

TED Talks Test Questions

Lesson Plan

Aim: to develop the students' ability to listen to a 10 min+ lecture, to take notes and then use those notes to answer the comprehension questions.

Lesson Time: Approximately 1:30-2:00 hours

1. Lead in

- Ask Students to discuss the 'title' and predict the content of the lecture.
- Ask students to write down key terms / language from their discussions.
- Feed in / check key vocabulary.

Three types of lesson

Lesson#1: [hard]

1. Students listen once and take notes.
2. Give the students 5 minutes to tidy their notes.
3. Students listen again and add to their notes (use a different colour pen).
4. Distribute questions. Set 20-25 minutes to answer.
5. Feedback: distribute or project answers.

Lesson #2: [medium]

1. Students listen once and take notes.
2. Distribute questions: Set 15 minutes for students to answer the questions from their notes.
3. Students listen again and answer the missed questions as they listen.
4. Give the students an extra 10 minutes to consolidate answers.
5. Feedback: distribute or project answers.

Lesson #3: [easy]

1. Distribute questions. Students have 10 minutes to read through the questions.
2. Students listen and answer the questions.
3. Give the students 5 minutes to tidy their answers.
4. Students listen again. They check their answers and answer any missed questions.
5. Give the students 5-10 minutes to tidy their answers.
6. Feedback: distribute or project answers.

Copyright: These materials are photocopiable but please leave all logos and web addresses on handouts. Please don't post these materials onto the web. Thank you

How wind energy could power the Earth.. 18 times over

[listening comprehension questions]

Author: Dan Jorgensen

Date: October 2021

Time: 10.58

Location: TED TALKS

Level: **** [B1/B2/C1]

Link:

https://www.ted.com/talks/dan_jorgensen_how_wind_energy_could_power_earth_18_times_over

Check these words and phrases before listening:

Key vocabulary

1. Abundance
2. Denmark
3. The Vikings
4. Challenge
5. Wind turbine
6. Replica
7. Affordable
8. Invention
9. Prototype
10. Pioneer
11. Rotation
12. A green frontrunner
13. Extraction of oil
14. Hydrogen
15. Decarbonize
16. Sustainable fuels
17. Scale
18. Renewable energy
19. Infrastructure
20. Greenland
21. Sails
22. Climate change
23. Innovation
24. Offshore wind
25. Motivation

How wind energy could power the Earth.. 18 times over

[Dan Jorgensen 10:58]

Take your notes here:

How wind energy could power the Earth.. 18 times over

[Dan Jorgensen 10:58]

Answer the following questions:

1. Who is Henrik Stiedal?

2. Who is Vestas?

3. When was the first offshore wind farm in Denmark created?

4. How many turbines does the largest offshore wind farm in Denmark have?

5. How much electricity can be made from one rotation of a blade?

6. What decision has the Danish government made with regard to oil and gas?

7. Why did the Danish government make the decision about oil and gas?

8. What does an electrolyzer do?

9. How can an electrolyzer solve the two problems that they have with wind energy?

10. How is Denmark going to expand their offshore wind capacity?

11. How many homes will Denmark be able to supply with electricity once they have expanded their offshore wind capacity?

12. The speaker mentioned the Vikings at the beginning of his speech, how is this connected to the topic of wind energy?

13. What does the International Energy Agency say about the potential of offshore wind energy?

14. What is the overall summary?

15. Critical Thinking:

- What did you think of this lecture?
- Do you agree with the ideas?
- Do you agree that offshore wind energy can power the whole world?
- Does your country have offshore wind energy? What do people think about these farms?

Put your ideas here:

How wind energy could power the Earth.. 18 times over

ANSWERS

1. Who is Henrik Stiedal?

He invented a wind turbine in the 1970s.

2. Who is Vestas?

The biggest turbine producer in the world.

3. When was the first offshore wind farm in Denmark created?

In 1991, we built the first offshore wind farm in the world called Vindeby.

4. How many turbines does the largest offshore wind farm in Denmark have?

This is Kriegers Flak. That's the biggest offshore wind farm in Denmark now. 72 turbines, 188 meters tall, each of them.

5. How much electricity can be made from one rotation of a blade?

It creates enough electricity to charge more than 1400 cell phones.

6. What decision has the Danish government made with regard to oil and gas?

Last year, the Danish government and the Danish parliament made an important decision. We've decided to put an end date on extraction of oil and gas in 2050 and immediately cancel all future licensing rounds.

7. Why did the Danish government make the decision about oil and gas?

But the reason we made it, even though it was expensive, was because we need to show the world that there are actually alternatives to oil and gas.

8. What does an electrolyzer do?

It transforms electricity into hydrogen.

9. How can an electrolyzer solve the two problems that they have with wind energy?

One, we can now store the energy for when the wind is not blowing. And two, we can now decarbonize parts of our energy system that we couldn't decarbonize before.

10. How is Denmark going to expand their offshore wind capacity?

A very important part of that strategy is to build the world's first energy island. This is a simulation of what it may end up looking like. 80 kilometers out in the sea, the size of 64 football fields, the biggest infrastructure investment in Danish history.

11. How many homes will Denmark be able to supply with electricity once they have expanded their offshore wind capacity?

When fully scaled, it'll be able to generate 10 gigawatts of green electricity. Now 10 gigawatts, that's enough to cover the demand of 10 million households.

12. The speaker mentioned the Vikings at the beginning of his speech, how is this connected to the topic of wind energy?

They exploited the wind.** They put tremendous effort into making efficient sails, and it took as a long time for them to make a sail as it did to build a ship, and it was just as important. And that brings me to my main point. We need, as the Vikings did 1,000 years ago, **to change the world by finding new and more efficient ways of exploiting the energy.

13. What does the International Energy Agency say about the potential of offshore wind energy?

*If you ask the International Energy Agency, they will tell you that **offshore wind has the potential to cover the current electricity demand of the entire world, not once, not twice, 18 times.***

14. What is the overall summary?

Over the last two decades, the wind power industry has grown rapidly. The speaker explains how Denmark aims to end the country's oil and gas industry by 2050 and make the transition to a fossil-free future by using off-shore wind farms.

15. Critical Thinking:

- Students' own ideas