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 |
| 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** |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |