Living Things and Their Habitats: Mammals

Aim:

To describe the life cycle of a mammal by exploring the life cycles of different mammals.

To describe the life process of reproduction in some plants and animals by describing sexual reproduction in mammals.

I can describe the life cycles of different mammals.

Success Criteria:

I can describe the process of reproduction in mammals.

I can describe different types of mammals. I can describe and compare the life cycles of different mammals.

Key/New Words:

Sexual, reproduction, gamete, male, female, sperm, ovum, penis, vagina, fertilise, pregnancy, gestation, montreme, marsupial, young.

Resources: Lesson Pack

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Preparation:

Describing Reproduction Activity Sheet - 1 per child

Platypus Life Cycle Activity Sheet - as required

Kangaroo Life Cycle Activity Sheet - as required

Rabbit Life Cycle Activity Sheet - as required

Prior Learning:

The children will have learnt about sexual reproduction in plants in lesson 1. They may have learnt about the stages of the human life cycle in lesson 1 of the Y5 Animals Including Humans unit.

Learning Sequence



Life Cycle of a Mammal: Children discuss animals that are mammals using the information on the **Lesson Presentation**. Children talk to their partner about how they know that the stages of the rabbit's life cycle on the **Lesson Presentation** are in the correct order.





Sexual Reproduction: Describe sexual reproduction in mammals using the **Lesson Presentation**. Discuss monotreme - mammals such as the duck-billed platypus that do not give birth to their young, but lay eggs instead. Children watch **this BBC clip** showing the moment of conception and the growth of a baby. This clip should be checked beforehand to ensure it is suitable for the children in your setting.





Describing Reproduction: Children cut out the pictures on the differentiated **Describing Reproduction Activity Sheet** and stick them in the correct order with their descriptions. Look for children who understand the process of sexual reproduction, and can order and describe the stages.





Children cut and stick the descriptions provided.



Children write their own descriptions.



(CO)

Different Mammals: Describe the three different groups of mammals (placentals, marsupials and monotremes) and discuss examples of animals in each group using the **Lesson Presentation**.





Life Cycles of Mammals: Children describe the stages of the life cycle of one of the different mammals on the differentiated **Animal Life Cycle Activity Sheets**. Children can choose from a platypus (a monotreme), a kangaroo (a marsupial) or a rabbit (a placental). You may wish to assign the different animals to groups of children to ensure a similar number of children cover each animal. Look for children who can order and describe the life cycles.





Fill in the gaps in the descriptions using the key words.



Complete the descriptions of the stages.



Write their own descriptions of the stages.

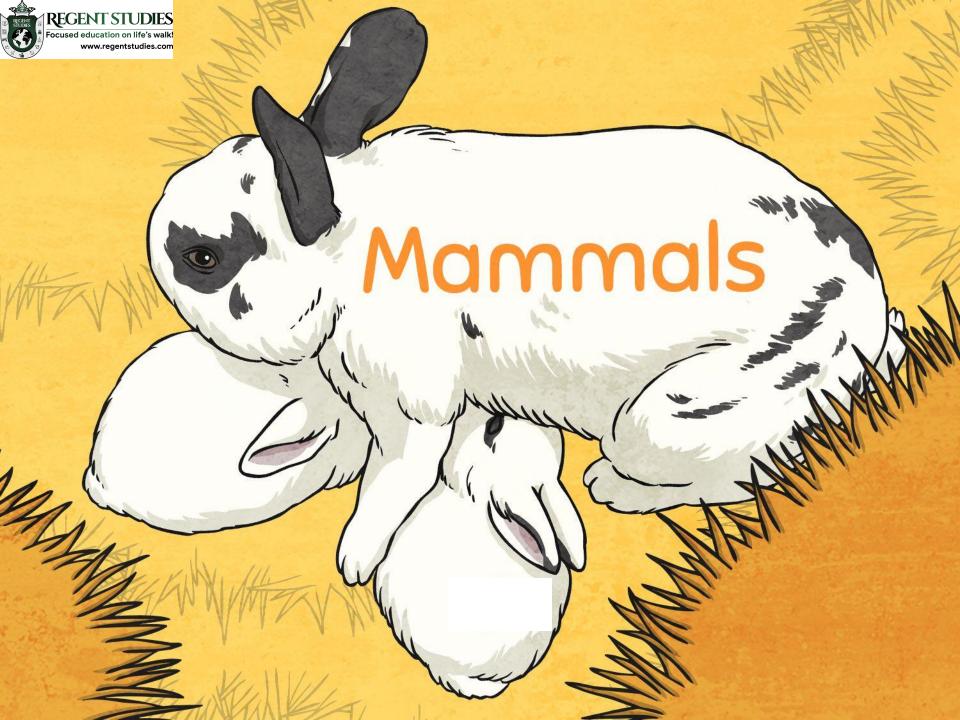


Comparing Life Cycles: Put children in groups so that they work with children who have described different animals' life cycles. Children discuss their life cycle wheels with their group, considering the similarities and differences between the different mammals. Look for children who can spot similarities and differences between the different mammals' life cycles.





Living Things and Their Habitats





Aim

• I can describe the life cycles of different mammals.

Success Criteria

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Life Cycle of a Mammal

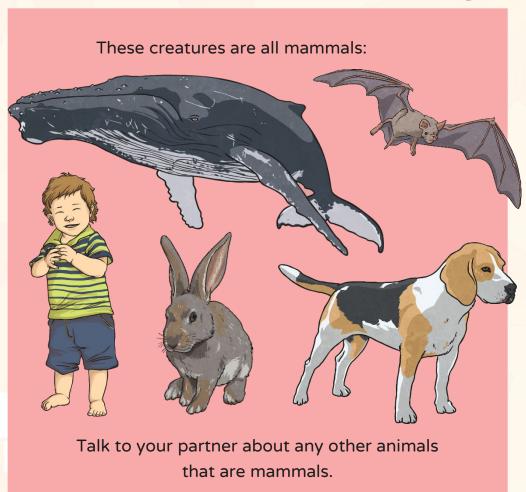


A mammal is a particular type of animal. There are two things that make mammals special:

Mammals make milk to feed their babies.

They are all warm blooded.

This means they can
maintain a constant body
temperature, independent
of the temperature of their
environment.





Life Cycle of a Mammal



Here are the stages of the life cycle of a rabbit, a mammal. Talk to your partner about how you know the stages are in the correct order.

Adult

The adult male rabbit will mate with an adult female rabbit and reproduce.



Embryo

The embryo grows inside the female rabbit.



Rabbit Life Cycle

Adolescent

The young rabbit grows and develops.



Kitten (baby rabbit)

The kitten drinks milk from the female. As it grows, it develops fur and starts to eat solid food.

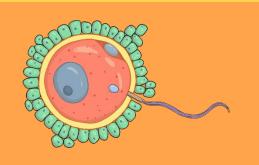


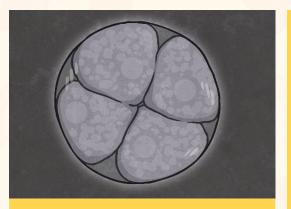
Sexual Reproduction

Mammals use sexual reproduction to produce their offspring.

The male gamete is called sperm. The sperm travels down the male's penis and enters the female's body through the vagina.

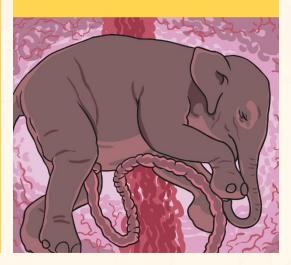
A sperm cell will fuse with the ovum, the female gamete. When this happens, the ovum is fertilised.





This fertilised cell splits in half, creating two cells.
These cells continue to divide, so that the number of cells doubles each time. Eventually, the cells will form a baby, and the heart starts to beat.

The baby will grow inside the female for the length of the pregnancy. This is known as the gestation period. At the end of the pregnancy, the baby is born.





Sexual Reproduction

Monotremes

There is a group of mammals called monotremes that do not grow their young inside their bodies. Monotremes lay eggs instead of giving birth to live babies. The only existing monotremes are the platypus and the echidna, and they live in Australia and New Guinea. They are still classed as mammals because once their babies are hatched out they do feed them milk.



Sexual Reproduction

Watch this clip to see how the sperm and the ovum meet and join, and then grow into a baby.

A short video: From Conception to Birth - YouTube









Describing Reproduction ©



Cut out the pictures on your Describing
Reproduction Activity
Sheet and stick them in the correct order with their descriptions.



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Different Mammals

There are three different groups of mammals:

Placentals: their young grow inside the female's body and are born fully developed.



Monotremes: their young hatch from eggs.

Marsupials: their young are born incompletely developed. They are then carried and fed in a pouch on the female's stomach until they are fully developed.



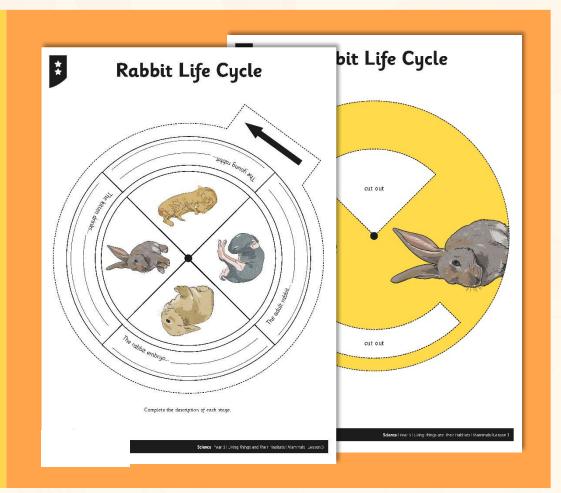


Life Cycles of Mammals



Make a Life Cycle
Wheel to describe the
stages of a mammal's
life cycle using your
Life Cycle Activity
Sheet.







Comparing Life Cycles



Work as a group to compare the life cycles of the different mammals.

Share your life cycle wheel and describe the different stages. Listen as your group members share their life cycle wheels.

How are the life cycles similar? How are they different?

Think of 2 things that are the same about each life cycle, and 2 differences between them.





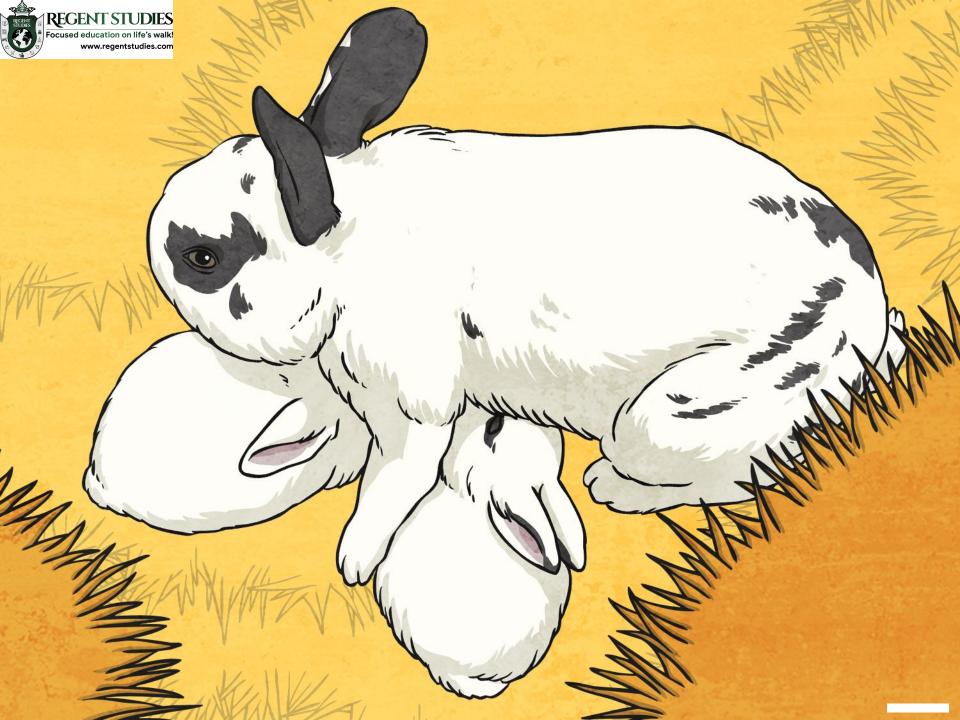
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