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| **Parklands primary School** |
| **Topic – food chains and food webs year 4 Strand - Biology** |
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| **What should I already know?** | **What will I know at the end of the unit?** |
| * Animals can be grouped into carnivores, herbivores and

omnivores and other ways in which to classify animals.* The differences between the teeth (incisors, molars, canines) of carnivores and herbivores.
* Examples of habitats (including microhabitats) and the animals and plants that can be found there.
* Plants need sunlight to grow.
* Living things depend on each other to survive.
* The seven life processes and that nutrition is one of them.
* Nutrition is the life process by which animals get energy.

How environments are changing. | * A food chain is a simple way to show the direction in which energy moves from the producer to the various consumers to the top or tertiary consumer.
* The producer (a plant) gets its energy from the Sun.

* In this example, the producer is the wheat, which gets its

energy from the Sun.* The mouse eats the wheat and gets its energy from it. The mouse is the primary consumer.
* The mouse is then eaten by the owl, which is the secondary consumer. The owl gets its energy from the mouse. The owl is the predator and the mouse is the prey.
* The owl is then eaten by the wolf, which is the tertiary consumer. The wolf gets its energy from the owl.

The arrows show the direction in which the energy travels. |
| **Vocabulary** | **What is a food web?** |
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| carnivore | an animal that eats meat |
| classification key | a system which divides things into groups or types |
| energy | the ability and strength to do physical things |
| environment | all the [circumstances,](https://www.collinsdictionary.com/dictionary/english/circumstance) people, things, and events around them that influence their life |
| food chain | [a series](https://www.collinsdictionary.com/dictionary/english/series) of [living](https://www.collinsdictionary.com/dictionary/english/living) things which are [linked](https://www.collinsdictionary.com/dictionary/english/link) to each other because each thing [feeds](https://www.collinsdictionary.com/dictionary/english/feed) on the one next to it in the series |
| food web | a combination of food chains that integrate to form a network |
| habitat | the [natural](https://www.collinsdictionary.com/dictionary/english/natural) environment in which an animal or plant normally lives or grows |
| herbivore | an animal that onl[y eats](https://www.collinsdictionary.com/dictionary/english/eat) plants |
| incisor | the teeth at the front of your mouth which you use for biting into food |
| lifeprocesses | There are seven processes that tell us that living things are alive |
| microhabitat | a small part of the [environment](https://www.collinsdictionary.com/dictionary/english/environment) that supports a habitat, such as a fallen [log](https://www.collinsdictionary.com/dictionary/english/log_1) in a forest |
| molar | the large, flat teeth towards the back of your mouth that you use for chewing food |
| nutrition | the process o[f taking](https://www.collinsdictionary.com/dictionary/english/taking) food into the body and [absorbing](https://www.collinsdictionary.com/dictionary/english/absorb) the nutrients in those foods |
| omnivore | person or animal eats all [kinds](https://www.collinsdictionary.com/dictionary/english/kind) of food, including both [meat](https://www.collinsdictionary.com/dictionary/english/meat) and plants |
| organism | a living thing |
| predator | an animal that kills and eats other animals |
| prey | an animal hunted or captured by another for food |
| primary consumer | an organism that feeds on producers . They are always herbivores. |
| producer | organisms that make their own food using energy from the Sun. |
| Secondary consumer | organisms that eat primary consumers for energy |
| tertiary consumer | Tertiary consumers eat primary and secondaryconsumers as their main source of food |

 | * A food web shows the direction in which energy travels when animals and producers (plants) are eaten by more than one thing.
* A food web shows multiple food chains where there are multiple feeding relationships.

* When part of the food chain is removed, this has an impact on the other parts of the food chain. The number of some species will increase, while the population of others will decrease.
* This can have a direct impact on the survival of the species.
* The population of tertiary consumers depends on healthy populations of producers, primary and secondary consumers.
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| **Investigate** |
| * Match predators and their prey depending on their habitats.
* Create food chains for different habitats and compare them. How do the producers, predators and prey compare? What are their teeth like?
* Compare animal populations and explain why some populations (e.g. insects) might be higher than others (e.g. wolves)
* Explore what happens when part of a food chain is removed.
* Create food webs.
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| Question 1: Look at this food chain. Draw arrows to show the direction in which the energy travels. |
| These questions are basedon the food chain above. | Start of unit: | End of unit: |
| Question 2: What is the producer in the food chain? |  |  |
| Question 3: What is the primary consumer? |  |  |
| Question 4: Give an example of a predator from the food chain. |  |  |
| Question 5:Give an example of prey from the food chain. |  |  |
| Question 6: Which habitat would you find this food chain in? |  |  |
| Question 7: What type of teeth would the fox have? Explain why. |  |  |
| Question 8: A grasshopper is typically a herbivore. Explain what this means. |  |  |
| Question 9: Name two things to this food chain that will happen if frogs become extinct. |  |  |
| Question 10: Where do plants get their energy from? |  |  |