Beast Creator Knowledge Organiser
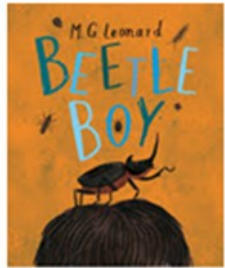
Subject Specific Vocabulary

invertebrate	An animal with no spine.
vertebrate	An animal with a spine.
arthropods	Invertebrates that have a tough exoskeleton, segmented bodies and jointed limbs.
annelids	Elongated, segmented animals such as worms.
molluscs	An unsegmented soft body that may have an inner or outer shell.
insects	An animal with six legs, three body parts and at least one pair of wings e.g. wasp
arachnids	An animal with four pairs of legs and two body segments e.g. spiders and scorpions.
myriapods	Small animals that have elongated bodies with numerous leg-baring segments e.g. centipedes.
crustaceans	An animal that has an exoskeleton e.g. crabs
antennae	A pair of long, thin sensors attached to the head of an arthropod.
exoskeleton	A hard outer layer that supports and protects an animals body.
mandible	A mouth part that grasps and cuts.
thorax	The middle segment of an insects body between the head and the abdomen.
abdomen	The last segment or end of an insect's body.
predator	An animal that kills and eats other animals.
prey	An animal hunted by a predator.
producer	A plant which is the start of a food chain- they produce their own food.
consumer	A person or animal that eats something in a food chain.

Subject Specific Vocabulary

habitat	The environment in which an animal lives.
life cycle	The series of changes that a living thing goes through as it matures.
reproduce	To produce new individuals of the same kind.
amphibian	Cold-blooded vertebrates with moist skin that can live on land or in water.
reptile	Cold-blooded vertebrates with scaly skin.
mammal	Warm-blooded vertebrates that give birth to live young.
bird	Warm-blooded vertebrates with feathers that lay eggs.
insects	An animal with six legs, three body parts and at least one pair of wings.
metamorphosis	A process by which an animal's body changes structure e.g. caterpillar to butterfly.
seed dispersal	The method by which a plant scatters its seeds to minimise competition for resources.

Sticky Knowledge

Classifying Animals
Learn and understand this vocabulary.

Body Parts
Learn and understand this vocabulary.
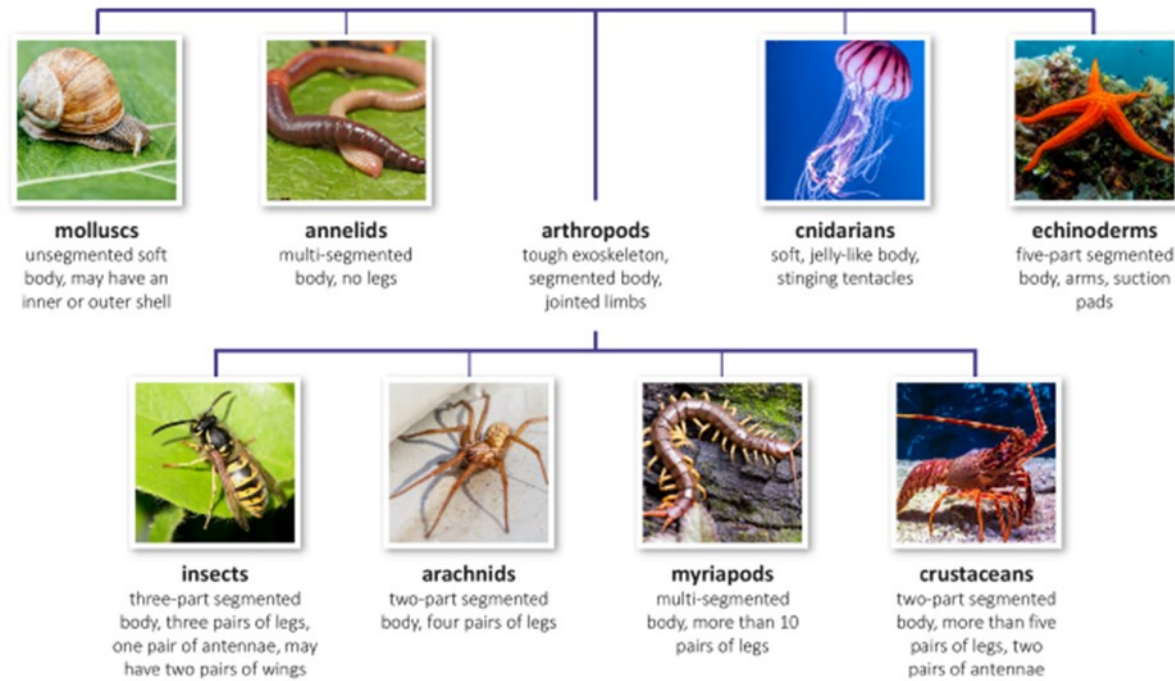
Food Chains/Food Webs
Learn and understand this vocabulary.
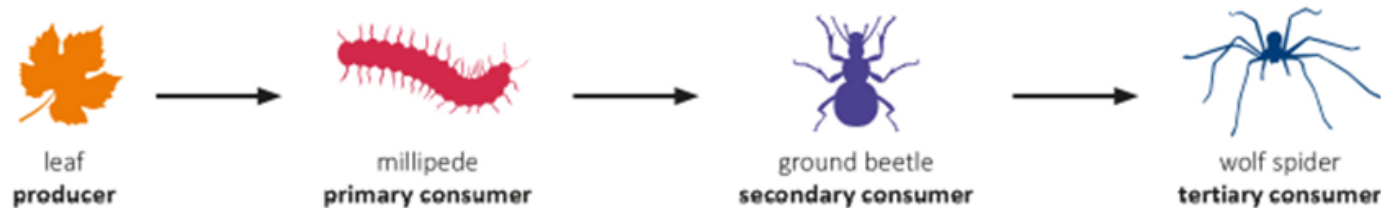
Life Cycles
Learn and understand this vocabulary.

Classifying invertebrates

There are thousands of invertebrate species all over the world that come in a variety of shapes, sizes and colours.

molluscs
unsegmented soft body, may have an inner or outer shell

annelids
multi-segmented body, no legs

arthropods
tough exoskeleton, segmented body, jointed limbs

cnidarians
soft, jelly-like body, stinging tentacles

echinoderms
five-part segmented body, arms, suction pads

insects
three-part segmented body, three pairs of legs, one pair of antennae, may have two pairs of wings

arachnids
two-part segmented body, four pairs of legs

myriapods
multi-segmented body, more than 10 pairs of legs

crustaceans
two-part segmented body, more than five pairs of legs, two pairs of antennae

Monarch butterfly life cycle

All living things have a life cycle. Some minibeasts have a life cycle called metamorphosis and experience complete transformations as they move from one stage to the next.

Stage 1 The female butterfly lays hundreds of **eggs** at one time and uses a special 'glue' to stick them to a leaf. This takes around 3–5 days.

Stage 2 Small **caterpillars** hatch from the eggs. Over the next 9–14 days, they eat an enormous amount of food, grow rapidly and shed their skin through a process called moulting.

Stage 3 The caterpillar transforms into a **pupa** called a chrysalis. The pupa is covered in a hard case. Over the next 8–15 days, the caterpillar's body transforms into a butterfly inside the pupa.

Stage 4 The **butterfly** emerges from the pupa and allows its wings to dry. After a few hours, the butterfly is ready to fly. It lives for between two and five weeks.

Stage 1 **Stage 2** **Stage 3** **Stage 4**

Food chains and food webs

Food chains show where living things get their energy. Food chains start with a producer that makes its own food. Anything that eats another living thing is a consumer. A food web shows how several different food chains are interconnected.

leaf
producer

millipede
primary consumer

ground beetle
secondary consumer

wolf spider
tertiary consumer