Geography Flight Path - Year 5 - Going Global

Subject:	**Unit:**	**Year:**	**Term:**	**Key Vocabulary** (max. 10) ***indicates etymological link***
Geography	Going Global	5	3	

Big Question:
To what extent do the sources of energy we use depend on where in the world we live?

National Curriculum objectives covered:

Locational Knowledge

- Locate the world 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.

Human and Physical Geography

- 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.

Land use - how humans use land.
Rural - *areas with low population density.*
Urban - *areas with high population density.*
Energy - *something that gives something else power.*
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.*

Natural *resources - *materials taken from Earth's environment.*
Fossil fuels - a *material formed from the remains of plants and animals over millions of years.*

***Export** - Selling goods to other countries*
***Import** – buying goods from other countries*

Key knowledge:
Know that land use can be agricultural, urban, rural.
Know that energy can be renewable or non-renewable.
Know how the environment, land, rivers, oceans and seas are used to produce energy.
To know how different climates, environments and natural resources result in the different energy used/traded in the UK, USA and Chile.

Concepts:
Settlements
Environment
Climate
Industry
Trade

<u>Key Locations of Study</u>

UK & British Isles:
Northumbria - Port of Blyth

Worldwide:
USA - Texas
Chile - River BioBio, Atacama Desert, Bosque de Fray Jorge National Park (Ovalle)

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Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6
LQ: what are the key human and physical characteristics of North America, South America and Europe	LQ: What is the difference between renewable and non-renewable energy?	LQ: How is energy generated in the United States of America?	LQ: How is energy generated in the United Kingdom?	LQ: How is energy generated in Chile?	LO: To what extent do the sources of energy we use depend on where in the world we live? Compare USA, UK and Chile
I know that:					
Focus on the following locations: UK, USA, Chile. I know the: Continent Capital city (and major cities) Population Climate Key human and physical characteristics. Environmental regions.	Natural resources are anything that people use that come from natural resources; freshwater, air, fossil fuels, metals, minerals, soil, wood. Land use depends on the environment, climate, human/ physical features and natural resources. Energy can be renewable or non-renewable. Non-renewable energy has been created and stored over millions of years and will eventually run out. Renewable energy can be made by humans harnessing technology and the physical features of the geographical location. It is sustainable. Renewable and non-renewable energy can be traded.	USA: Study of energy consumption (by source e.g. oil, coal, gas, etc) over time Largest consumption of renewable energy is wind. Largest consumption of non-renewable energy is oil. Major land use of USA: pasture, forests crops (agriculture) Case study of Texas. Midland city - oil Stanton - wind power Import and export of energy: the USA exports crude oil to the UK. Midland is half way along the main trainline from East to West - originally for cattle farming import/export in 1882 (before cars) but subsequently for export of crude oil since the oil boom in 1920.	UK: Study of energy consumption (by source e.g. oil, coal, gas, etc) over time Largest consumption of renewable energy is wind. Largest consumption of non-renewable energy is gas. Major land use of UK: 70% is agriculture Case study of North East of England: Industrial Revolution, coal, oil rigs in North Sea moving towards wind energy. Import and export of energy UK would have exported coal not since industrial revolution?	Chile: Study of energy consumption (by source e.g. oil, coal, gas, etc) over time. Largest consumption of renewable energy is hydro & solar. Largest consumption of non-renewable energy is oil. Major land use of Chile: ~20% agricultural, ~20% forest - the remaining 57% 'other' including wasteland - desert, the Andes. Case study of Atacama Desert - driest non-polar desert in the world - solar energy - CEME1 Solar plant Hydro power - HPP Angostura Rio Biobio. Coastal wind farm - Ovalle. Long coastline - potential tidal. Chie Import and export of energy Major copper reserves therefore mining and export; green energy export is increasing as Chile becomes a world leader in renewable energy generation.	A country's use of energy sources is impacted directly by the geography of the country: Climate and therefore solar/ wind reliability. River/coastal proximity for generation of hydro/tidal electricity. Fossil fuels: naturally occurring in the location and economic ability to exploit this. Fossil fuels are finite - are they running out?

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I Can:					
Use maps to locate places around the world. Locate USA, Chile and UK. Compare key environmental regions of North America, South America & Europe. Use the language of hemisphere, continent, ocean, physical geographical features, human geographical features.	Share at least 3 examples of renewable sources of energy and 3 examples of non-renewable sources of energy. I can describe what renewable and non-renewable mean. I can describe the key problem of fossil fuels due to the greenhouse effect.	I can show Midland, Texas on a digital map. I can use Midland as an example as to why energy generation takes place in certain locations and how settlements are developed because of this. I can state that the USA mostly generates oil (non-renewable) and wind (renewable) energy.	I can show Port of Blyth, Northumbria on an OS map and point out symbols for wind farms. I can use Port of Blyth as a case study for how non-renewables are an old industry. I can begin to use 6 digit grid references to locate specific places in an OS map.	I can show Chile, South America on a digital map. I can state Chile as a country that is prioritising renewable energy. I can explain how the geographical physical features of Chile help with this: Atacama Desert, high altitude, equator - solar River Biobio from the altitude of the Andes - hydro Long exposed Pacific coastline - wind	I can compare the geographical features of the three locations and relate this to the generation of renewable and non-renewable energy.