

**Picture** *Windmill (Windmühle)*



Photo: Rolf Handke / pixelio.de

**Picture** *Wind farm (Windpark)*



Photo: Maren Beßler / pixelio.de



### Quiz sheet *Wind turbines (Windräder)*

Read the statements and decide whether they are correct. Mark what you think is correct.

- ☐ Wind turbines are used to produce electricity.
- ☐ Wind turbines can be on solid ground or in the ocean.
- ☐ Wind turbines can be more than 1000 meters high.
- ☐ There are wind parks that have more than 50 wind turbines.
- ☐ A large rotor blade weighs as much as an elephant.
- ☐ A large wind turbine can supply multiple thousands of people with electricity.
- ☐ If you pay an entry fee, you can visit wind turbines.
- ☐ One can walk freely on the top of a wind turbine.
- ☐ One can turn the rotor blades so they are not facing the wind to stop them.
- ☐ Modern wind turbines have three rotor blades.

**Answer key** for the *Wind turbines* (Windräder) quiz sheet

- ☒ Wind turbines are used to produce electricity.
- ☒ Wind turbines can be on solid ground or in the ocean.
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- ☒ Modern wind turbines have three rotor blades.

## Worksheet *Discovering the wind turbine (Das Windrad entdecken)*

What fits? Find the appropriate answer to the questions.

<b>What does Christoph need in order to be allowed to go up the tower?</b>	Safety harness, thick rope, hook, helmet
<b>How does Christoph travel up the tower?</b>	100 meters
<b>How high is the tower?</b>	The generator
<b>How long does it take for the elevator to get to the top of the tower?</b>	No
<b>What generates electricity in the turbine's head?</b>	On the elevator
<b>Is there a railing on the top?</b>	6 minutes
<b>What does Christoph need to do when he arrives at the top?</b>	Like airplane wings
<b>What does Christoph see from up high?</b>	There is a device in the head of the turbine that measures the strength and direction of the wind.
<b>What do the rotor blades look like?</b>	He has to hook himself in right away.
<b>Can the rotor blades be adjusted?</b>	Yes, one can turn them so they are not facing the wind to stop them.
<b>How does one know what direction the wind is coming from?</b>	Yes, one can turn them so they are facing the wind in order to use the full strength of the wind.
<b>Can the rotor blades be brought to a stop?</b>	Lots of wind turbines, the shadow of the wind turbine he is on, and the large rotor blades

**Answer key** *Discovering the wind turbine (Das Windrad entdecken)*

**What does Christoph need in order to be allowed to go up the tower?**

Safety harness, thick rope, hook, helmet

**How does Christoph travel up the tower?**

On the elevator

**How high is the tower?**

100 meters

**How long does it take for the elevator to get to the top of the tower?**

6 minutes

**What generates electricity in the turbine's head?**

The generator

**Is there a railing on the top?**

No

**What does Christoph need to do when he arrives at the top?**

He has to hook himself in right away.

**What does Christoph see from up high?**

Lots of wind turbines, the shadow of the wind turbine he is on, and the large rotor blades

**What do the rotor blades look like?**

Like airplane wings

**Can the rotor blades be adjusted?**

Yes, one can turn them so they are facing the wind in order to use the full strength of the wind.

**How does one know what direction the wind is coming from?**

There is a device in the head of the turbine that measures the strength and direction of the wind.

**Can the rotor blades be brought to a stop?**

Yes, one can turn them so they are not facing the wind to stop them.

**Word cards** *True and false* (richtig und falsch)

true

false

**My word bank sheet** *Wind Turbine* (Windrad)



Student materials