



Saint Mary's Catholic Voluntary Academy

Geography- Where does our energy come from?

	Composite	Components	Vocabulary
Lesson 1	I know where energy sources are important.	- I know what we use energy for. - I know examples of different sources of energy. - I know how to map significant energy trading routes.	energy source, coal, biofuel, crude oil, hydropower, natural gas, non-renewable, renewable, solar power, nuclear power, wind power
Lesson 2	I know the benefits and drawbacks of different energy sources.	- I know the difference between renewable and non-renewable energy sources. - I know the benefits and drawbacks of an energy source. - I know what to consider when deciding which energy source to use.	dam, emissions, fossil fuel, landscape, ocean tide, regenerate
Lesson 3	I know how energy is generated in the United States.	- I know the significance of the Prime Meridian and time zones. - I know how the United States generates its energy. - I know how to use a digital map to identify energy production in an area of Texas.	consumption, headquarters, reliable, producer, Prime Meridian, replenished, time zone
Lesson 4	I know how energy sources are distributed in an area.	- I know how to locate cities in the UK. - I know how to use grid references on an OS map to locate human and physical features. - I know how to describe the similarities and differences between two areas.	six-figure grid references, offshore, onshore
Lesson 5	I know how to explain reasons for choosing an energy source.	- I know the benefits and drawbacks of an energy source. - I know how to justify the location of an energy source.	annotate, considerations, urban planner



Saint Mary's Catholic Voluntary Academy

Geography- Where does our energy come from?

	Composite	Components	Vocabulary
		I know how to make considerations when planning new energy source facilities.	
Lesson 6	I know how to collect and present data on where to position a solar panel on the school grounds.	- I know how to use interview questions to collect qualitative data. - I know how to draw a sketch map using contours where needed. - I know how to use data collected to justify a proposed location for a solar panel.	contour lines, justify, sea level

Prior Knowledge

To know that the global population has grown significantly since the 1950s.
 To know which factors are considered before people build settlements.
 To know migration is the movement of people from one country to another.
 To know the name of many countries and major cities in Europe and North and South America.
 To know the name of many counties in the UK.
 To know the name of many cities in the UK.
 To confidently name the twelve geographical regions of the UK.
 To know that London and the Southeast regions have the largest population in the UK.
 To know the global population has grown significantly since the 1950s.
 To know which factors are considered before people build settlements.
 To know migration is the movement of people from one country to another.
 To know some negative impacts of humans on the environment.
 To know that qualitative data involves qualities, characteristics and is largely opinion based and subjective.
 To know that GIS is a digital system that creates and manages maps, used to support analysis for enquiries.
 To know that a pie chart can represent a fraction or percentage of a whole set of data.
 To be aware of some issues in the local area.
 To know what a range of data collection methods look like.
 To know how to use a range of data collection methods.



Saint Mary's Catholic Voluntary Academy

Geography- Where does our energy come from?

Adaptive Learning

Cognitive	Physical	Sensory	Social/Emotional
L1- Can use the <i>Activity: Mapping energy</i> (support) to map exports and imports using the pre-labelled countries. L2- Can use the 'Nuclear energy' page of the <i>Activity: Energy sources</i> and work as a group with a supporting adult to read the information. L3- May need to work with an adult or in a small group to identify human features on the digital map. L4- Could use four-figure grid references to identify the grid square the features are in. L5- Could draw a map of their proposed town and where they would place their chosen energy source, annotating to explain their decisions.			

Review Notes

National Curriculum Links

Locational knowledge

Pupils should be taught to:

- Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.
- Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).



Saint Mary's Catholic Voluntary Academy

Geography- Where does our energy come from?

- Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time.

Place knowledge

Pupils should be taught to:

- Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.

Human and physical geography

Pupils should be taught to:

- Describe and understand key aspects of:
human geography, including types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

Geographical skills and fieldwork

Pupils should be taught to:

- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.
- Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world.

Unit Outcomes

Key Knowledge



Saint Mary's Catholic Voluntary Academy

Geography- Where does our energy come from?

Pupils who are **secure** will be able to:

- 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.

To know the name of many countries and major cities in Europe and North and South America.

To know the name of many cities in the UK.

To know the Prime/Greenwich Meridian is a line of longitude which goes through 0° and determines the start of the world's time zones.

To know that natural resources can be used to make energy.

To know some positive impacts of humans on the environment.

To know some negative impacts of humans on the environment.

To know that contours on a map show height and slope.

To know that qualitative data involves qualities, characteristics and is largely opinion based and subjective.

To know what a range of data collection methods look like.

To know how to use a range of data collection methods.

Key Skills

Locating more countries in Europe and North and South America using maps.

Locating major cities of the countries studied.

Locating some key physical features in countries studied on a map.

Locating key human features in countries studied.

Locating many cities in the UK.

Identifying key physical and human characteristics of the geographical regions in the UK.

Understanding how land use has changed over time using examples.

Explaining why a locality has changed over time, giving examples of both physical and human features.

Identifying the location of the Prime/Greenwich Meridian and time zones, (including day and night) and explaining its significance.

Using longitude and latitude when referencing location in an atlas or on a globe.

Describing and explaining similarities between two environmental regions studied.

Describing and explaining differences between two environmental regions studied.

Understanding how climates impact on trade, land use and settlement.

Using maps to explore wider global trading routes.

Understanding some of the impacts and causes of climate change.



Saint Mary's Catholic Voluntary Academy

Geography- Where does our energy come from?

Giving examples of alternative viewpoints and solutions used in regards to an environmental issue and explaining how this links to climate change.

Describing and understanding economic activity, including trade links.

Suggesting reasons why the global population has grown significantly in the last 70 years.

Understanding the distribution of natural resources both globally and within a specific region or country studied.

Recognising geographical issues affecting people in different places and environments.

Describing and explaining how humans can impact the environment both positively and negatively, using examples.

Confidently using and understanding maps at more than one scale.

Using atlases, maps, globes and digital mapping to locate countries studied.

Using atlases, maps, globes and digital mapping to describe and explain physical and human features in countries studied.

Identifying, analysing and asking questions about distributions and relationships between features using maps (e.g settlement distribution).

Recognising an increasing range of Ordnance Survey symbols on maps and locating features using six-figure grid references.

Recognising the difference between Ordnance Survey and other maps and when it is most appropriate to use each.

Using models and maps to talk about contours and slopes.

Selecting a map for a specific purpose.

Confidently using the key on an OS map to name and recognise key physical and human features in regions studied.

Accurately using four and six-figure grid references to locate features on a map in regions studied.

Making sketch maps of areas studied including labels and keys where necessary.

Making an independent or collaborative plan of how they wish to collect data to answer an enquiry-based question.

Selecting appropriate methods for data collection.

Designing interviews/questionnaires to collect qualitative data.

Conducting interviews/questionnaires to collect qualitative data.

Deciding how to present data using plans, freehand sketch maps, annotated drawings, graphs, presentations, writing at length and digital technologies (photos with labels/captions) when communicating geographical information.

Drawing conclusions about an enquiry using findings from fieldwork to support your reasonings.