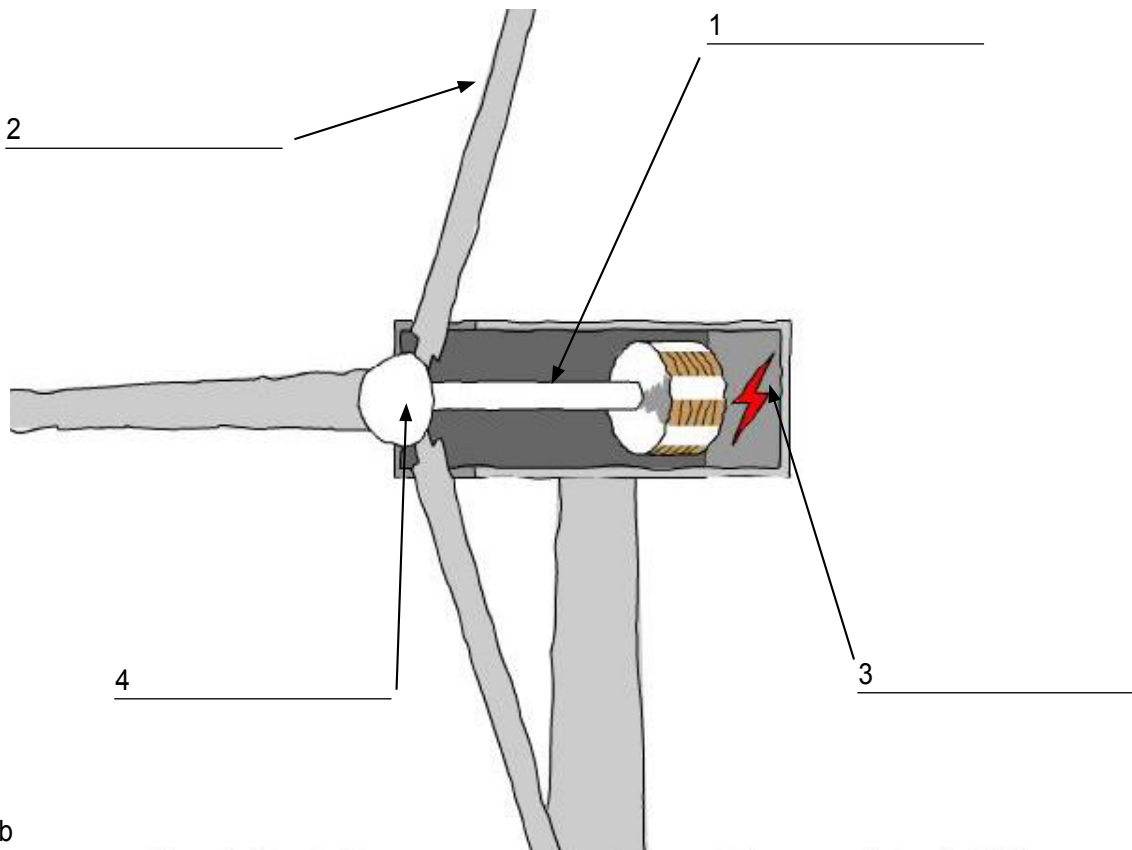


Exercise 1

Write the labels in the correct place on the diagram.



hub
shaft
generator
blades

Exercise 2

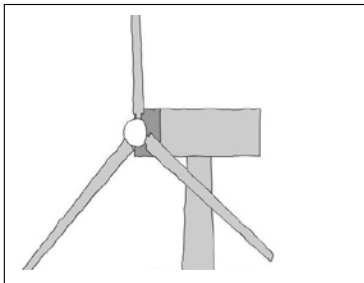
Complete the gaps using the words in the box.

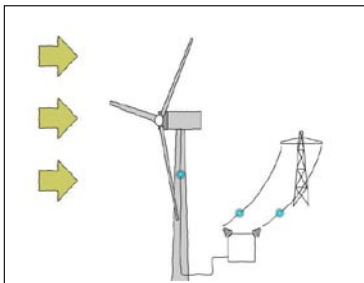
shaft cables sensors blades generator hub

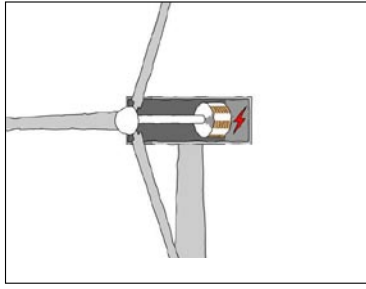
1. Wind blows past the _____.
2. _____ detect the direction of the wind and turn the blades to face it.
3. The blades rotate around a _____.
4. The hub is connected to a _____ inside the head.
5. The rotating shaft powers a _____ to convert the energy into electricity.
6. Electricity is sent via pylons and _____ to homes around the country.

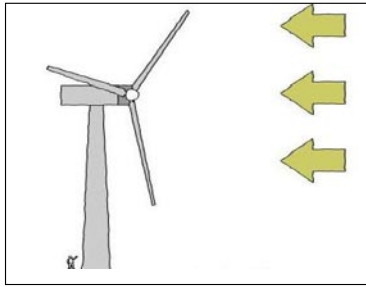
Exercise 3

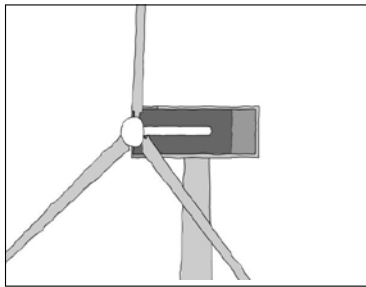
Write the number of the correct completed sentence above (1-6) next to each picture .

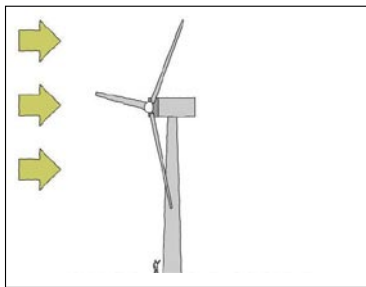












Objectives

Science

Students learn how the energy in wind can be used to produce electricity.

Language

Skills: Speaking, listening, reading and writing

Grammar: Present simple tense

Vocabulary: Nouns: *hub, shaft, generator, blades, energy, electricity, sensors, cables, pylons*

Verbs: *harness, produce, blow, detect, face, rotate, connect, power, convert*

Activities

Activities	Language skills
Students label a diagram of a wind turbine	Vocabulary
They discuss how they think wind power produces electricity	Speaking; vocabulary; present simple tense
They watch the animation and check if they were correct	Listening; reading; vocabulary
They do a gap-filling activity	Reading; writing; vocabulary
They match sentences with a set of jumbled pictures showing the process	Reading; vocabulary
(Groups only:) They give an oral commentary on the animation	Speaking; vocabulary; present simple tense

Procedure**With the whole class**

(Typical situation: whole class watching the presentation and animation on an interactive whiteboard or projector.)

- 1 [Slide 1] Introduce the topic. Ask the class to say what they know about how wind power can be used to make electricity. Introduce some key vocabulary (see above). Then ask the students to work in pairs or groups and do exercise 1 on the worksheet: they label the diagram.
- 2 Then ask the students to work in groups, discussing how they think wind power is used to generate electricity. Students make notes and get ready to tell the class how they think the process works. They can do this in English or their first language. Monitor and help. When they are ready, ask a group to report on how they think the process works. Encourage the class to respond, but do not explain the whole process to students at this point.
- 3 [Slides 2 and 3] Play the animation. Ask the students to listen and watch and check the labelling on their diagrams. Ask them if they were right about how wind power is used to generate electricity. Check that they have understood the whole process.

- 4 [Slide 4] Students work in groups and do exercise 2 on the worksheet: they complete the gaps. Monitor and help. Check the answers with the whole class. (See answer key.)
- 5 Students work individually or in pairs and do exercise 3 on the worksheet: they write the number of the correct sentence from exercise 2 next to each picture. When they have finished, check answers with the whole class. (See answer key.) If you wish, you can ask some of the students to describe the process again.

With groups (one group studies wind power and then presents it to the s)

(Typical situation: students arranged in groups around computers eg, in a language lab)

- 1 [Slide 1] Students work in their group and do exercise 1 on the worksheet: they label the diagram.
- 2 Then the students discuss how they think wind power is used to generate electricity.
- 3 [Slides 2 and 3] Students play the animation, listening and watching to check the labelling on their diagrams and to see if they were right about how wind power is used to generate electricity.
- 4 [Slide 4] Students work in their group and do exercise 2 on the worksheet: they complete the gaps. They can check answers using the answer key.
- 5 Students work individually or in pairs and do exercise 3 on the worksheet: they write the number of the correct sentence next to each picture. When they have finished, they can replay the animation or use the answer key to check their answers.
- 6 [Slide 5] The group gets ready to give an oral commentary on the animation. They can rehearse once or twice if they wish. Play the animation without sound; students give the commentary.

Wind power**Worksheet answer key****Exercise 1**

1. blades
2. hub
3. generator
4. shaft

Exercise 2

1. blades
2. sensors
3. hub
4. shaft
5. generator
6. cables

Exercise 3

- 3
- 6
- 5
- 1
- 4
- 2