Activity: Make a Pinwheel

This activity provides students with the opportunity to identify and apply fundamentals of wind energy. Students will build a pinwheel, explore the concept of wind and discover wind’s power to move objects.

Age suitability: The activity can be adapted to suit classes from junior infants to senior infants

Materials
- 10 cm card squares with template drawn on
- Drawing pin
- Scissors, pencil & ruler, colouring pencils
- Drinking straw

Method
Pre activity: Ask students about things that they see move in wind. Ask students “How does wind make things move?” Discuss how pressure from the wind pushes against objects causing them to move in one direction or another depending on the direction of wind.

Making the pinwheel
1. Each students should get a pinwheel template, scissors, pencil, ruler and drinking straw
2. Cut the pinwheel template into a 10cm x 10cm square. The children can colour in one side of the pinwheel to decorate
3. Draw the diagonals as shown on the template using the ruler. Cut along the diagonals almost to the centre.
4. Bring the corners of the windmill to the centre and drive a pin through the holes into the drinking straw.
5. Blow on the pinwheel or hold it against the breeze to make it move

Testing the Pinwheel in the Wind:
1. Take students outside with their pinwheels (preferably on a windy day) and ask students to stand in a line
2. Rotate the students to face north, south, east, and west (discuss what happens in different directions). Have students stand in place with their pinwheel (discuss what happens)
3. Have the class create a list of ways to make their pinwheels move. (i.e. blowing on them, running, spinning in circles)
4. Have students try each of the suggestions and discuss what occurs
5. Assessment: Does the pinwheel spin faster when you face a particular direction? Does the pinwheel spin faster when you stand in place or run? How does wind move the pinwheel?
Pinwheel Template