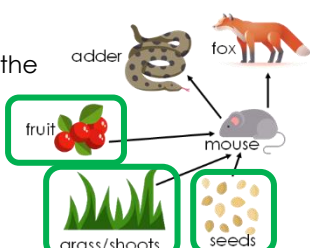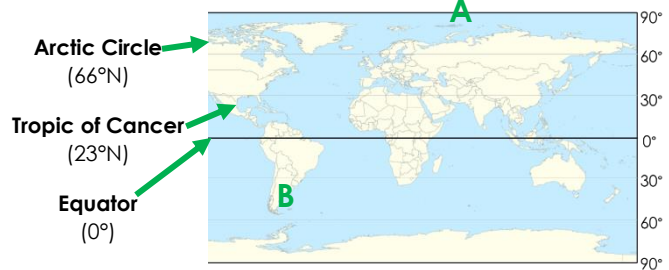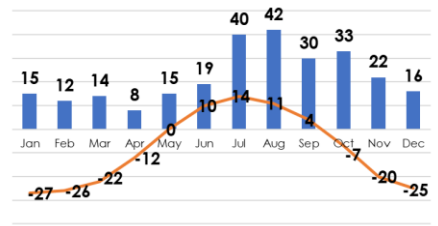# Year 7 Unit 4- Brilliant Biomes

1. Define biome.

A large scale ecosystem.

2. Give 3 examples of biomes.

Tundra / coniferous forest / deciduous forest / hot desert / tropical rainforest.

3. Circle 2 sources of energy for the mouse.

4. Give 2 biotic ecosystem components.

- Plants / trees
- Animals
- People

5. Using arrows, link the 3 given latitude line names (below) to their location on the map.

Arctic Circle (66°N)

Tropic of Cancer (23°N)

Equator (0°)

6. On the map in box 5, label the following:

- Put an **A** anywhere along the 90°N line of latitude.
- Put a **B** in South America at 50°S.

7. At what latitudes are tropical rainforests found?

In the low latitudes / near the equator / between the Tropics of Cancer (23°N) and Capricorn (23°S).

8. At what latitudes are deciduous forests found?

Between 30° - 60°.

9. Why do deciduous trees lose their leaves?

To conserve energy, water, and nutrients over the winter.

10. How does leaf litter affect soil in the deciduous forest biome?

It adds nutrients to the soil making it very fertile.

11. Give 2 reasons why deciduous forests are moderately biodiverse.

- Leaf fall adds nutrients which support plant growth.
- Variety of plants/forest layers = habitat for a range of animal types.
- Many plant and animal types can survive in the temperate climate.

12. Study the tundra climate graph then complete the sentences.

a) Temperature is shown by a red line. It is measured in degrees Celsius.

b) Rainfall is shown by blue bars. It is measured in millimetres.

c) The lowest average rainfall is 8mm in the month of April.

Stretch questions

13. What evidence did you gather during fieldwork showing that we live in the deciduous forest biome? (L8, Biomes Fieldwork Record)

During the Photo Annotation I noticed that our local vegetation changes throughout the seasons like deciduous trees, e.g., losing leaves in autumn/winter and growing buds and leaves in spring.

I identified tree types during the Vegetation Analysis, e.g., oak and London Plane trees in my local area. These are deciduous trees.

Also, by comparing a climate graph of my local area to the climate graphs of 4 major biomes, I could see that local climate data was very similar to the averages for the deciduous biome.