|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Substantive knowledge**  Our curriculum supports pupils to:   * Understand concepts, themes and genres * Acquire and apply knowledge and skill * Develop vocabulary | | | **Disciplinary knowledge**  Our curriculum supports pupils to:   * Interpret and use geographical sources and equipment * Understand and describe geographical processes * Identify cause, consequence, continuity. * Present, organise and communicate. | |
| **KS2 TIER 3 -  *all children will access KS1 Tier 2 at least once (Cycle A or B). Where learning is repeated, formative assessment will be used to ensure knowledge has been retained and can be retrieved, applied and deepened.*** | | | | |
| **Key concepts**  **Key vocabulary** | **Location and place** | **Biomes and Natural Processes** | | **Ecology + Human Processes** |
| TIER 3  Cycle A | **North America & Asia** | **Biomes - Forest (tropical)/Forest (temperate) Grassland (savannah), Desert** | | **Climate Change and sustainability** |
| Accessing Prior Learning?  **Can you describe South America? (KS2 Tier 2)** | Accessing Prior Learning:  **Can you name and describe different types of aquatic biome? (KS2 Tier 2)** | | Accessing Prior Learning:  **What effects have humans had on the forests of South America? (KS2 Tier 2)** |
| Acquiring + Attempting New Learning:  North America:   * North America is made up of many countries (including Canada, USA, Mexico) * North America is in the northern hemisphere * Northern most part of the continent is in the Arctic Circle, whilst the southern part is much closer to the equator so the climate is diverse.   Asia:   * Asia is the largest continent both in size and population. * There are 49 countries in Asia including India, China and Pakistan. * Asian continent has a very diverse climate including arctic, tropical and desert landscapes. * Mount Everest in the Himalayas is the highest mountain in the world.   CASE STUDY: **Canada**   * Environmental regions * Key physical and human characteristics * Major cities | Acquiring + Attempting New Learning:  Temperate Forest biome:   * Temperate forest experiences all 4 seasons. * Lots of rain fall and good fertile soil. * The plants of the forest grow in 3 different layers. The canopy, understory and forest floor * Made up of both deciduous trees and evergreen trees * Temperate forests are found in eastern North America, north eastern Asia, and central and western Europe * Each species of animal has adapted to survive the winter.   Grassland (Savanna):   * Savannas have a rainy season in the summer and a dry season in the winter * The savanna is rolling grassland with scattered trees and shrubs. Plants have adapted to survive the dry season. * Savannas are generally found between the desert biome and the rainforest biome. They are mostly located near the equator. * Largest savanna is in Africa   Compare  Compare these biomes to each other and aquatic. | | Acquiring Subject Knowledge  Climate Change:   * The main cause of climate change is burning fossil fuels such as oil, gas, and coal. * 5 of the countries responsible for leading the cause of climate change are in Asia. * Temperatures are rising two times faster in Asia than the global average, which is associated with an increase in weather-related natural disasters and their severity. * By 2050, parts of Asia may see increasing average temperatures, lethal heat waves, extreme flooding, severe hurricanes and drought.   Renewable energy/alternatives to fossil fuels  **Solar**:   * The sun shines on the solar panels and the panels absorb the energy, creating direct current (DC) electricity. * The electricity is fed into what is called a solar inverter. This converts the current into alternating current (AC) electricity. * The AC current is then used to power the appliances in your home. * Any power that your home does not need gets sent back (or sold) to the National Grid for others to use. |
| Cycle B | Acquiring + Attempting New Learning:  North America:   * North America is made up of many countries (including Canada, USA, Mexico) * North America is in the northern hemisphere * Bordered by Arctic Ocean, Atlantic Ocean, Pacific Ocean * Northern most part of the continent is in the Arctic Circle, whilst the southern part is much closer to the equator.   Asia:   * Asia is the largest continent both in size and population. * There are 49 countries in Asia including India, China and Pakistan. * Asia is surrounded by the Arctic Ocean to the north, Pacific Ocean to the east and the Indian Ocean to the south. * Asian continent has a very diverse climate including arctic, tropical and desert landscapes. * Mount Everest in the Himalayas is the highest mountain in the world.   CASE STUDY: **United States of America**   * Environmental regions * Key physical and human characteristics * Major cities | Acquiring + Attempting New Learning:  Tropical forest**:**   * Tropical rainforests are hot and wet. They have high temperatures and heavy rainfall throughout the year. * Tropical rainforests are found near the equator * Amazon Rainforest is biggest rainforest in the world * A rainforest is typically made up of four key layers: emergent, upper canopy, understory, and forest floor   Desert:   * Deserts are defined by their lack of rain. * Deserts get very hot during the day but quickly get cold at night. * Only certain types of plants can survive the harsh environment of the desert. These include cactus, grasses, shrubs, and some short trees * Many of the animals who live there are nocturnal. They sleep during the heat of the day and come out when it is cooler at night * The largest hot and dry desert in the world is the [Sahara Desert](https://www.ducksters.com/history/africa/sahara_desert.php) in Northern Africa.   Compare   * Compare these biomes to each other and aquatic. | | Acquiring Subject Knowledge  Climate Change:   * The main cause of climate change is burning fossil fuels such as oil, gas, and coal. * 5 of the countries responsible for leading the cause of climate change are in Asia. * Temperatures are rising two times faster in Asia than the global average, which is associated with an increase in weather-related natural disasters and their severity. * By 2050, parts of Asia may see increasing average temperatures, lethal heat waves, extreme flooding, severe hurricanes and drought.   Renewable energy/alternatives to fossil fuels  **Wind**:   * Wind is a type of solar energy. * Wind is caused by the uneven heating of the atmosphere by the sun, the differences in the earth's surface and the rotation of the earth. * Wind flow can be harvested by wind turbines to generate electricity. |
|  | Applying Essential Learning:  **Describe Asia and North America (North America in more detail).** | Applying Essential Learning:  **Name and describe more than one biome. Can you compare them?** | | Applying Essential Learning:  **What effects have humans had and continue to have on the environment? What solutions might there be to slow down the effects?** |
| Mapping + fieldwork | Use a map, atlas, aerial photos or globe to locate countries and describe features.  Northern and southern hemisphere  Use 6 figure grid references.  Observe, measure, record and present human and physical features in the local area. | | | |
| Impact evidence:   * Pupil knowledge * Class floor books * Displays * English books | | | | |