S2 Biology Ecosystems Learning Outcome checklist

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| activity | by the end of this activity you should know |
| Components of an ecosystem | * a **habitat** is where an organism lives
* a **population** is a group of organisms of the same species
* **community** is all the populations in an ecosystem
* an **ecosystem** is the community and their physical habitats
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| Food chains | * all food chains start with a green plant
* the green plants at the start of the food chain are called **producers**
* producers use the sun’s energy to make food
* all the animals ain the food chain are **consumers** because they eat food made for them
* primary consumers are **herbivores** and are the first animals in a food chain
* secondary consumers are **carnivores**
* **omnivores** can eat plants or animals and can be secondary or primary consumers
* the arrows in a food chain show the **direction of energy flow**
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| Food webs | * many interconnected food chains make a **food** **web**
* the more links a food web has the more stable it is
* when animals are removed form a food web it can impact other organisms in the food web
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| Measurement in an ecosystem | * distribution of organisms is affected by biotic and abiotic factors
* **abiotic** factors are non- living and include – temperature, moisture, light intensity, pH
* **biotic** factors are those influenced by living things and include – availability of food, predators and disease
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| Sampling Techniques | * the abundance of organisms can be estimated using sampling techniques
* **quadrat** – for sampling plants
* **pitfall trap** – for sampling ground crawling animals
* **sweep net** – for sampling aquatic animals
* **tullgren funnel** – for sampling animals living in soil
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| Biomes | * **Biomes** are very large ecological areas on the earth’s surface, animals and plants adapting to their environment, often defined by rainfall and temperature.
* name the 6 main terrestrial Biomes as **tundra**, **taiga**, **grassland**, **tropical** **rainforest**, **temperate forest**, **desert**
* give the main features (climate, flora and fauna) of two terrestrial Biomes
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| Adaptations for Survival | * animals and plants have adapted to the ecosystem they live in
* **adaptations** are feature that help organisms to survive in their habitat
* give an example of an animal or plant’s adaptations
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