	<b>7D Ecosystems</b>
--	----------------------

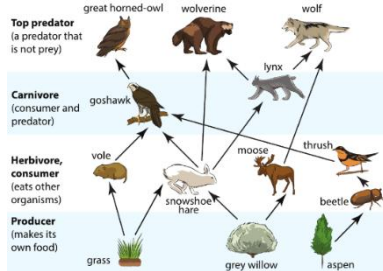
1. Variation	
<b>Habitat</b>	The place where an organism lives.
<b>Variation</b>	The difference between organisms.
<b>Continuous</b>	Type of variation where the measurement can be any value in a given range. <i>e.g. height, mass</i>
<b>Discontinuous</b>	Type of variation where the measurement falls into certain categories. <i>e.g. eye colour, blood group</i>
<b>Offspring</b>	The new organism produced by reproduction.
<b>Species</b>	Group of organisms that can reproduce to produce offspring that can also reproduce.
<b>Hybrid</b>	The offspring of two different species. They cannot reproduce.

2. Adaptations	
<b>Environment</b>	The conditions in a habitat.
<b>Adaptations</b>	Features that help an organism to survive in the environment where it lives.
<b>Cactus Adaptations</b>	<ul style="list-style-type: none"> <li>Stem stores water</li> <li>roots cover large area to absorb water</li> <li>no leaves to stop water loss</li> </ul>
<b>Community</b>	All the animals and plants that live in a habitat.
<b>Ecosystem</b>	The community and all the physical environmental factors together.
<b>Inherited Variation</b>	Variation between features caused by an organism's DNA

3. Effects of the Environment	
<b>Environmental Variation</b>	Variation caused by environmental factors. <i>e.g. hairstyle, accent</i>
<b>Nocturnal</b>	Animals that are only active at night.
<b>Deciduous</b>	Trees that lose their leaves in winter to stop water loss.

<b>Evergreen</b>	Trees with tougher leaves that don't lose much water so they keep them all year.
<b>Hibernation</b>	Organisms become inactive in winter so they don't need food.
<b>Migration</b>	Birds fly to warmer places for winter to find food.

4. Effects on the Environment	
<b>Resources</b>	What an organism needs to survive and grow- oxygen, food, water, etc. for animals.
<b>Population</b>	The numbers of a specific organism.
<b>Food Chain</b>	Represents what eats what in a habitat Grass → hare → lynx
<b>Competition</b>	Organisms compete over the resources that they need.
<b>Food Web</b>	Formed by joining together all food chains in an ecosystem.

Food Web Example	
 <p><b>Top predator</b> (a predator that is not prey): great horned-owl</p> <p><b>Carnivore</b> (consumer and predator): goshawk, lynx, wolf</p> <p><b>Herbivore, consumer</b> (eats other organisms): vole, hare, moose, thrush, beetle</p> <p><b>Producer</b> (makes its own food): grass, grey willow, aspen</p>	
<b>Interdependent</b>	Organisms in an ecosystem all depend on one another.
<b>Predator</b>	Eats another animal.
<b>Prey</b>	Eaten by another animal.

5. Transfers in Food Chains	
<b>Food Chain Arrows</b>	Represent energy passed between organisms.
<b>Energy Flow</b>	Energy is lost at each stage along a food chain due to being released by respiration for movement etc. and some food remains undigested.
<b>Pesticides</b>	Poison that kills pests.
<b>Pests</b>	Organisms that cause problems.