cork but does not go through the cork?
- 5. Place your completed ship in a container of water and race your sail boat using wind power.
- 6. Compare race times with your patrol members to see who can sail the length of the container quickest.

Review

- 1. Did your boat work as expected? Why or why not?
- 2. What did you enjoy the most from this experiment? What did you learn?
- 3. If you were to do this activity again, what would you do the same? What would you do differently?

Safety

- Youth members should be supervised at all times around water.
- Be careful when handling sharp objects such as scissors and skewers.
- Be careful with rubber bands. Never shoot a rubber band at someone's face as they can damage eyes.
- Wind power can be generated by blowing air. Be careful against hyperventilation.

Variations

- Try making a bigger boat with other materials
- Consider what other games and challenges you could do with your boats.