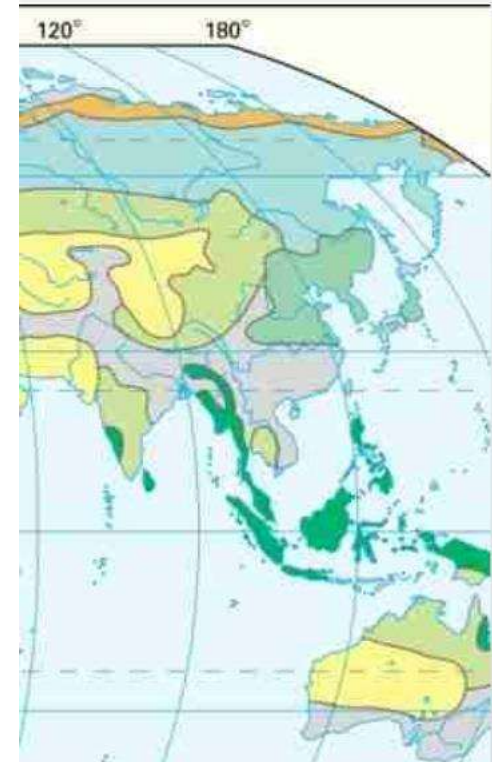


Year 8 Topic 1 Ecosystems

This unit of work follows the ecosystems along the 120° line of longitude.

What is an ecosystem? – a community of plants and animals and the environment they live in. It can be a small ecosystem like a pond or a **global ecosystem** for example a desert. **Biome** is another word for global ecosystem.



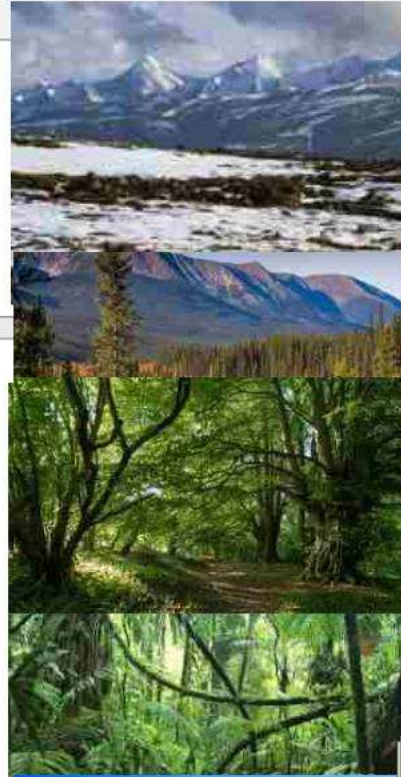
The different ecosystems we learn about are

- Tundra: cold and dry (Russia)
- Taiga: cold with some rain (Russia)
- Temperate: mild and wet (China)
- Tropical: hot, humid, wet (Philippines)
- Desert: dry and hot (Australia)

What causes different ecosystems to occur where they do?

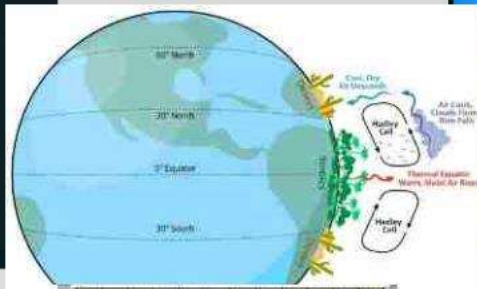
The curve shape of the earth means that places at lower latitudes (near the Equator) receive more concentrated sun. For places at higher latitude, the sun's heat is more spread out and is weaker.

Also, movement of air can create or not create rain. At the Equator, air rises and therefore forms rain. So, we get hot and rainy tropical rainforests at the Equator.



In this unit of work we also learn about:

- How the finless porpoise is under threat and at risk of extinction in the River Yangtze due to human activity.
- How the pangolin is one of the most trafficked (illegally traded) animals in the world
- The huge importance of coral reefs and how local people in Indonesia are protecting them
- That eco-tourism is a way to preserve the tropical rainforest and allow people to make money



KEY WORDS: global ecosystem, biome, National Park, vegetation layer, adaptation, deforestation, logging, eco-tourism, selective logging, permafrost, indigenous, nomadic, vegetation, flora, fauna, biodiversity, omnivores, carnivores, herbivores, producers, consumers, decomposers, abiotic, biotic, threat, GDP, rehabilitation, economic, human, extinction, food chain, mitigate, conservation, coral bleaching, mining, adaptation, emergent, decomposition, nutrient, infrastructure, precipitation, air pressure, high pressure, low pressure, sustainable