



# Habitats and Interdependence & Adaptations Games

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## Bat & Moth

**Aim:** To raise awareness of how bats find their food and predator-prey relationships.

**Equipment needed:** Two blindfolds

**How to play:** Organise the class into a large circle. Nominate two children to be bats and four children to be moths. The bats and moths stand inside the circle. The bats should wear the blindfolds. Once the bats are wearing the blindfolds, they start shouting "Bat". Every time "Bat" is shouted, the moths reply "Moth". The bats should use their hearing to locate the moths. Once caught, the moth should leave the circle. Repeat the game until everyone has had a chance to be a bat or a moth.

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## Food Web Game

**Aim:** To illustrate that plants and animals in a habitat are interdependent.

**Equipment needed:** Label to wear around neck with the name (or pictures) of different woodland plants and animals on. Everyone in the group will need a different label. Several pieces of string approximately 1m long.

Possible woodland plants and animals include: fox, rabbit, squirrel, badger, deer, mouse, worm, slug, snail, hedgehog, buzzard, blackbird, owl, grass, oak tree, nettles, dandelions, brambles, daisies, leaf litter.

**How to play:** Each child is given a label with a woodland plant or animal on it. The children then stand in a circle (optimum number of about 10-15 children). The Teacher asks if anyone can see something they think they may eat or that may eat them (e.g. A child with a fox label may say they can see a squirrel which they could eat). When a predator-prey relationship is identified in this way, a piece of string is used to "link" the two organisms together, each child holding an end. An organism may eat/ be eaten by more than one organism and, in this way, several predator/prey relationships can be created (E.g. A child may end up holding the ends of several pieces of string). As more pieces of string are added, a physical food web is created.

Once a food web has been created, the Teacher can explain that sometimes a habitat changes and this can have an impact upon the organisms living there. Imagine that the farmer was to shoot lots of the foxes in the woods. As the fox population would be affected, ask children with a fox label to pull gently on any strings they are holding. If others feel the pull on the string, they should then pull gently on any strings they are holding. This can then lead to a discussion about the number of organisms that were affected by the fox population decreasing and the impact this may have on the other organisms (e.g. Would other populations increase or decrease? Would their food sources change?).

Other examples to try include,

- An animal or plant being affected by disease.
  - A type of plant being removed by the Woodland Ranger.
  - Trees being chopped down to let more light to the woodland floor.
  - Climatic conditions increasing the growth and spread of a type of plant.
  - A harsh winter resulting in few hedgehogs surviving.
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## Food Chain Game

**Aim:** To construct food chains and think about what animals may eat.

**Equipment needed:** Pictures of animals and plants attached to elastic so that children can wear them on their heads. The pictures should be in sets to create a food chain. Possible food chains include:

- dandelion, rabbit, fox.
- dead leaves, snail, hedgehog, fox.
- dead leaves, slug, blackbird, owl.
- pond weed, caddis fly larva, dragonfly nymph, fish, heron.
- leaves, worm, centipede, robin, hawk.

**How to play:** 3, 4 or 5 children (depending on the size of the food chain) are asked to the front of the room. A picture is put on their head without the children seeing what it is. The children then need to get into the order of the food chain without speaking to one another. When the children think they are in the right order, they can introduce themselves to the rest of the class, "I am a plant and I give my energy to the rabbit", "I am a rabbit. I get my energy from the plant, which is a dandelion, and pass my energy on to the fox".

The process is repeated with different children and different food chains.

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## Seeds and Their Needs

**Aim:** To know what plants needs to grow and that birds may eat seeds.

**Equipment Needed:** Tokens with "air", "warmth", "water", "sunlight" on them (enough tokens for one for each of the group).

**How to play:** Explain that most of the class are going to be seeds. What do seeds need to grow? They need WATER and WARMTH to germinate. Once the plants start to grow above the ground, they need AIR and SUNLIGHT to

carry out photosynthesis. Four adults (or children) will stand in different areas of the playground and will each have a bundle of one of the types of token - WATER, WARMTH, AIR, SUNLIGHT. The children will be seeds and will run round trying to get all 4 different tokens. Before the game starts, two other children are chosen to be birds. The birds want to eat the seeds and run round trying to catch the seeds. If a seed gets all 4 tokens without being caught by a bird, they go to an area designated as the "growing area" and pretend to grow into a tall, healthy, tree. If a seed is caught by a bird before getting all 4 tokens and getting to the "growing area", then they must go to another designated area called the "bird's tummy". The game finishes when all the seeds are in either the growing area or the bird's tummy. This is a good point to discuss what happens to the seeds eaten by the birds. "Although they did not manage to grow this time, when the bird goes to the toilet, they will have another chance! Birds eating seeds is a method of seed dispersal - getting seeds further away from the plant that produced them". The game can be repeated with different children being the birds.