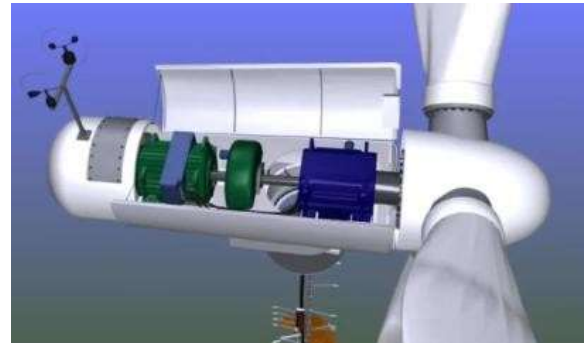


Surname:

Name :

Date :

What's inside a wind turbine?



1 Watch the video and say what the topic is.

.....

2 Answer the questions by ticking the correct box:

1. Where are wind turbines found?

- on wind farms on white farms

2. Wind turbines are:

- Horizontal axis machines Horizontal access machines

3. What sort of rotor is spinning?

- a 6 bladed rotor a 3 bladed rotor

4. The nacelle is composed of:

- The generator, often a gear box and occasionally a high voltage transformer
- The generator, often a high voltage transformer and occasionally a gear box

5. How do we class wind turbines?

- by their power output by their tower height

6. What does each sub-megawatt turbine produce?

- 400 to 600 kwh 4000 to 6000 kwh

7. What is the height of sub-megawatt turbines:

- 25 to 35 meters 25 to 45 meters

8. Why does the cable stop being attached to the wall?

- to get closer together to be able to twist

9. What is the platform at the top made of?

- steel seal

10. What gives indications about the speed and direction of the wind?

- wind rotors wind sensors

11. What can we find after the shaft?

- the generator The gearbox

12. The layout of a multi megawatt nacelle is:

- Less different than for a smaller version
- More different than for a smaller version

13. What do we necessarily have to have?

- a transformer a generator

14. The nacelle is:

- 3 meters high, 2 ½ meters wide
- 7 meters wide, 3 meters high

15. The components in the multi megawatt turbines are:

- smaller than in sub-megawatt turbines
- bigger than sub-megawatt turbines

16. Where can we find the additional component?

- at the back of the nacelle
- at the base of the tower

17. What is the heaviest component?

- the shaft the gearbox

18. The generator supplies:

- 690 volts 6090 volts

19. How do we stop the blades?

- we turn the blades to ninety degrees
- we turn the blades to nineteen degrees

20. The design of future turbines will be:

- a little bit different very different

3 Match each word with the right translation :

- | | | | |
|-----------|---|---|------------------|
| Blade | • | • | Mât |
| Hub | • | • | Pale |
| Tower | • | • | Générateur |
| Gearbox | • | • | Moyeu |
| Generator | • | • | Boite de vitesse |

4 Fill in the gap with the right vocabulary

Vocabulary:

- | | |
|------------------|---------|
| Wind sensors | Nacelle |
| Hub | Blade |
| Shaft | Gearbox |
| High speed shaft | Brake |
| Generator | |

