**Video Comprehension**

**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 variable than for a smaller version
    - [ ] More variable 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

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On youtube: http://www.youtube.com/watch?v=LNXTm7aHvWc
3 Match each word with the right translation:

- Blade
- Hub
- Tower
- Gearbox
- Generator

- Mât
- Pale
- Generateur
- Moyeu
- Boîte de vitesse

4 Fill in the gap with the right vocabulary

**Vocabulary:**

- Wind sensors
- Hub
- Shaft
- High speed shaft
- Generator

- Nacelle
- Blade
- Gearbox
- Brake