





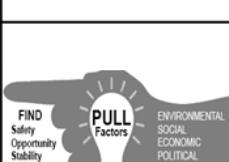



| Key Vocabulary... | | Key concepts... | | Picture this... |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Urbanisation | Urbanisation is the increase in the proportion of people living in towns and cities. | Urban area |  An urban area is a city or town. Urban areas are very developed, meaning there is a density of human structures such as houses, commercial buildings, roads, bridges, and railways. | Dhavari-Slum in Mumbai, India  |
| Migration | The movement of humans from one place to another. This can be locally or globally | Rural area |  A rural area is an open swath of land that has few homes or other buildings, and not very many people. A rural areas population density is very low. Usually the countryside. | Wealth Inequality - Rio De Janeiro, Brazil  |
| Refugee | Refugees are people who must leave their home area for their own safety or survival. | Push factor |  Push factors are those that force the individual to move voluntarily, and in many cases, they are forced because the individual risk something if they stay. Push factors may include conflict, drought, famine, or extreme religious activity. | Refugee camp, Syria  |
| Slum | Slums refer to informal settlements in urban areas that are densely populated | Pull factor |  Pull factors are those factors in the destination country that attract the individual or group to leave their home. | The BIG questions.. 1. List push and pull factors for the area you think in. 2. Explain what challenges governments will have in the future with populations rising. |
| Sustainable | Sustainable means that a process or state can be maintained/stays the same or at a certain level for as long as is wanted. | | | |
| Future generations | Future generations are the generations of people to come in the future, after the currently living generations of humans. | | | |
| Tudor Entertainment | | Into the future... | | Deeper Learning... |
| Industrialisation in the 1800's in Britain caused cities to grow because, factories began to be built and needed workers. People then wanted to live close to their work place and this caused cities and towns to grow rapidly. Liverpool and Manchester were two of these cities. | | By 2050 the world's population is expected to reach 9.8 billion. Nearly 70 percent of this booming population, (6.7 billion people) are projected to live in urban areas. National geography state there are 10 key ideas to think about to keep our growing population sustainable for future generations.  | | Counter urbanisation is when large numbers of people move from urban areas into surrounding countryside or rural areas. |

Activity: Design your own sustainable city of the future. Draw and label the features of your 2D or 3D model and explain how it will help keep the people and environment safe for future generations.

Key Vocabulary...

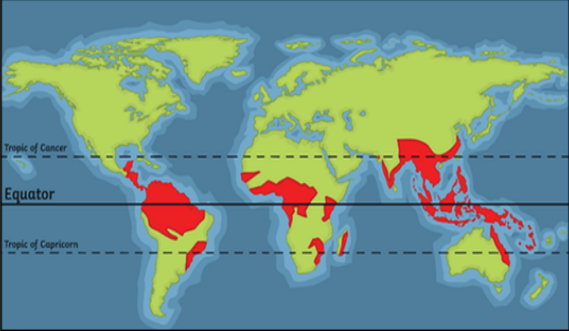
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|---------------|--------------------------------------------------------------------------------------------------|
| Ecosystem | An ecosystem is a system in which organisms interact with each other and with their environment. |
| Afforestation | The planting of new trees and forests |
| Deforestation | The cutting down of trees and forests |
| Food Web | A complex system showing how plants and animals depend on each other for survival |
| Abiotic | Anything that is not alive e.g. Sunlight, Oxygen |
| Biotic | Anything that is alive e.g. plants, animals, fungi |
| Adaptation | A change that enables better survival in an environment |

Rainforest nutrient cycle

The **hot, damp conditions** on the forest floor allow for the **rapid decomposition** of dead plant material. This provides plentiful nutrients that are easily absorbed by plant roots. However, as these nutrients are in high demand from the many fast-growing plants, they do not remain in the soil for long and stay close to the surface. If vegetation is removed, the soils quickly become **infertile**.

Food Web and Chains

Simple **food chains** are useful in explaining the basic principles behind ecosystems. They show only one species at a particular trophic level. **Food webs** however consists of a network of many food chains interconnected together.



Tropical Rainforest Biome

Tropical rainforest cover about **2 per cent** of the Earth's surface yet they are home to **over half of the world's plant and animals**.

Climate of Tropical Rainforests

- Evening temperatures rarely fall below **22°C**.
- Due to the **presence of clouds**, temperatures rarely rise above **32°C**.
- Most afternoons have heavy showers.
- At night with no clouds insulating, temperature drops.

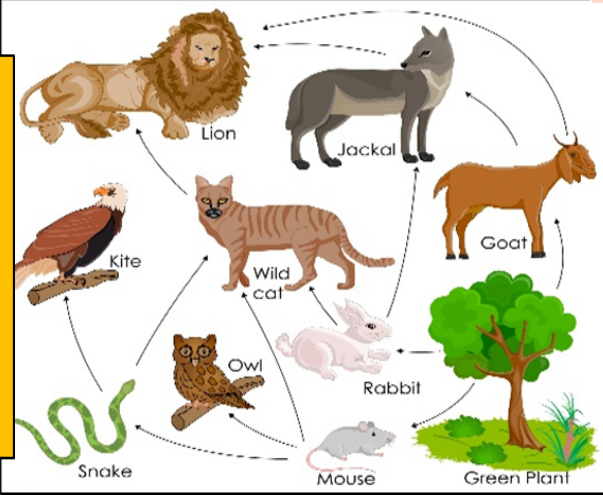
Interdependence in the rainforest

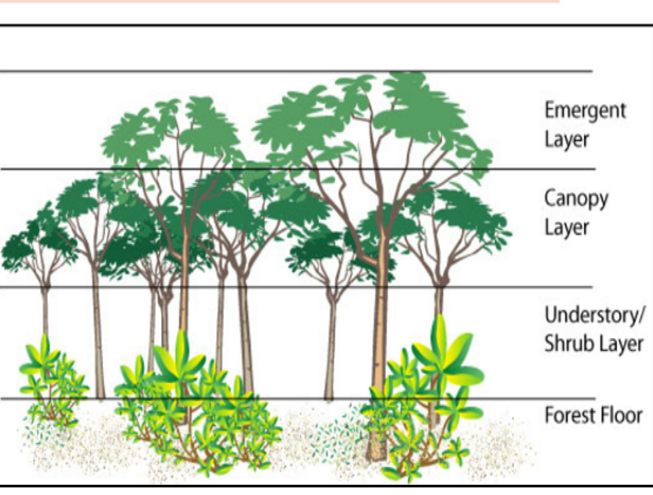
A rainforest works through **interdependence**. This is where the plants and animals **depend on each other** for survival. If one component changes, there can be **serious knock-up effects** for the entire ecosystem.

What are the causes of deforestation?

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>Logging</div> <ul style="list-style-type: none">Most widely reported cause of destructions to biodiversity.Timber is harvested to create commercial items such as furniture and paper. | <div>Agriculture</div> <ul style="list-style-type: none">Large scale 'slash and burn' of land for ranches & palm oil.Increases carbon emission.River saltation and soil erosion increasing due to the large areas of exposed land.Increase in palm oil is making the soil infertile. |
| <div>Mineral Extraction</div> <ul style="list-style-type: none">Precious metals are found in the rainforest.Areas mined can experience soil and water contamination.Indigenous people are becoming displaced from their land due to roads being built to transport products. | <div>Tourism</div> <ul style="list-style-type: none">Mass tourism is resulting in the building of hotels in extremely vulnerable areas.Lead to negative relationship between the government and indigenous tribesTourism has exposed animals to human diseases. |
| <div>Energy Development</div> <ul style="list-style-type: none">The high rainfall creates ideal conditions for hydro-electric power (HEP).The Bakun Dam in Malaysia is key for creating energy in this developing country, however, both people and environment have suffered. | <div>Road Building</div> <ul style="list-style-type: none">Roads are needed to bring supplies and provide access to new mining areas, settlements and energy projects. |

Homework Project:
Research and create a model of the rainforest. Show the layers, plants and animals that live in it. You can make this out of anything you have at home- rubbish, cardboard, lego – whatever you have at home.





| Layers of the Rainforest | |
|--------------------------|----------------------------------------------------------------------------------------|
| Emergent | Highest layer with trees reaching 50 metres . |
| Canopy | 80% of life is found here as It receives most of the sunlight and rainfall . |
| Understory | Consists of trees that reach 20 metres high . |
| Shrub Layer | Lowest layer with small trees that have adapted to living in the shade . |

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