WEB GAME

Time: 20 minutes
Organisation: whole class activity

Learning Outcomes
- how food chains work
- that all living things rely on each other to survive
- Predator, prey
- Carnivore, herbivore, omnivore
- working together as a group
- using listening skills
- co-operating with each other

Equipment/Resources
Web Game, consisting of string, scissors and name cards
Name cards can be found on pages 4 –11. They can be used as they are, or the children could decorate them with pictures of their named creature.

Setting the scene
Think about all the other creatures that might like to eat a bumblebee.

Bumblebees are prey to mammals such as badgers, weasels, fox, mice, shrews, voles and possibly hedgehogs. They are prey to birds such as great tits, robins, fly catchers and invertebrates such as spiders, wasps, ants and some flies. The wax moth lays its eggs in the nest and the larvae eat the bumblebee food stores, eggs and grubs. A range of mites live in the nest and can often be seen "hitching a ride" on the bumblebee.

Activity
- Start by giving one sensible and responsible child the bumblebee name card. Ask them to hang the card around their neck.

- Give out the rest of the cards to the class. Hang the cards around each child's neck. Make sure each child knows which creature they are.

- Ask the children to think about what their creature would eat and what might eat them. Predator and prey. Are they herbivores, carnivores or omnivores?

- Show the ball of string and explain that the string will let us see how the bumblebee and the other creatures are connected.

- Firstly construct a simple food chain, for example

        flower - bumblebee - badger

- Ask which creature would eat the nectar and pollen from the flower. Is the bumblebee an herbivore, a carnivore or an omnivore?

- Cut a piece of string long enough to link the bumblebee to the flower and ask each child to hold the end tightly, keep the string taut without pulling and to keep their hands still.

- Ask the class which creature might eat the bumblebee. Cut another piece of string long enough to connect the badger to the bumblebee and ask the children to hold the ends. Is the badger herbivore, carnivore, omnivore? Is the bumblebee predator or prey?

- Ask the class which creature would eat the badger. The badger is at the top of the food chain as it has no natural predators. Dogs and humans may kill a badger, but they (usually) won't eat it. You could discuss what happens to the badger when it dies and connect it to a worm.

You have now constructed a simple food chain.

- To construct the food web, start back at the bumblebee.

- What other creatures would eat the bumblebee? Great tit, flycatcher, crab spider, ant, moth, fox, mouse, stoat

- Link all of these to the bumblebee with string (there will be lots of ends to hold).

- Which creatures would eat these? (The carnivores & omnivores). Link them together with string. You'll begin to find that other links become obvious, for example a fox will eat all birds, small mammals and minibeasts.

- Build up the 'web' until every child has a role and is connected. It will become very tangled at this stage! You can add other herbivores that would eat the flower, seeds, leaves such as caterpillar, greenfly, mouse and connect them to omnivores and carnivores already in the web

- Eventually you will have constructed a food web.

For younger children, to show how each living thing depends upon the others you can tell this story.

"For many years the bumblebees in our school lived contentedly, drinking the nectar and eating the pollen from the flowers that grew in the playing field.

One day a man with rucksack came along. He had been told that the school playing field was full of weeds. He thought he would make a nice green grassy lawn for the children to play on so he sprayed the flowers with weed killer. The flowers curled up their colourful petals, their leaves turned brown and they died.
But, what happened to the bumblebees?"

- Ask the flower to **gently** pull on all the strings they are holding to represent the wildflowers dying. Tell the rest of the creatures if they feel a tug on the strings they are holding to **gently** pull on their strings

- Repeat until all the children/creatures can feel the strings tugging

Conclusion
If the children felt a tug on their string, they are affected by the flowers dying and will have to find another place to live and find food – another habitat.

We should take care of the natural environment, because even a flower provides food and shelter for many different living things and if it is destroyed it affects all of them.

Extension Activity
Explore connections; what happens if the spider or another small creature disappears? Find out by asking the child with that card to gently pull their string and see where the connections are.

Worksheets

Two worksheets are included for use with this activity to help consolidate learning.

The food chain worksheet can be used to reinforce learning of food chains before starting the main food web activity. Use it to build 2 different bumblebee food chains as shown, or the children can create their own food chain, for example
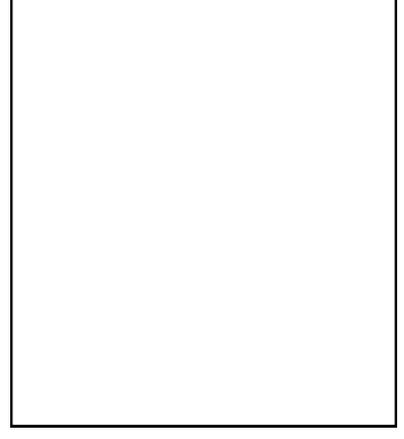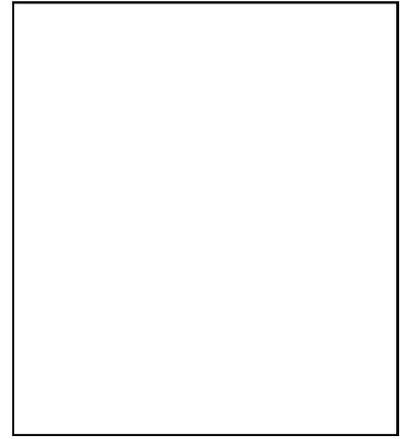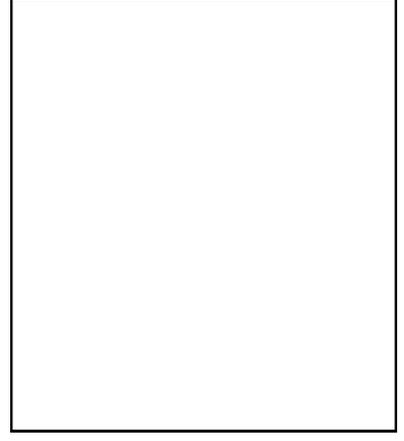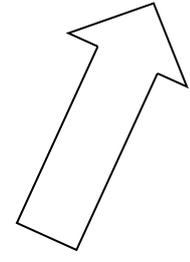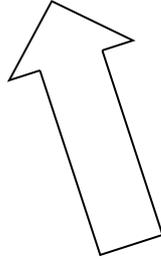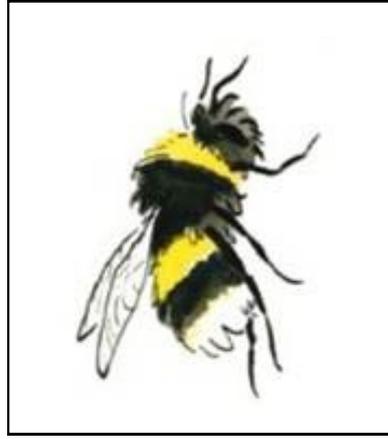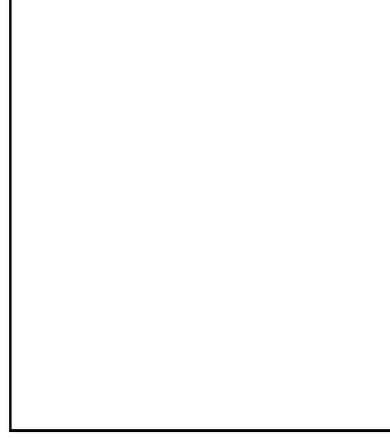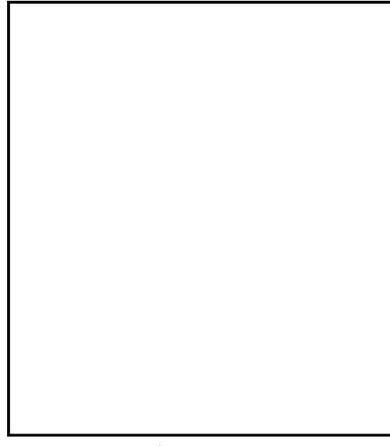
Flower - caterpillar - robin – kestrel

You can provide pictures for the children to cut out and paste onto the worksheet or they can draw and label their own.

The food web worksheet can be used at the end of the activity. There is an example of a completed worksheet included. You can provide pictures for the children to cut and paste onto the worksheet or they can draw and label their own.

Name: _____

What's eating you? Food Chains

Example Food Chains

flower → bumblebee → badger → [ ]

flower → great tit → fox
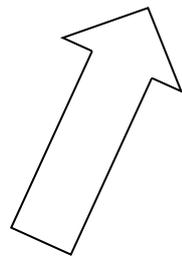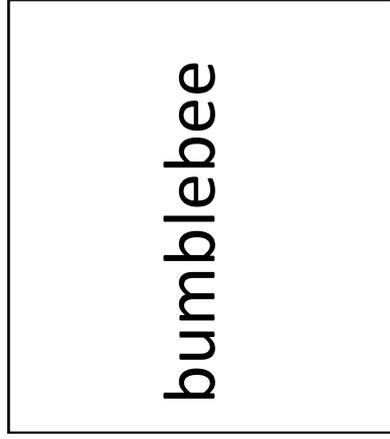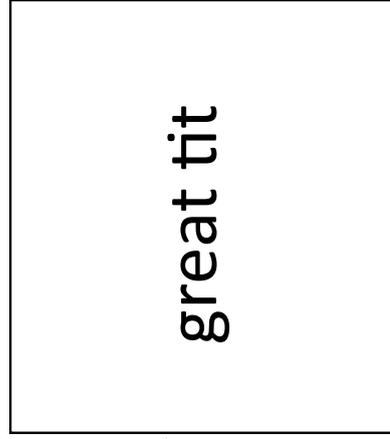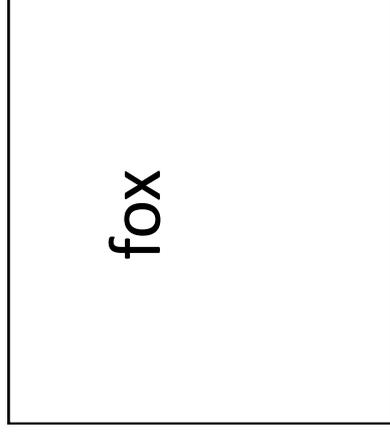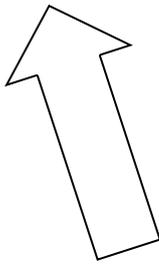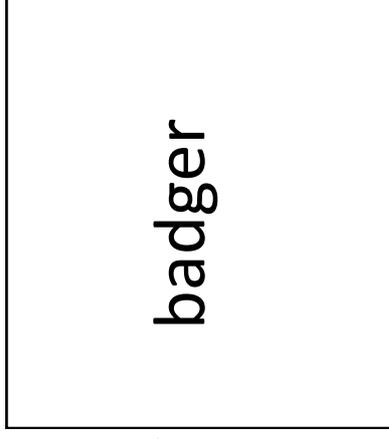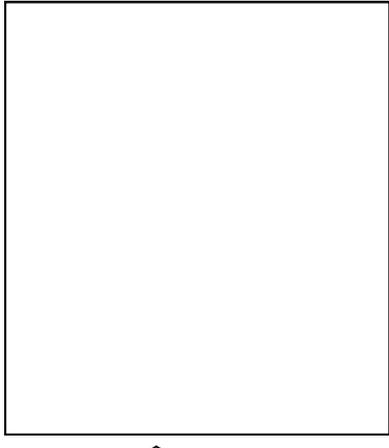
Flower

Seed

Leaf

Bumblebee

mite

moth

spider

ant

Badger

Great tit

Flycatcher

Fox

Weasel

Squirrel

mouse

blackbird

rabbit

worm

robin

greenfly

People

Bat

Owl

caterpillar

butterfly

hoverfly

cow

sheep

Kestrel

ladybird

shrew

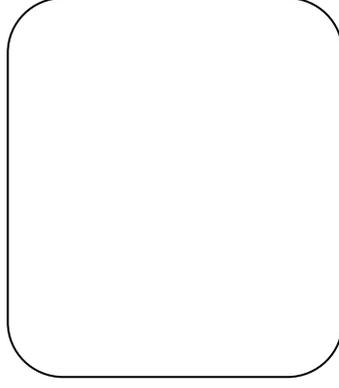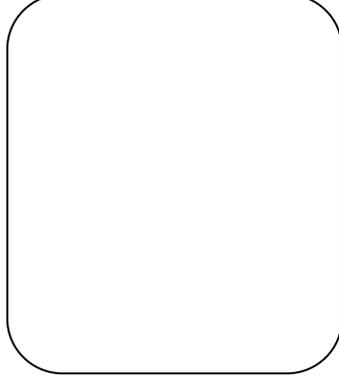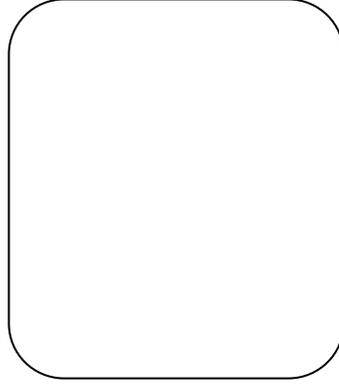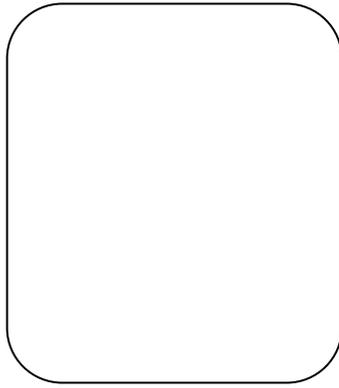# Wasp

Bumblebee Food Web
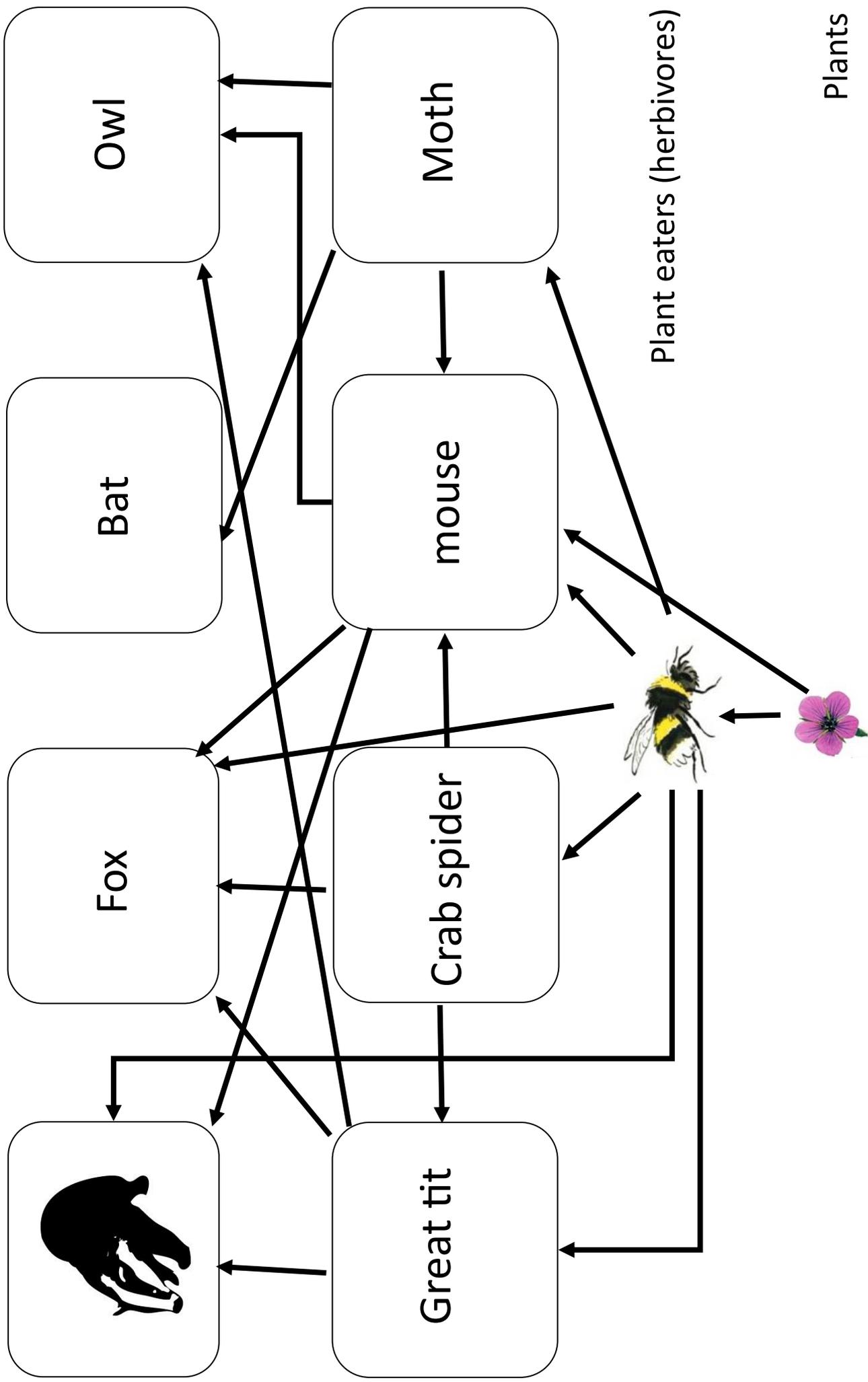
Name _____
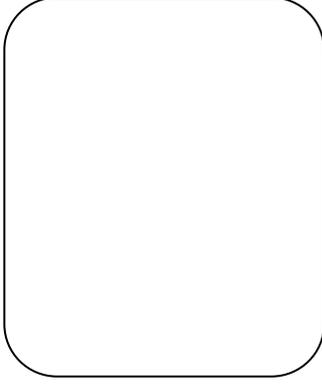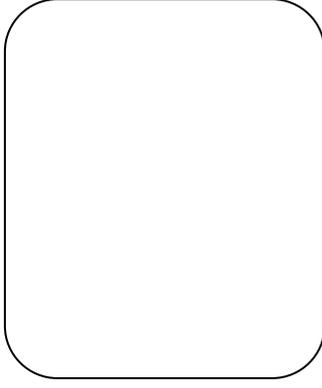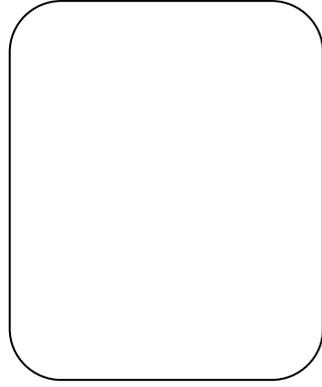
Meat eaters (carnivores)
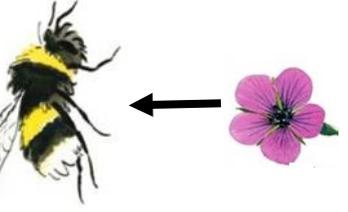
Plant eaters (herbivores)

Plants

Example Bumblebee Food Web

Meat eaters (carnivores)

Plant eaters (herbivores)

Plants

Owl

Moth

Bat

mouse

Fox

Crab spider

Great tit