N5 Biology LE 1 Ecosystems LEARNING OUTCOMES

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| \_+\* | | by the end of each lesson you should know (including meanings of **key words**) |
| **Ecosystem components** |  | * I can state that **a species** is a group of organisms which can interbreed to produce fertile offspring * I can state that **biodiversity** as the variety of living things in an ecosystem. * I can state that a **population** is the number of individuals of the same species in an area. * all the populations (plant & animal) in an ecosystem is called the **community** * I can state that an **ecosystem** consists of all the organisms (the community) living in a habitat and the non-living components with which the organisms interact. |
| **Food chains** |  | * I can construct **a food chain** to show the relationship where one organism feeds on the previous one in a series and in turn provides food for the next one * I can state that a **producer** is an organism (usually a green plant) which can create its own food * I can state that the arrows in a food chain or food web show the flow of energy between species * I can state that a **consumer** is an organism which eats another organism for food * I can state that **herbivores** eat plant matter, **carnivores** eat meat and **omnivores** eat both meat and plants * I can state that a **predator** hunts other animals for food and that **prey** is the animal that is hunted for food. |
| **Food Webs** |  | * I can state that interconnected food chains from an ecosystem are called a **food web** * I can construct a food web * I can explain what happens to other species when one species is removed from a food web. * I can state that food webs with many interconnections are more stable than those with few interconnections |
| **Niches** |  | * I can state that a **niche** is the role that an organism plays within a community. * I can explain that a niche relates to the **resources** an organism requires in its ecosystem, such as light and nutrient availability and its **interactions** with other organisms in the community * I can explain that the niche of an organism involves **competition** and **predation** and the **conditions** it can tolerate such as temperature |
| **Competition** |  | * I can state that competition in ecosystems occurs when resources are in short supply. * I can state that **interspecific** competition occurs amongst individuals of different species for one or a few of the resources they require. * I can state that **intraspecific competition** occurs amongst individuals of the same species and is for all resources required. * I can explain that intraspecific competition is **more intense** than interspecific competition because it occurs amongst individuals of the same species and is for all resources required. |