Lyng Primary School Knowledge Organiser

Topic:	Where does our energy come from?	Year 6 Civilisation, Communication and Inventions	Spring 2

Let's recap...

Year 2 - Natural resources are materials found on Earth that people use to meet their needs.
Year 3 - Different countries use their land and resources in different ways.
Year 4 - Human actions can have both positive and negative impacts on the environment.
Year 5 - We have used maps to identify where different physical and human features are located and considered how these influence how places develop.

Enquiry questions that we shall investigate during the topic:

OVERARCHING BIG QUESTION OF UNIT: Where does our energy come from?

- Why is energy important?
- What is renewable energy?
- How does the United Kingdom generate energy?
- What is the best way to generate energy?
- Where is the best place for a solar panel on the school grounds?

Fieldwork Opportunities

Conduct fieldwork around school to find a suitable place for solar panels.

Significant places

Locations of renewable energy sources (wind, solar)

To discover more:

Britannica Kids – Energy - https://kids.britannica.com/kids/article/energy/353100

Ducksters – Energy- https://www.ducksters.com/science/energy.php

National Geographic Kids - https://www.natgeokids.com/uk/kids-club/cool-kids/general-kids-

What Step On and Goldilocks words will I use?

Spelling	Definition
Hydropower	Energy generated by the movement of water.
Wind power	Energy generated by wind powering large turbines.
Geothermal energy	Energy generated by the heat from the Earth's core.
Solar power	Energy generated by the sun and solar panels.
Biofuel	Energy generated from plant and animal waste.
Crude oil	A naturally occurring liquid made millions of years ago, found underground.
Nuclear power	Energy generated from radioactive materials that create heat.
Natural gas	A highly-flammable mixture of gases found deep underground.
Renewable energy	Energy that does not reduce in quantity when it is used.
Non-renewable energy	Energy that cannot be replenished and will eventually run out.
Fossil fuel	A material formed from the remains of plants and animals over millions of years.

Our Storytelling Approach to enhance engagement

People:	Place:	Problem:
The children of Lyng Primary School 	Lyng Primary School 	What would be a suitable location for solar panels in our school? 

Key facts and locations

Energy cannot be created or destroyed but can be transferred from one store to another. For example, when generating electricity from solar panels, the light energy from the sun is transferred to electricity. Wind turbines and wave power transfer kinetic (movement) energy to electrical energy.

Fossil fuels

- Include, coal, crude oil and natural gas
- Are generated by the decomposed remains of plant and animal matter over millions of years.
- Are found by drilling into the Earth's crust.
- Contain hydrogen and carbon, which create energy when burnt.
- Are non-renewable, which means once they have been used, the amount that can be harvested is permanently depleting.
- Provide a huge about of the energy that is used.

An alternative way to generate energy is through renewable energy sources such as geothermal energy solar, hydro and wind power.

Examples of energy sources are:

- Coal
- Natural gas
- Crude oil
- Hydropower
- Wind power
- Geothermal energy
- Solar power
- Nuclear power
- Biofuel

Map to be studied

Agreed Outcome

Agreed location for the 'new Lyng solar panels'.

Lyng Primary School Knowledge Quiz

Geography Topic:	Where does our energy come from?	Year 6 *Civilisations, Communication and Inventions*	Spring 2

Our Viking Geography Quiz

Start of unit ___

End of unit ___

1. Why do we need energy? (Choose two)	S	E
a) To help the environment		
b) To make sure we work hard.		
c) To light and heat buildings		
d) To power modes of transport		

2. How does hydropower generate electricity?	S	E
a) From the movement of water.		
b) From the heat from the Earth's core.		
c) From radio active materials.		
d) From plant matter.		

3. Which one is NOT a reason to trade energy?	S	E
a) To generate extra income for a country.		
b) To get rid of wasted energy.		
c) To support countries in generating enough energy to meet the needs of their population.		
d) To strengthen relationships with other countries.		

4. Write an example of a renewable and non-renewable energy source.	S	E
Start: End:		

5. Which renewable energy source is most consumed in the UK?	S	E
a) Solar power		
b) Hydropower		
c) Biofuel		
d) Wind power		

6. What is the name of the line of longitude on which time zones are based?	S	E
a) The International Date Line		
b) Prime/Greenwich Meridian		
c) Tropic of Capricorn		

7. What are contour lines?	S	E
a) Lines to show the different hemispheres.		
b) Lines to show land height on an OS map.		
c) Lines to show a grid on an OS map.		
d) Lines to show the directions on a compass		