

Maple Tree Primary School Year 6 Geography: Where does our energy come from?

What should I already know?

- how latitude and longitude link to climate
- Earth is constructed in layers
- the difference between urban and rural
- the name and location of major rivers and how they are used
- an understanding of biomes, ecosystems and tropics

Knowledge and skills

- Describe the significance of energy.
- Give examples of sources of energy and their trading routes.
- Define renewable and non-renewable energy.
- Discuss the benefits and drawbacks of different energy sources.
- Describe the significance of the Prime Meridian.
- Identify human features on a digital map.
- Discuss how transport links have changed over time.
- Locate UK cities on a map.
- Use six-figure grid references to identify features on an OS map.
- Consider and justify the location of energy sources.
- Design and use interview questions.
- Plot points on a sketch map

Diagrams



OTHER PUBLIC ACCESS

- • • Other route with public access (not normally shown in urban areas)
The exact nature of the rights on these routes and the existence of any restrictions may be checked with the local highway authority. Alignments are based on the best information available
- ◆ National Trail / Scotland's Great Trails ◆ Recreational Route
 - ◇ Alternative Route (England Coast Path only)
 - Traffic-free cycle route
 - ① National cycle network route number - traffic free
 - ② National cycle network route number - on road
 - Permissive footpath } Footpaths and bridleways along which landowners have permitted public use but which are not rights of way. The agreement may be withdrawn
 - Permissive bridleway }

Vocabulary	
biofuel	a class of renewable energy derived from living materials
consumption	the action of using up a resource.
crude oil	oil in its natural form from the ground before it is refined into usable oil
emissions	an amount of a substance that is produced and sent out into the air that is harmful to the environment, especially carbon dioxide
hydropower	uses the natural flow of moving water to generate electricity
non-renewable	resources that will run out or will not be replenished in our lifetimes
Prime Meridian	the line of 0° longitude, the starting point for measuring distance both east and west around Earth – used for timezones
replenish	restore (a stock or supply) to a former level or condition.
solar power	conversion of energy from sunlight into electricity
urban planner	creates plans for the development of cities, towns
coal	combustible black or brownish-black sedimentary rock
dam	barrier that stops or restricts the flow of surface water or underground streams
energy source	the fuel used for the generation of the electricity
natural gas	a fossil fuel energy source
nuclear power	use of nuclear reactions to produce electricity
renewable	comes from sources that are constantly and naturally renewed
wind power	use blades to transfer the wind's kinetic energy into electricity
six-figure grid reference	the grid squares on your Ordnance Survey map

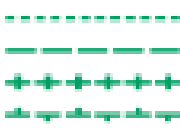



Question 1 Which of these are renewable energy sources?	Start of unit	End of unit
Coal		
Gasoline		
Solar power		
Sunflower oil		
Fossil fuels		
All of the above		

Question 2: Which of the following best describes renewable energy?	Start of unit	End of unit
Energy from fossil fuels		
An energy source that is not used up		
Energy that is generated by burning up something		
All of the above		
None of the Above		

Question 3: Why is developing renewable energy important to life on Earth?	Start of unit	End of unit
We will run out of energy		
Renewable energy can last forever		
Renewable energy produces less pollution		
Other energy sources will be used up and gone forever		
All of the above		

Question 4: True or False	Start of unit	End of unit
Renewable energy is generally better for the environment as it produces less pollution.		

Question 5: What do these symbols refer to when looking at an Ordnance Survey map		
Start of unit		<hr/> <hr/> <hr/> <hr/>
End of unit		<hr/> <hr/> <hr/> <hr/>

Question 6: Name some negative effects of Hydropower:		
Start of unit		
End of unit		

Question 7: What type of renewable energy comes from building dams on rivers?	Start of unit	End of unit
Wind power		
Geothermal energy		
Solar power		
Hydropower		
Wave and tidal power		

Question 9: What does this symbol represent on OS maps? PC	Start of unit	End of unit
a pub		
a police station		
a park		
an information centre		

Question 8: What type of renewable energy comes from tapping heat generated inside the Earth?	Start of unit	End of unit
Wind power		
Geothermal energy		
Solar power		
Hydropower		
Wave and tidal power		

Question 10: How many time zones are there on Earth?	Start of unit	End of unit
12		
256		
7		
24		