# Oddizzi World Explorers KS2 Week 12 - Global knowledge



# Login details

To access online resources please go to **www.oddizzi.com/school/login** 

**Oddizzi subscribers**: Use your oddizzi class login and password.

# **Online investigator**



Login to **www.oddizzi.com** and click on *explore the world* 

Use your **Scavenger Hunt 2** sheet and Oddizzi's online **explore the world** section to answer the questions and find out many facts you might not have known!

# **Putting pen to paper**

Login to **www.oddizzi.com** and click on *explore the world - places* How many countries can you name? See how many you can think of using the **Country alphabet challenge** sheet. If you have any gaps, use the oddizzi website to help you!

# Watch this

Login to **www.oddizzi.com** and click orexplore the world - country close up - United Kingdom energy - renewable energy

Watch: An introduction to wind energy

- 1. How many wind turbines are there in the London Array offshore wind farm?
- 2. Why is the London Array where it is? (Can you give three reasons?)

# Map skills

Do you know where these capital cities are around the world?

Look at each capital city on your Locating the world's capitals map and decide which country they might be located in. Label it on the map.

# **Quiz time**

Login to www.oddizzi.com. Click on Quiz at the top of the page. Find the Capitals and flags quiz. We suggest trying Level 2. See how many points you can score! Can you beat your score from last time?

# What if...

Discuss this made up scenario with your family over breakfast or dinner.

# What if...wind farms were the UK's only source of energy?

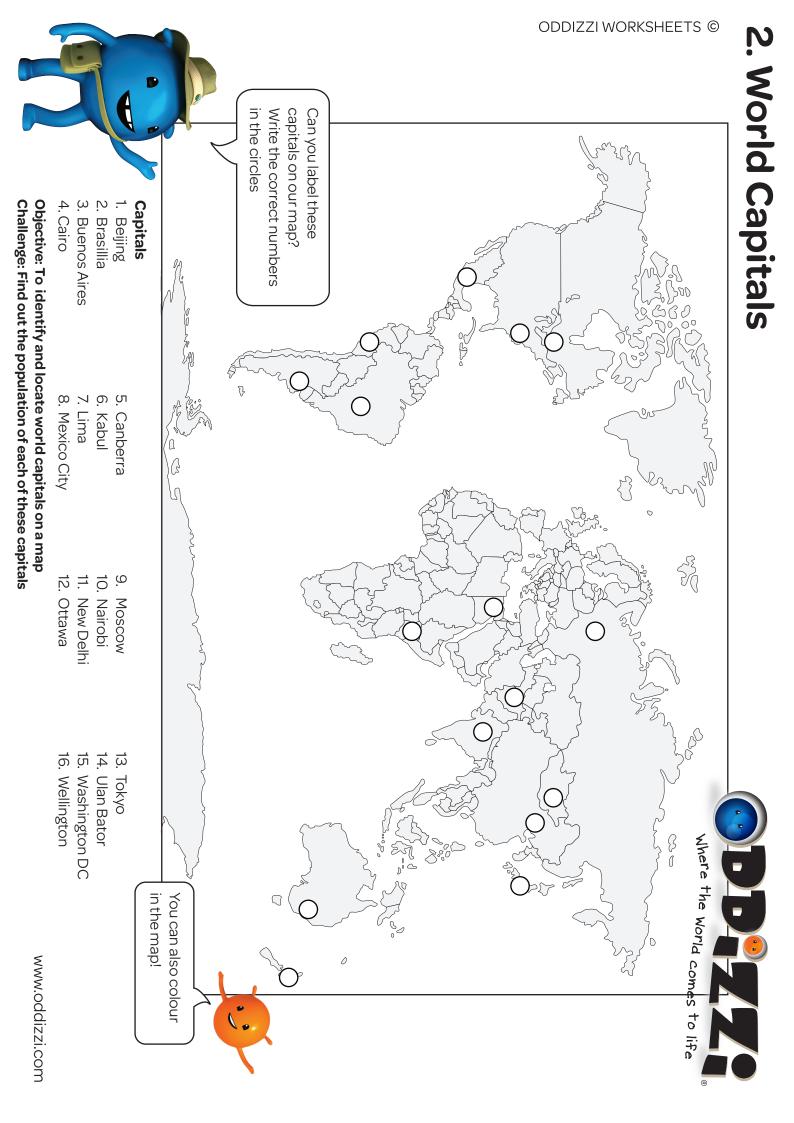


# **Read it**

Read the fact-file **UK energy**.

Use the text to help you answer the questions that follow.

To find out more go to www.oddizzi.com explore the world - country close up -United Kingdom - energy





# Oddizzi Club Scavenger Hunt 2



Use Oddizzi to complete the table below.

12. Go to Global Knowledge – World Food – 13. Go to Kuwait. What dessert do the students make? animal fo	9. Name the four seasons. 10. What Climate -	<ol> <li>What is the official language in Columbia?</li> <li>Name</li> </ol>	4. How many active volcanoes are in Indonesia?	1. What is Spain's motto? 2. Draw
13. Go to Global Knowledge – Animals. Name an animal found in the Galapagos Islands.	10. What is there a photo of in Weather & Climate – Extreme Weather – Droughts?	7. Name and describe a popular food in Bolivia.		2. Draw Thailand's flag.
14. CHALLENGE QUESTION: Find the page on Global Warming. Hint: It's somewhere in the Global Knowledge section.	11. What is 'non-aqueous rain'? <i>Find the answer</i> <i>in Unusual Events (Weather &amp; Climate)</i> .	8. Name the world's largest rodent. <i>The answer</i> <i>is in Venezuela's Secret Fact</i> .	5. Povi Masima is a popular food in Samoa, Oceania. What is it?	3. Fiji is a part of which continent?



ODDIZZI WORKSHEETS ©

# Find a country for every letter of the alphabet

Α	Ο
В	Ρ
C	Q
D	R
Ε	S
F	Τ
G	U
Н	V
	W
J	Χ
Κ	Υ
L	Ζ
M	Remember to use Oddizzi to help you! Log in and go to PLACES

Can you find out how many countries there are in the world?

www.oddizzi.com

Welcome to Oddizzi's Key Stage 2 guided reading resources. In this pack you will find differentiated nonfiction texts, with varied follow-up activities and teacher answer sheets. Topics for these texts are aligned with the new Geography National Curriculum.

These resources would work beautifully during a guided reading session with lower Key Stage 2 students, or for pupils in upper Key Stage 2 to use during independent or shared reading. The texts make for strong exemplars to use when studying news articles, persuasive and informative texts. These resources can equally be used during geography lessons.

The two texts have similar content, but are written for different reading levels. The simpler text is identified by the '**Core Text**' note in the footer, while the more challenging text is marked with '**Extension Text**'. The three follow-up activities can be used with both texts.

# There are three different follow-up activities.

- 1) YOUR MISSION is a basic comprehension activity incorporating true/false, multiple choice and short answer.
- 2) OBSERVER ODD'S MISSION includes more challenging comprehension questions to be answered in full sentences.
- 3) INSPECTOR IZZI'S MISSION incorporates higher order thinking questions including inferring, making connections and predicting. These questions would be great to discuss during guided reading.

Included at the end of Odd's and Izzi's missions are extra cross-curricular activities that support multiple intelligences.

Texts	Related Topics	Text Form
Ready, Get Set, Go to Rio!	South America, Brazil, Olympics	Persuasive
Tour the Rockies!	North America, mountains, economic activity	Persuasive
UK Energy Fact-File	United Kingdom, energy, resources	Informative
The River Nile Fact-File	(Ancient and modern) Egypt, rivers	Informative
Save the Amazon!	South America, Brazil, rainforests	News article
Second Earthquake Hits Nepal	Asia, Nepal, earthquakes, natural disasters	News article
Fairtrade Fact-File	Fairtrade, food, farming, economic activity, Global Marketplace	Informative

# PACKS

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# www.oddizzi.com

# FACT-FILE UK ENERGY



# How much energy does the UK use?

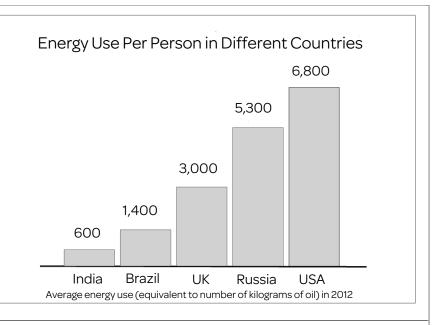
The UK uses a lot of energy. Cars and trucks, all of the gadgets in people's homes, machines in factories and other businesses are all powered by electricity or require coal, oil or gas to fire them up.

# What sort of power is it?

# Electricity – power at the flick of a switch

Almost all of the electricity the UK uses, for example, when you switch on a computer, comes from power plants in the UK. They might be coal-fired, gas-fired or nuclear power stations.

More and more, the UK is also using renewable energy sources to create power. Your electricity might come from an offshore wind farm!



Every Brit uses about five times more energy than a person living in India (see graph) but only about half as much as an American, on average.



Oil platform in the North Sea, in Scotland.



Open-cast coal mine in Wales.

Page 1

# Other sources – power for cars, cooking and keeping warm

Oil and gas are two other important sources of energy. Oil (including petrol and diesel) is used for transport. If you live in the UK, the heating system in your home most likely uses gas.

# **UK Fossil Fuels**

Did you know?

Fossil fuels are formed over millions of years from the rotting bodies of plants and animals which, having sunk into the mud, eventually become covered by layers of rock.

# Fossil fuel 1: Natural gas

Around half of the natural gas that Britain uses to cook, keep warm, and power UK industry comes from its own North Sea gas field. This is an area of the North Sea where gas is found under the sea bed – it's just off the coast of the East of England.

# Fossil fuel 2: North Sea oil

North Sea oil is another major energy source for Britain. Oil platforms off the coast of North East Scotland allow engineers to drill into the sea bed to get both oil and natural gas from rocks underground.



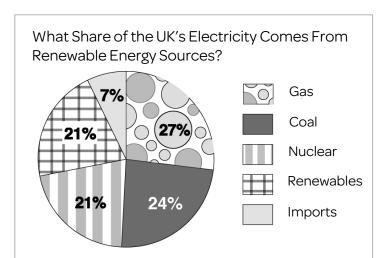
All of the UK's nuclear power plants are by the sea.



UK solar farms turn the sun's rays into electricity.



Wind power will help to replace power from polluting coal.



# **Fossil fuel 3: Coal**

Coal used to fuel coal-fired power stations in Britain is still dug out of the ground in open-cast mines in the UK.

A lot more coal is shipped into the country from across the world. Russia and the USA are big suppliers.

# **Nuclear Power**

The UK also depends on energy produced by its nuclear power stations. About one-fifth of the electricity the UK needs comes from nuclear power.

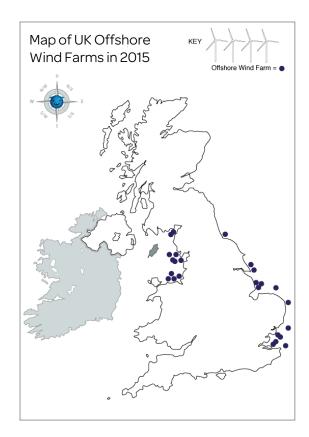
These power plants are found in eight different sites around the country. All eight are on the coast - sea water can be used for cooling.

# **Renewable Energy in the UK**

Today, we also use the power of the sun, wind and water to create electricity. Unlike fossil fuels, the sun's rays, wind and water won't run out – they're renewable!

The UK Government wants to produce one-third of its electricity using renewable sources by 2020, to help reduce climate change. Over the next ten years, electricity generated by new offshore wind farms will replace power created by burning coal.

The UK plans to shut all of its polluting coal-fired power stations by 2025. This is great news for the environment! Burning coal releases greenhouse gases, including carbon dioxide, but wind turbines don't.



Key Words:

electricity energy fossil fuel nuclear offshore onshore power station renewable solar source

# FACT-FILE UK ENERGY



# How much energy does the UK use?

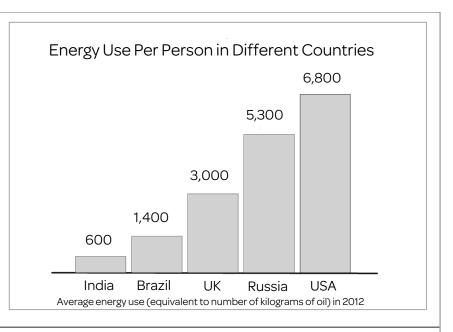
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Open-cast coal mine in Wales.

# Other sources – power for cars, cooking and keeping warm

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All of the UK's nuclear power plants are by the sea.



UK solar farms turn the sun's rays into electricity.



Wind power will help to replace power from polluting coal.

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A lot more coal is shipped into the country from across the world. Russia and the USA are big suppliers.

# **Nuclear Power**

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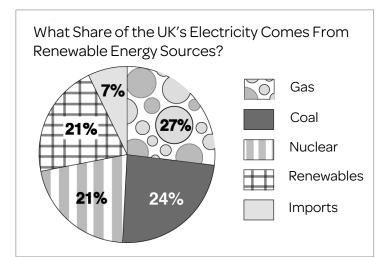
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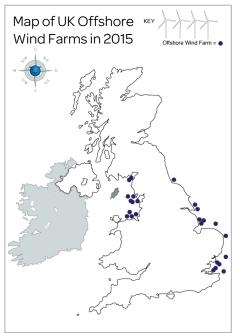
Electricity generated by wind farms will replace power created by burning coal. Coal-fired power stations emit greenhouse gases (such as carbon dioxide).

# Wind energy

When the wind blows, gigantic turbines both offshore and onshore across the UK generate electricity. In 2014, the world's largest offshore wind farm was completed 20km (12 miles) off the coast of Kent. It is called the London Array.

The amount of power created by these offshore wind turbines whirling above the waves is set to grow even more in the next few years.





Key Words:

electricity energy fossil fuel nuclear offshore onshore power station renewable solar source

- 1. Draw yourself in the circle to become a detective!
- 2. Answer the questions below to complete your mission.

# A. Tick 'true' or 'false' for the statements below.

Statements	True	False
1. People living in the UK use more energy than people living in India.		
2. Natural gas is a type of fossil fuel.		
3. Power from the sun, wind and water can be used to create electricity.		

# B. Circle the correct answer.

4. Oil is an energy source. Where does it come from?

a. Rocks in the sea bed

b. Waves in the ocean

c. Biggusts of wind

- 5. Where are the UK's nuclear power stations found?
  - a. By the sea
  - b. On top of mountains
  - c. Inland

- 6. What share of the UK's electricity comes from renewable energy sources?
  - a. 24%
  - b. 21%
  - c. 7%

### C. Draw a quick cartoon to show three different energy sources used in the UK.

D. Why is the UK government planning to shut all of its coal-fired power stations by 2025?

OBSERVER ODD'S MISSION: UK E	Energy
	eds your help! The a report on the facts presented in the <i>UK Energy</i> text. This below in full sentences so that he can use the information
1. What have you used today that required e	lectricity?
2. Can you give two examples of fossil fuels?	
3. Name a few different sources of renewab	le energy.
4. Why do you think the UK's nuclear power	plants are located by the sea? Explain your answer.
5. Find an example of a compound word in t	he text. on a wind turbine by visiting oddizzi.com - Global

INPSECTOR IZZI'S MISSION: UK Energy



### Inspector Izzi has a new job and needs a hand!

Her task is to write a detailed analysis of the UK Energy text. She needs you to help

her read 'between the lines' and answer the questions below in full sentences.

6. Use Odd's compass to describe where the offshore wind farms are located in the UK.

7. What text features did the author use that helped you understand the text? Explain your answer.

8. What types of energy sources do you think the UK will use more of in the future? Use evidence from the text to support your answer.

9. What do you think it would be like to work on an oil platform in the North Sea?

# EXTRA MISSIONS:

- 1. Imagine you are applying for a job at a wind farm. Write an application letter explaining why you are passionate about renewable energy.
- 2. Be a renewable energy detective! Outside of school, see if you can spot houses with solar panels or a wind turbine.
- 3. Imagine your school has just been given money to invest in a renewable energy source. With a partner, discuss what energy source your school should use and think about where you would set it up.

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NAME: Answer Key

- 1. Draw yourself in the circle to become a detective!
- 2. Answer the questions below to complete your mission.

# A. Tick 'true' or 'false' for the statements below.

Statements	True	False
1. People living in the UK use more energy than people living in India.	X	
2. Natural gas is a type of fossil fuel.	x	
3. Power from the sun, wind and water can be used to create electricity.	X	

# B. Circle the correct answer.

- 4. Oil is an energy source. Where does it come from?
- 5. Where are the UK's nuclear power stations found?
- 6. What share of the UK's electricity comes from renewable energy sources?

# a. Rocks in the sea bed

- b. Waves in the ocean
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### a. By the sea

- b. On top of mountains
- c. Inland

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- b. **21%**
- c. 7%

# C. Draw a quick cartoon to show three different energy sources used in the UK.

Natural gas Oil Coal Nuclear power Solar Wind (Hydro)

# D. Why is the UK government planning to shut all of its coal-fired power stations by 2025?

# To help reduce climate change.

OBSERVER ODD'S MISSION: UK Energy	Answer Key
Observer Odd needs your help!         His mission is to write a report on the facts presented         Answer the questions below in full sentences so that h         in his report.	
<ol> <li>What have you used today that required electricity?</li> <li>Answers will vary.</li> </ol>	
2. Can you give two examples of fossil fuels? Natural gas, North Sea oil, coal	
3. Name a few different sources of renewable energy. Sun, wind, water	
4. Why do you think the UK's nuclear power plants are located by the sea? Exp	lain your answer.
Sea water is used for cooling as part of the process of nuclear power genera	
5. Find an example of a compound word in the text.	
Coal-fired, gas-fired, one-fifth	
GO ONLINE: Find out what it's like to work on a wind turbine by visiting oddiz:	zi.com - Global

Knowledge - Environment - Sustainability - Renewable Energy - Wind.

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6. Use Odd's compass to describe where the offshore wind farms are located in the UK.

Skills/locational knowledge question: Just off the southeast coast, around East Anglia, close to the northeast

coast and just off the northwest of England. Answers might include names of countries or regions.

7. What text features did the author use that helped you understand the text? Explain your answer.

Text features to discuss: subheadings, graphs, maps, images/pictures, captions, text box, bold, italic, title.

8. What types of energy sources do you think the UK will use more of in the future? Use evidence from the text to support your answer.

Renewable energy. "The UK Government wants to produce one-third of its electricity using renewable

sources by 2020, to help reduce climate change". "The UK plans to shut all of its polluting coal-fired

power stations by 2025".

9. What do you think it would be like to work on an oil platform in the North Sea?

Answers will vary.

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