**My Knowledge Organiser – Grouping and Classifying Living Things Year 3**

**Vocabulary**

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| Environment | The area all around us. It can be natural or man-made |
| Habitat | The place where an animal or plant lives. |
| Adapted | When an animal or plant suits the place where it lives we say it is adapted to that place |
| Classification | When scientists put animals or plants into groups with other animals and plants that are very similar to it and give the groups names. |
| Key | A diagram that scientists use to help identify what an animal or plant is and which group it belongs to. |
| Endangered | When there are not many of a particular type of animal or plant left in the world |
| Flowering plants | Plants that produce flowers to help them reproduce |
| Non-flowering plants | Plants that do not produce flowers to help them reproduce such as conifers, grasses. |
| Vertebrates | An animal that has a backbone. |
| Invertebrates | An animal that does not have a backbone |

Scientists always try to put living things, that are **similar,** into groups.

Animals are put into 2 main groups;

* Vertebrates, with a backbone and
* Invertebrates, without a backbone.

These are the main vertebrate groups;

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| [Squirrels: Diet, Habits & Other Facts | Live Science](https://www.google.com/url?sa=i&url=https://www.livescience.com/28182-squirrels.html&psig=AOvVaw04VgH2fu3AVR7G59ZMpLbn&ust=1587395020109000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCIjGhbPh9OgCFQAAAAAdAAAAABAK) | A squirrel is a mammal because it gives birth to living babies and feeds the babies with milk.  We are also mammals. |
| [Clownfish Voice Changer](https://www.google.com/url?sa=i&url=https://clownfish-translator.com/voicechanger/&psig=AOvVaw2ni-T1rZukjcAFd80J7ZHe&ust=1587395676928000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCMiEw-zj9OgCFQAAAAAdAAAAABAO) | A clownfish is a fish. It lives in water and lays eggs. |
| [Barn Owl](https://www.google.com/url?sa=i&url=https://hawkandowltrust.org/about-birds-of-prey/barn-owl&psig=AOvVaw0km8ovmhydZwsit8IlfZvT&ust=1587395798713000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCNjB66bk9OgCFQAAAAAdAAAAABAD) | An owl is a bird. It is covered with feathers and it lays eggs. |
| Tiny DNA tweaks made snakes legless | Science | AAAS | A snake is a reptile. It is covered in scales and lays eggs. |
| Ride into 2019 like these cane toads using a python as an Uber ... | Toads and frogs live in water and on land and they lay eggs that change into tadpoles then adults. They are amphibians. |

Can you see the questions?

The answer must always be **yes** or **no**.

So, at each question, the animals are divided into 2 sets.

Mammals all share similar characteristics that we can see, so they go together in this **group**.

What characteristics do mammals share?

Classification Keys

Scientists use a classification key to work out the correct group that an animal or plant belongs to.

Here are 6 animals. We can use a key to sort them.

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| [The world's fastest ant clocks record speed of 108 times its own ...](https://www.google.com/url?sa=i&url=https://arstechnica.com/science/2019/10/the-worlds-fastest-ant-clocks-record-speed-of-108-times-its-own-body-length/&psig=AOvVaw1jUR1vUpBJE-wY2bgldD-T&ust=1587395592618000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCLCJwsPj9OgCFQAAAAAdAAAAABAD) | [House Mouse or Field Mouse? Types of Mice - Woodland Trust](https://www.google.com/url?sa=i&url=https://www.woodlandtrust.org.uk/blog/2019/01/types-of-uk-mice/&psig=AOvVaw1fnF2j-8Tfl1xXqZLbdKdt&ust=1587395626244000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCKjAw9Tj9OgCFQAAAAAdAAAAABAD) | [Clownfish Voice Changer](https://www.google.com/url?sa=i&url=https://clownfish-translator.com/voicechanger/&psig=AOvVaw2ni-T1rZukjcAFd80J7ZHe&ust=1587395676928000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCMiEw-zj9OgCFQAAAAAdAAAAABAO) | [Smoked baby chimp on menu leaves hotel facing court | World | The ...](https://www.google.com/url?sa=i&url=https://www.thetimes.co.uk/article/hotel-faces-court-for-putting-smoked-baby-chimp-on-menu-djp5hhfnz&psig=AOvVaw0omb6CJLeJBRDZkuj__bRW&ust=1587394963382000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCNDzvJnh9OgCFQAAAAAdAAAAABAD) | [It's Time to Give Back to Dolphins | Dolphin Project](https://www.google.com/url?sa=i&url=https://www.dolphinproject.com/blog/its-time-to-give-back-to-dolphins/&psig=AOvVaw1hu5xTRPSMch0Wr6x-62VP&ust=1587395073853000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCNDF1s3h9OgCFQAAAAAdAAAAABAD) | [Barn Owl](https://www.google.com/url?sa=i&url=https://hawkandowltrust.org/about-birds-of-prey/barn-owl&psig=AOvVaw0km8ovmhydZwsit8IlfZvT&ust=1587395798713000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCNjB66bk9OgCFQAAAAAdAAAAABAD) |

This is what the key might look like that scientists could use to sort these 6 animals;



Animals live in their special habitat because they find all they need to **survive** there; things such as……. food, water, shelter and a mate.

Scientists would say they are **adapted** to their habitat or environment. They are perfectly suited to live where they do.

How are these animals adapted to where they live?

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| [Can a worm cut in half sense anything? - BBC Science Focus Magazine](https://www.google.com/url?sa=i&url=https://www.sciencefocus.com/nature/can-a-worm-cut-in-half-sense-anything/&psig=AOvVaw2MeddeoiRIEGDzHMa-pgwR&ust=1587396873708000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCLDO0qfo9OgCFQAAAAAdAAAAABAD) | [Walking With Wild Polar Bears: How A Dramatic, Arctic Safari Will ...](https://www.google.com/url?sa=i&url=https://www.forbes.com/sites/jimdobson/2020/01/07/walking-with-wild-polar-bears-how-a-dramatic-arctic-safari-will-change-your-life-forever/&psig=AOvVaw1BPWXVfUnXmMo9_298Di9Y&ust=1587396909977000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCNDVpLno9OgCFQAAAAAdAAAAABAD) | [Spider Monkeys and some Wicked Cool Bugs! — SDM Diving](https://www.google.com/url?sa=i&url=https://sdmdiving.com/blog/2019/7/11/spider-monkeys-and-some-wicked-cool-bugs&psig=AOvVaw1-BimYdXiEQlbqf_WX6htZ&ust=1587397059913000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCOjY8v_o9OgCFQAAAAAdAAAAABAD) | [20 Amazing Animal Adaptations for Living in the Desert | Mental Floss](https://www.google.com/url?sa=i&url=https://www.mentalfloss.com/article/57204/20-amazing-animal-adaptations-living-desert&psig=AOvVaw1lUxc7wETaCMNSTBn5APac&ust=1587397146879000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCLi1_6rp9OgCFQAAAAAdAAAAABAD) | [Adaptations of Animals in the Tropical Rain Forest](https://www.google.com/url?sa=i&url=https://sciencing.com/adaptations-animals-tropical-rainforest-6862950.html&psig=AOvVaw18fjRBE-ylPVAI2fE5PNbG&ust=1587397197294000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCMj9rcbp9OgCFQAAAAAdAAAAABAD) |

The worm is thin so it can slither through the soil.

The polar bear is white so it is camouflaged.

The monkey has long arms and legs and excellent grip so it can live in trees.

The fox has fantastic hearing to hunt its prey that is underground.

The ocelot is well camouflaged but it can also climb trees to catch its prey.

If any of these animals was taken from its habitat and put into a different one it probably would not survive.

Also if the habitat **changed** in some way the animal may not survive.

What might happen to the monkey if people cut down all the trees?

What might happen to the polar bear if the climate warms up and the ice melts?