St Winefride's Catholic Voluntary Academy
Curriculum Plan for Geography
Year Group: 5
Title of Unit: Eco-Leaders

Key Knowledge and Skills- Map work:

- Use an index to find a place name.
- Find the correct page in an atlas by using the index.
- Explain why maps have symbols on them.
- Recognise some map symbols on an Ordnance Survey map.
- Give co-ordinates by going across first and then up.
- Find a location from four-figure coordinates.
- Find differences between photographs of the same location.
- Find similarities between photographs of the same location.
- Find differences between maps of the same location.

Key Knowledge and Skills- eco leaders:

- Identify important features of a settlement site.
- Rank human needs by importance to me.
- Tell you the main stages of electricity distribution.
- Use an atlas to locate a given place.
- Identify what makes an energy source renewable.
- Find the country or town of origin on a food label.
- List some foods that are produced in the UK.
- Tell you what food miles are.
- Identify ways to reduce food wastage.
- Tell you that food shortages are a global problem.
- Tell you about the causes of food shortages in a country in South or Central America.

- Reflect on my own role in reducing resource shortages around the world.

Year 5 Geography- Eco-leaders

Key Vocabulary	
atlas	A collection of maps often of each country in the world.
compass	A tool used for showing direction.
digital map	A map that uses technology such as a satnav.
easting	The numbers used in a grid reference that run west to east.
grid references	The numbered squares on a map used to locate a place.
National Grid	A system used to split Great Britain into 100km squares.
northing	The numbers used in a grid reference that run south to north.
Ordnance Survey maps	Detailed maps of Great Britain where each square represents 1km squared ($1km^2$).
symbols	Small pictures, letters or lines that represent a feature.

Compass Points

Four-Point Compass

N - north

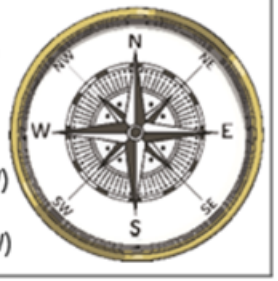
E - east

S - south

W - west

Eight-Point Compass

north (N)
north-east (NE)
east (E)
south-east (SE)
south (S)
south-west (SW)
west (W)
north-west (NW)



Symbols

- Maps use symbols instead of words to label real-life features.
- A key on the map tells you what the symbol means.

	Nature Reserve		Cycle Trail		Footpath
	Motorway		Train Station		Place of Worship

Year 5 Knowledge organiser
Fair Trade
Why buy Fairtrade?

FAIRTRADE

What is Fair Trade?
The Fairtrade Foundation was established in 1992. Fairtrade is a way of buying and selling products that allows producers (farmers) to be paid a fair price for their produce and have better working conditions. Identified by the Fairtrade mark, products include both food and non-food items such as bananas, tea, coffee, chocolate and cotton.

Enrichment
Fair Trade festival

History
- Use a wide range of evidence to compare and analyse how the lives of people have changed through Fairtrade.

Geography
- Using atlases, identify the equator and countries that produce Fairtrade products.
- Understand the advantages of Fairtrade.
- Be able to explain the impact of Fairtrade on the environment.

Art and design and technology
- Design a comic strip to describe the journey of a Fairtrade product

Key facts
1. Fairtrade means that farmers are paid a fair minimum price for their produce.
2. The Fairtrade Premium provides extra money to develop farmer's communities and protect their environment.
3. Having a minimum price means farmer's can plan for the future because they have a regular income.
4. Women are able to become involved and have a say. Previously, it would have been only the men allowed to do this.
5. Fairtrade supports 1.65 million farmers and farm workers in 74 countries.
6. When we buy Fairtrade products, we are helping farmers in poorer countries live better lives.

Key Vocabulary	
Consumer	Person who buys goods or services
Exports	Goods are sent to another country for sale
Fairtrade	Trade where producers are paid a fair price for their goods
Fairtrade Premium	An additional sum of money, which goes towards developing the farming community and protecting the environment farmers live and work in.
Imports	Where good are brought into a country for sale
Industries	A group of businesses that provide a particular product or service
Negotiation	A discussion between two or more people with the aim of an agreement being reached.
Producer	person or business that makes or grows goods for sale
Retailer	A person or business that sells goods or services
Trade	Buying or selling goods or services

Key Knowledge and Skills Expectation

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Element 1: Power – Teaching Sequence

	Direct Teaching (including resources and links)	Pupil Tasks
Lesson 1 What do we need?	Show children the image of a settlement area. Why have settlers chosen to build here? Encourage children to think about site, aspect, resources and links. Discuss children's ideas, drawing out ideas related to each theme - Site (dry, flat, firm ground), Aspect (sufficient sunlight, shelter from prevailing winds), Resources (close to a water source, food supplies nearby), Links (convenient for transport links). Share the features of a settlement site. Which of these do children think is the most important? Which is least important? Sort them together using the sorting diagram (most important on the green space, least important on the red space). Ask children to look again at the needs cards they sorted. Which needs do they think would have been important 100 years ago? 1000 years ago? Establish that basic human needs (those at the top of children's diamonds) may have remained the same, but that at different times in history, middle level needs may have varied. What would you miss if you moved to a settlement from 100 years ago? 1000 years ago?	In mixed ability groups, children sort the needs cards from the What Do We Need Activity Sheet, ranking them by importance to them. Which is the most important feature? Which is the least important feature? Do the group agree? How can you reach a consensus? Are there any features missing from the cards? What would you add/remove?

Lesson 2 Where does our power come from?	Ask a child to switch the classroom lights off and on again. What is happening? Why? (In the case of an energy saving bulb or fluorescent tube, electricity flowing through the tube cause chemicals – usually phosphorus - in the tube to give off light) How does the electricity get to the bulb? Chart the journey of electricity backwards from the classroom light through wires to a consumer unit and then back through power lines. From there, back to a substation and then through high voltage lines to a power station. Share this video. It shows how power demands varied around the UK at different times of day. Replay the video a second time with the sound turned down. Ask children to look at the meter in the bottom left corner. Explain that the units are gigawatts (GW) and that the icons show the time and temperature. Pause the video after 15 seconds (approx. 03:00) What is happening? What can you tell me about the power usage? Can you explain why that is happening? Ask the children to jot down their answers to these questions each time you stop the video. Pause the video again after 30 seconds (07:12), 40 seconds (13:12), 50 seconds (17:00) and 1 minute 25 seconds (22:24). (Note: the clock jumps back to 17:00 several times to show power usage in various regions at this time). Children may be interested to know that the peak usage (58GW) is the equivalent of everyone in the UK turning on a microwave all at the same time!	Children use atlases and Power Stations in the UK Activity Sheet to identify the locations of UK power stations. LA Children use the suggested key to locate nuclear and coal fired power stations. MA Children use the suggested key to identify coal, CCGT, nuclear and pumped storage power stations. HA Children create their own key to identify coal, CCGT, nuclear and pumped storage power stations.

Lesson 3 Renewable or non-renewable	Following on from last lesson, children to research aspects of energy production in more details. Group presentations	

Element 2: Food – Teaching Sequence

	Direct Teaching (including resources and links)	Pupil Tasks
Lesson 1 Where our food comes from?	Show children a small selection of items from a supermarket shopping basket. Where has this food all come from? Talk backwards through the supply chain to each item's producer. Where was the item produced? How can we find out? What do you think food miles are? Explain the idea that food miles are the distance an item has travelled from where it was produced to where it was consumed, including all the miles in the supply chain process. Why should we worry about food miles? (The further an item travels, the more CO2 is likely to be released into the atmosphere, contributing to climate change.) Food miles difficult to calculate accurately, but was can use the information on food labels to give us an idea of how far an item might have travelled.	Children use the Food Miles Activity Sheet and this distance calculating website to work out "as the crow flies" distances between a food's country of origin and the school. Note: children will need to use the clear button after each calculation. LA Children record the distance between the places in miles, focusing on foods from Europe. MA Children record the distance between the places in miles and mark the place of origin on a European map.

		HA Children record the distance between the places in miles and mark the place of origin on a world map.
Lesson 2 Fair Trade	• Explain how longitude and latitude lines are used to describe the location of things around the world. • Show map with the tropics labelled. Describe the tropics, then show climate zone map. Do you know the names of any countries in the tropics? Children to discuss their ideas. • Explain that today we will continue our journey, visiting Jamaica. Has anyone ever been to Jamaica? What are the conditions? If any children have been to Jamaica, they could share their ideas. Go on to show the slide describing the tropical conditions. • Share information about how bananas are grown, cultivated and distributed in Caribbean countries. • Do you recognise this logo? Show a close up of a fair trade sticker on some bananas. Explain what is meant by fair trade, and how it benefits banana growers. • Explain that today we will be looking closely at how bananas are grown, cultivated and shipped to the UK.	On worksheet 3B, children are to read a numbered list of statements about the journey of bananas from the Dominican Republic to the UK. They are then to design an illustrated flow chart explaining the process visually. • Using books and the internet, children are to find out more about fair trade and how it benefits farmers. The Fair Trade sheet has some basic information as well as a list of websites where children may find relevant information. • Children are to produce a poster, radio advert or a news article which will persuade people to choose fair trade products when they go shopping. The Fair Trade sheet also has a few tips to help children write persuasively.

Lesson 3 Climate Zones	• Show the climate zone map. Today we will be continuing our journey, visiting Italy. Can you see which climate zone Italy is in? Do you know anything about the climate conditions in Italy? Children to discuss their ideas. • Explain the conditions in a mediterranean climate zone. Because of these conditions, certain foods grow well. Italy is famous for its food. Can you think of some Italian foods that you like? Children to discuss their ideas. Do you like any of these? Show various Italian foods. • Go on to describe the main types of farming in southern Italy. • Tomatoes grow well in mediterranean climate zones. However, by using farm land in a different way, British farmers are also able to grow tomatoes. Explain how this is achieved. • Explain that today we will be explaining how farm land is used to grow food in Italy.	Give pairs of children the Crops and Livestock cards and The Farmer's Fields sheet. They should discuss what each field could be used for and group the cards accordingly. Once they have agreed, children should choose one card for each field and write their choice on the table, giving reasons for their choice.

Element 3: The future – Teaching Sequence

	Direct Teaching (including resources and links)	Pupil Tasks
Lesson 1 Conserving resources	Ask children what they think the terms efficiency and conservation mean when referring to natural resources. (Conservation means using as few resources as possible; efficiency means using resources as wisely as possible) Demonstrate the meaning of these two terms using the demonstration explained in the Adult Guidance Efficiency and Conservation. Use the Efficiency and Conservation Activity Sheet to record how many children had stopped eating at each timing point. Which part of the demonstration do you think is the best way to reduce use of natural resources like food, energy and water? Show children the information regarding food wastage in the UK. What kinds of foods are most often thrown away? Why do you think that is? Share the suggestions for ways to reduce food wastage. Which do you think would have the biggest impact on reducing food waste?	Children use the Saving Resources Activity Sheet to calculate their own potential savings by making small changes to their daily routines or their houses. LA Children calculate potential water savings by making small changes. MA Children calculate potential energy savings by making small changes HA Children calculate potential CO2 reductions by making small changes.
Lesson 2 Is There Enough for Everyone?	Show children the world map. Where do you think you might find families without enough food to eat? Click to highlight the areas affected by hunger. Tell children that although there are developing countries in the world affected by hunger, famine emergencies account for less than 8% of hungry families. Click twice more to highlight the areas most affected by hunger –	Children use Action Against Hunger website to research the impact of food shortages in a given country. LA Children research Bolivia.

	Asia and east, central and southern Africa. Click again to highlight all the areas affected by hunger. The remaining 92% of hungry families are found throughout the world living in long-term hunger. Are you surprised by this? Remind children of the ideas that they looked at in Lesson 5 – ways to reduce food, water and energy waste in order to reduce their carbon footprint. Why are these important in ensuring equitable access to resources? (It is increased production of CO2 that is causing global warming. As our planet heats up, extreme weathers, floods and droughts are all more likely to occur. These in turn influence farming, food production and access to drinking water.) In other cases political unrest, war and economic crises have affected both food supplies and food prices.	MA Children research Haiti. HA Children research Peru.