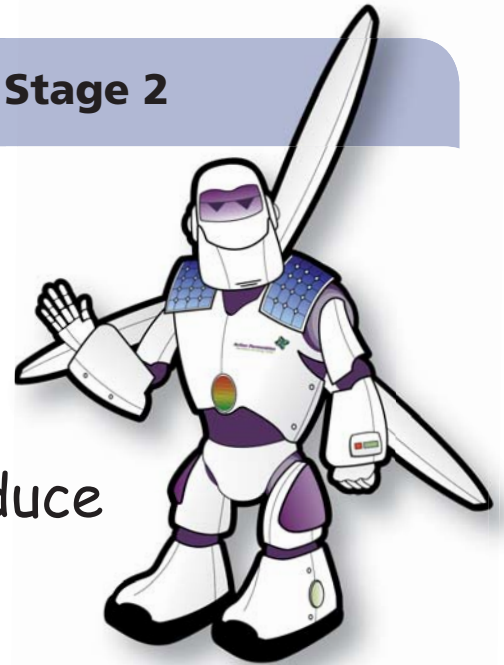


Wind Energy

Renewable Robbie found out that wind can be used to produce electricity. Wind will never run out and does not cause pollution.



Read the following sentences and circle the correct answer:

1. Wind turbines are built in **exposed/sheltered** locations.
2. The best location is on **top of a mountain/in a valley**.
3. Wind turbines are enormous and need **a lot of space/very little space**.
4. Wind energy is a **non-renewable/renewable** source of energy.

Renewable Robbie thinks you would enjoy making your own windmill. Follow the instructions below to find out how!

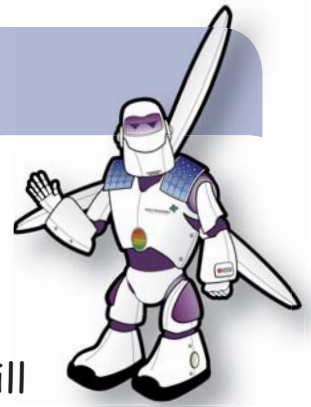
What you need...

- Card
- A pipecleaner
- A straw
- A pair of scissors

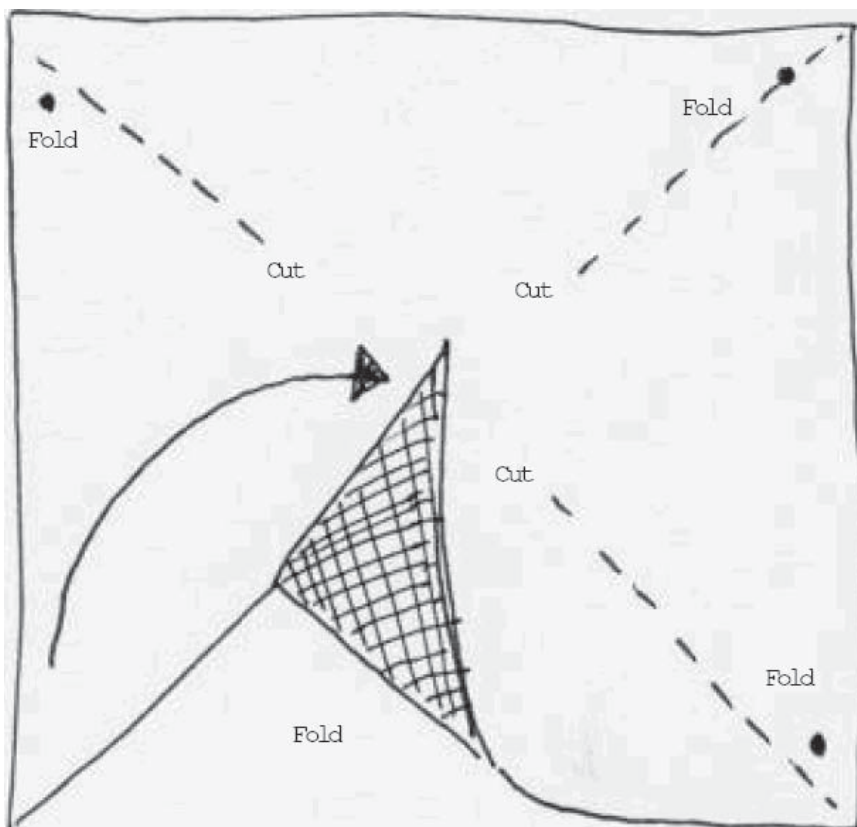
Instructions...

1. Cut out a square of card about 15 cm by 15 cm.
2. From each corner, cut in a diagonal line ending about 2 cm from the centre.



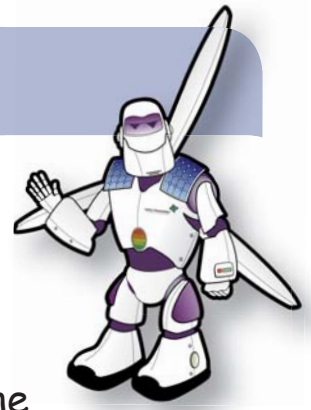


3. Fold every other corner into the centre.
4. Draw a dot on each corner to mark where a hole will be made.
5. Carefully put a hole in each corner and in the centre of the square.
6. Make a loop at one end of the pipe cleaner and push the other end through the holes.
7. Thread the pipe cleaner through the straw and bend at the bottom to secure it.



Join Renewable Robbie to carry out a decision making activity:

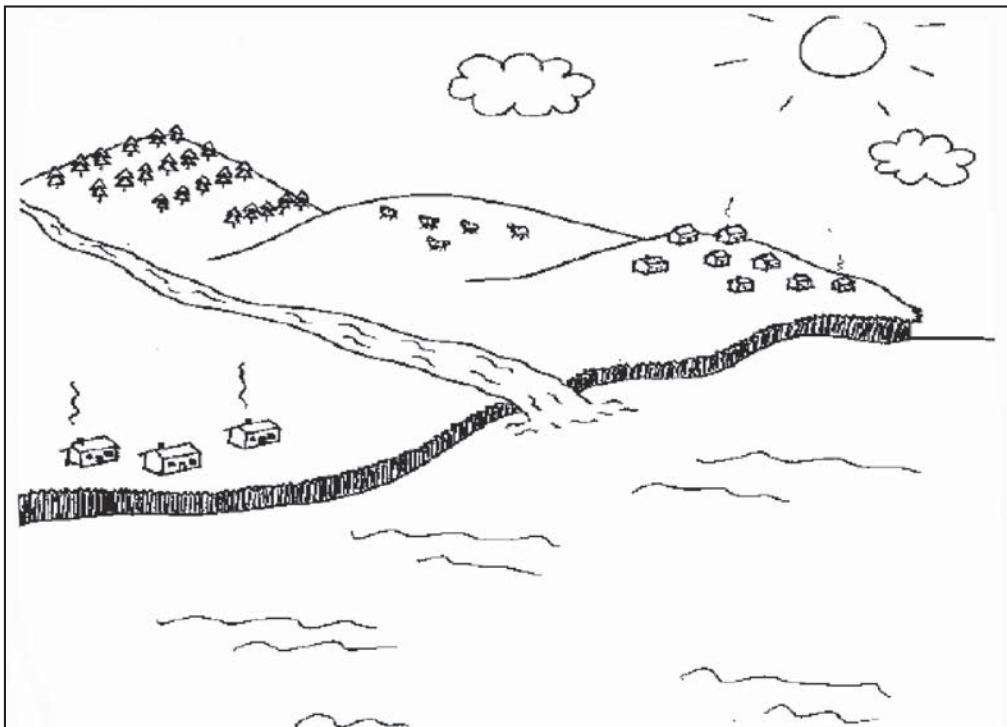




Decision Making

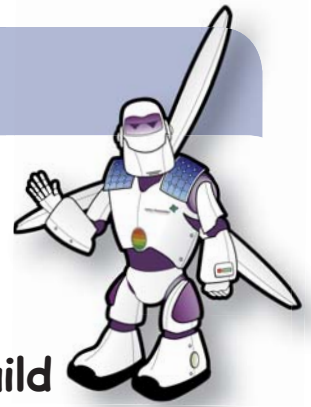
A group of wind turbines is called a **wind farm**. Can you think where the best place is to locate them? Look at the picture below. You are going to draw on a wind farm in the place that you think is the most suitable for them. Some points to remember:

- Wind farms are usually found on top of round hills where the wind can blow freely without being blocked by trees or buildings.
- There must be plenty of space between each turbine to give the blades room to spin.
- **Offshore** wind farms are found in the sea, a few miles out from the coast. As the sea is flat, the wind here is very strong because there is nothing to get in the way of its flow.



Renewable Robbie hopes you chose a good place for a wind farm. Are you ready to take part in a debate?





Debate on Wind Farms

Motion: This house believes that we should build many more wind farms.

Renewable Robbie discovered that some people do not like wind farms. Some people think they destroy the look of the landscape while many people disagree. Others are concerned about the noise of them although they are often much quieter than people think. Wind turbines do not work in very weak or very strong winds which puts some people off them. However, wind farms provide us with a source of renewable energy and do not cause any pollution. Land that they are built on can still be used for farming.

Your teacher will divide your class into two groups; one group will be for wind farms and one will be against wind farms. Your aim is to make a list of reasons to convince the other side of the class that you are right. If possible, use the internet to do some research on wind farms.

Once you have gathered all the information together, your teacher will chair the debate. Each group should put their arguments forward following the instructions of the teacher. At the end, you will hold a vote to see if there are more people who are for or more who are against the motion.

Renewable Robbie hopes you enjoyed the debate. Join him to find out about solar energy!

