

BC SRC 2017: Walk on the Wild Side!
Tween Program, Theme 4: Beautiful British Columbia
Make a Compass
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ACTIVITY

Create a compass using a needle and water.



Step by step instructions:

1. Precut pieces of cork or Styrofoam to the depth of the water. A milk jug lid can also be used. The cork allows the needle to float on the water and creates a frictionless environment in which it can move freely. The needle can also be taped to the cork if it is floating in the water.
2. Turn the needle into a magnet. Hold the needle in one hand and slide one side of the bar magnet along the length of the needle. It is important that you don't slide the magnet back and forth on the needle, just slide it in one direction, lift it up, and repeat until the needle is a magnet.
3. Pour some water in the plastic lid or shallow bowl.
4. Place the cork/Styrofoam/lid in the water and put the needle on top of it. It may take a minute to get the needle balanced well but eventually it will smoothly spin so that the needle points to the North.
5. If desired, compare with a real compass to see that DIY compass is pointing north.
Note: Have children predict what direction is north before beginning the experiment! They could even draw a map of their community.

SUPPLIES

Plastic lid or shallow bowl
Needle or straight pin
Bar magnet
Cork, styrofoam or the top of a plastic milk jug
Water

RESOURCES

<http://kidsactivitiesblog.com/12007/how-to-make-a-compass> - Step by step instructions for the activity.

<http://munchkinsandmayhem.blogspot.ca/2015/04/paper-plate-compass.html?m=1> – Instructions for a more complicated DIY compass that children could take with them

<http://www.env.gov.bc.ca/bcparks/education/> - BC Parks website has links to many children's activities, such as crosswords, word searches, and spot the difference sheets.

British Columbia by Jill Foran. Examines the geography, history, symbols, climate, economy and culture of British Columbia.

British Columbia by Kaite Goldsworthy. Describes the environment, history, industry, tourist attractions, arts, sports, and cultural groups that make British Columbia unique.

The Explorer's Handbook: How to Become an Intrepid Voyager by Marilyn Tolhurst. Tells about famous explorers and includes instructions for making a compass, a survival kit, a sea chest, and other items.

What Makes a Magnet? by Franklyn Mansfield Branley. Describes how magnets work and includes instructions for making a magnet and a compass.