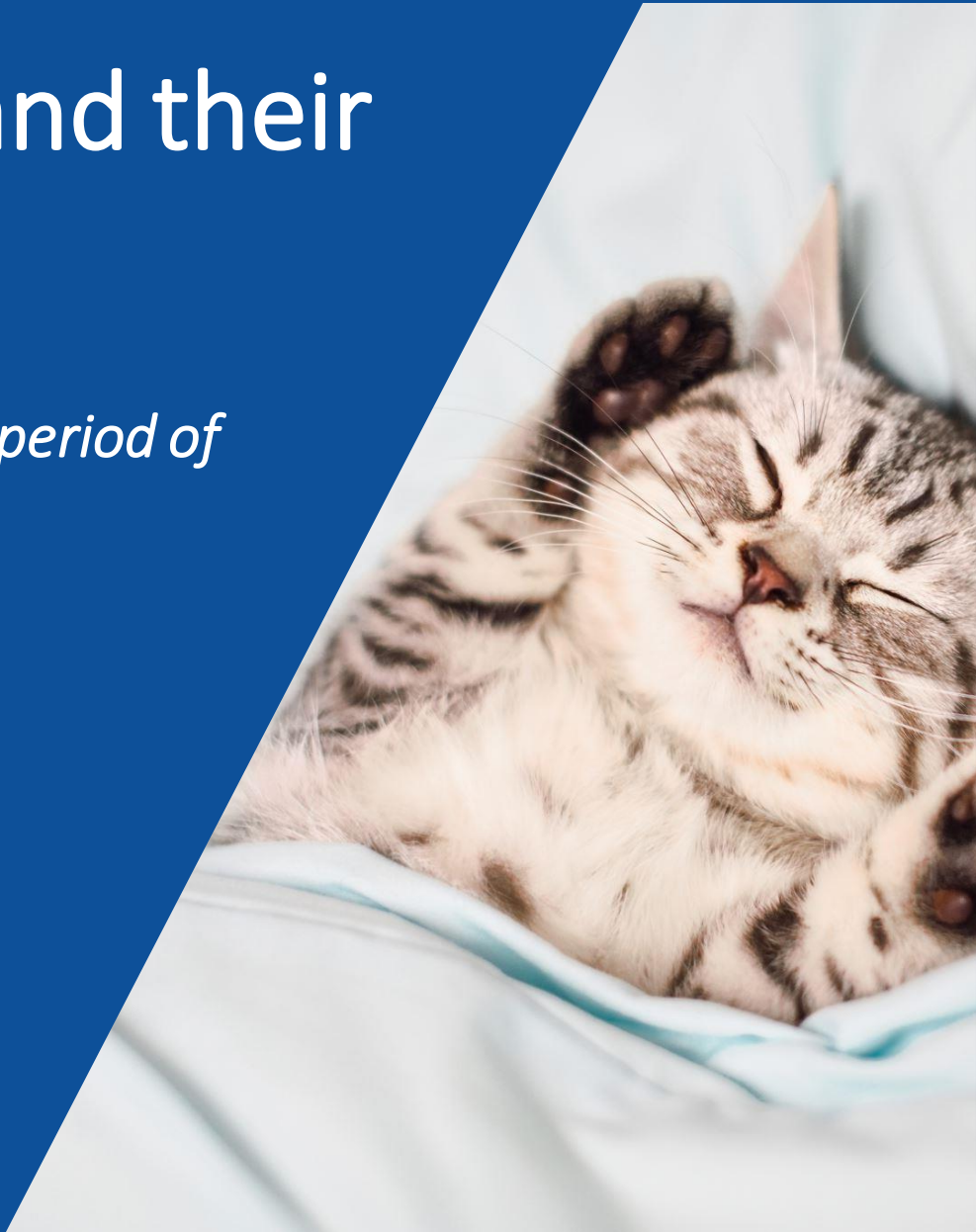


Living things and their habitats

Comparing the gestation period of different mammals

*Year 5
Age 9-10*



For parents

Thank you for supporting your child's learning in science.

Before the session:

- Please read slide 2 so you know what your child learning and what you need to get ready.
- As an alternative to squared paper, slide 6 may be printed for your child to record on.

During the session:

- Share the learning intentions on slide 2.
- Support your child with the main activities on slides 3 to 6, as needed.
- Slide 7 is a further, optional activity.
- Slide 8 has a glossary of key terms.

Reviewing with your child:

- Slide 9 gives an idea of what your child may produce.



Living things and their habitats

Comparing the gestation period of different mammals

Key Learning

- Most animals **reproduce** sexually. This involves two parents where the **sperm** from the male fertilises the female **egg**. They produce offspring which grow into adults.
- Humans and most other **mammals** give birth to live young.
- The time between egg fertilisation and giving birth is called the **gestation period**.

I can...

- compare the gestation period for different mammals and look for patterns.

Activities (pages 3-6): 30 - 45 mins

- Use lined paper, squared paper, a ruler and pencil.
- Alternatively, print page 6 as a worksheet.



Find out more... (page 7)

- Find out about some mammals with more unusual life cycles.



Explore, review, think, talk....

What do you already know about life cycle of mammals?
(5 - 10 minutes)

Humans and most other **mammals** give birth to live young.

- Watch this BBC bitesize clip:

<https://www.bbc.co.uk/bitesize/clips/zpmqxnbn>

- How many months does it take for a human baby to develop before it is born?
- How does this compare to other mammals?



- The length of time a mammal is pregnant is known as the **gestation period**.
- The gestation period starts when the **sperm** from the male fertilises the female **egg**.
- It finishes when the baby animal is born.

Look at this information about the gestation of a baby elephant:

<https://www.dkfindout.com/uk/animals-and-nature/mammals/mammals-and-their-young/>





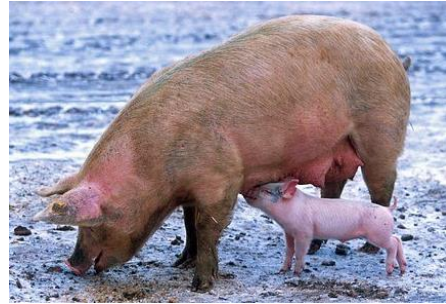
Gestation period of mammals

Investigating the gestation period of different mammals
(page 4-6: 20-35 minutes)

- The gestation period of mammals can range from a few weeks to almost two years.



Squirrel – 44 days



Pig – 114 days



Camel – 400 days



Giraffe – 425 days

- From these four examples, do you notice a possible pattern about the length of the gestation period and the size of the adult animal?
- Do you think a sample of four mammals gives you enough data to be certain?
- How might the size of an animal be measured?

Look at the information about the average female weight and the gestation period of twelve different mammals.

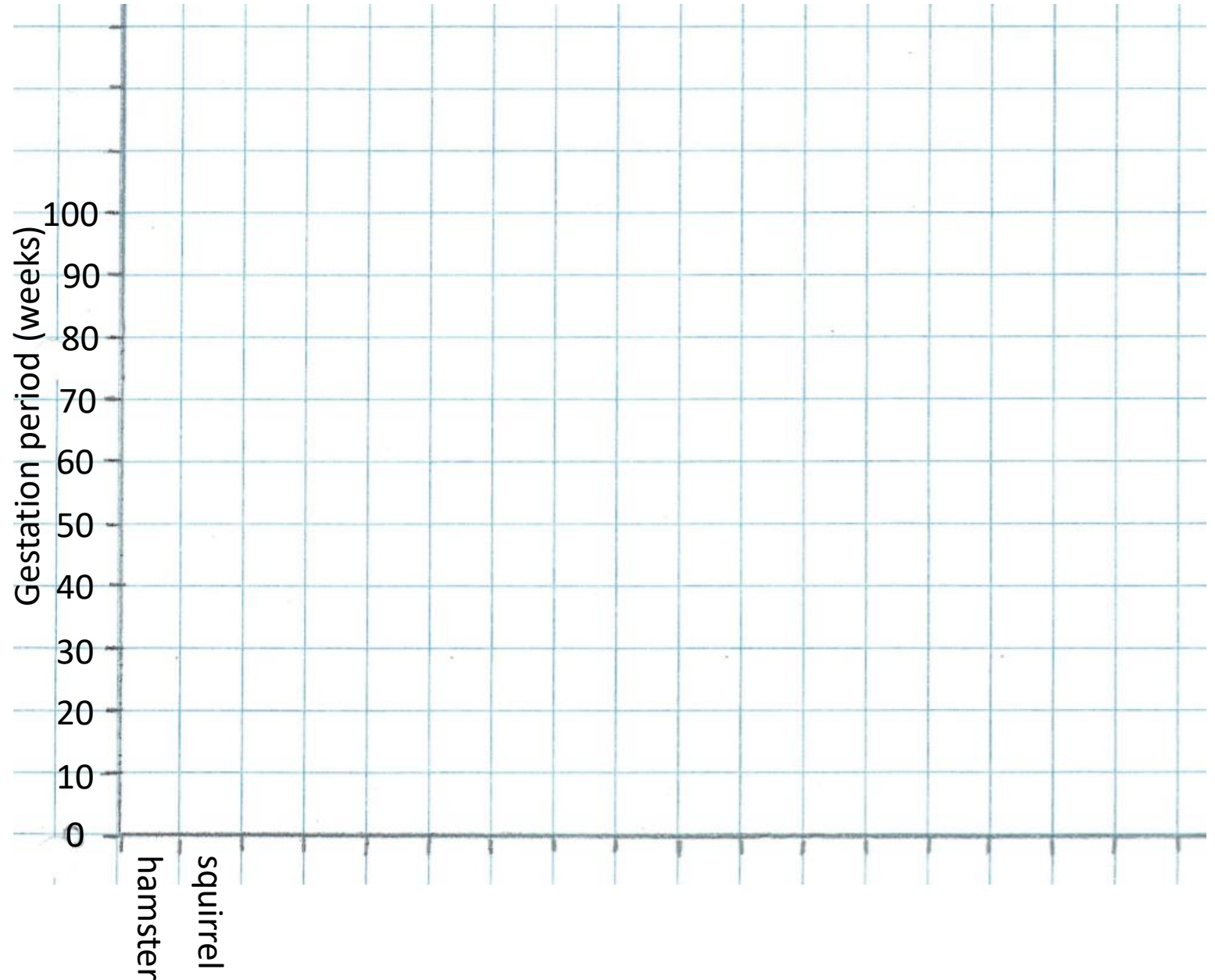
- Draw a table to order the mammals from smallest to largest by weight.
- Next plot a bar chart showing the gestation period for each mammal, ordered from the smallest to the largest.
- Look carefully to see if there is a pattern and make a note of any unusual results.
- Explain what you have found out from the data you have been given.
- Think about other questions you might now ask.

Learning outcome: I can compare the gestation periods for different mammals and look for patterns.

Type of mammal	Average weight of female mammal in kg	Gestation period in weeks (rounded to nearest whole week)
Hamster	0.12kg (120g)	2
Dog (Labrador)	29kg	9
Lion	130kg	15
Human	77kg	40
Giraffe	828kg	62
African Elephant	3,150kg	92
Grey Squirrel	0.56kg (560g)	6
Sheep	72kg	21
Cow (Jersey)	450kg	40
Rabbit	2.5kg	4
Pig	250kg	16
Camel	650kg	57

I can compare the gestation periods for different mammals and look for patterns.

Type of mammal	Average weight (kg)	Gestation period (weeks)
hamster	0.12	2
grey squirrel	0.56	6



Remember to explain your findings and think about further questions.



Find out more...

Find out about some mammals with more unusual life cycles

Some mammals have more unusual life cycles.

Find out how the young of **marsupials** or **monotremes** develop:

<https://www.dkfindout.com/uk/animals-and-nature/mammals/marsupials/>

<https://www.bbc.co.uk/programmes/p004vtyd>



<https://www.dkfindout.com/uk/animals-and-nature/mammals/egg-laying-mammals/>

<https://www.bbc.co.uk/programmes/p004jl2c>



- Choose one of these mammals and create a poster to illustrate its life cycle.

Glossary of terms

Reproduce: All living things **reproduce** to make new individuals.

Sexual reproduction: **Sexual reproduction** in animals occurs when male and female animals mate to create offspring.

Fertilises: A male sperm joins a female egg and **fertilises** it. This is the first stage of sexual reproduction.

Gestation period: For mammals, the time between egg fertilisation and giving birth is called the **gestation period**.

Egg: A female reproductive cell is called an **egg**.

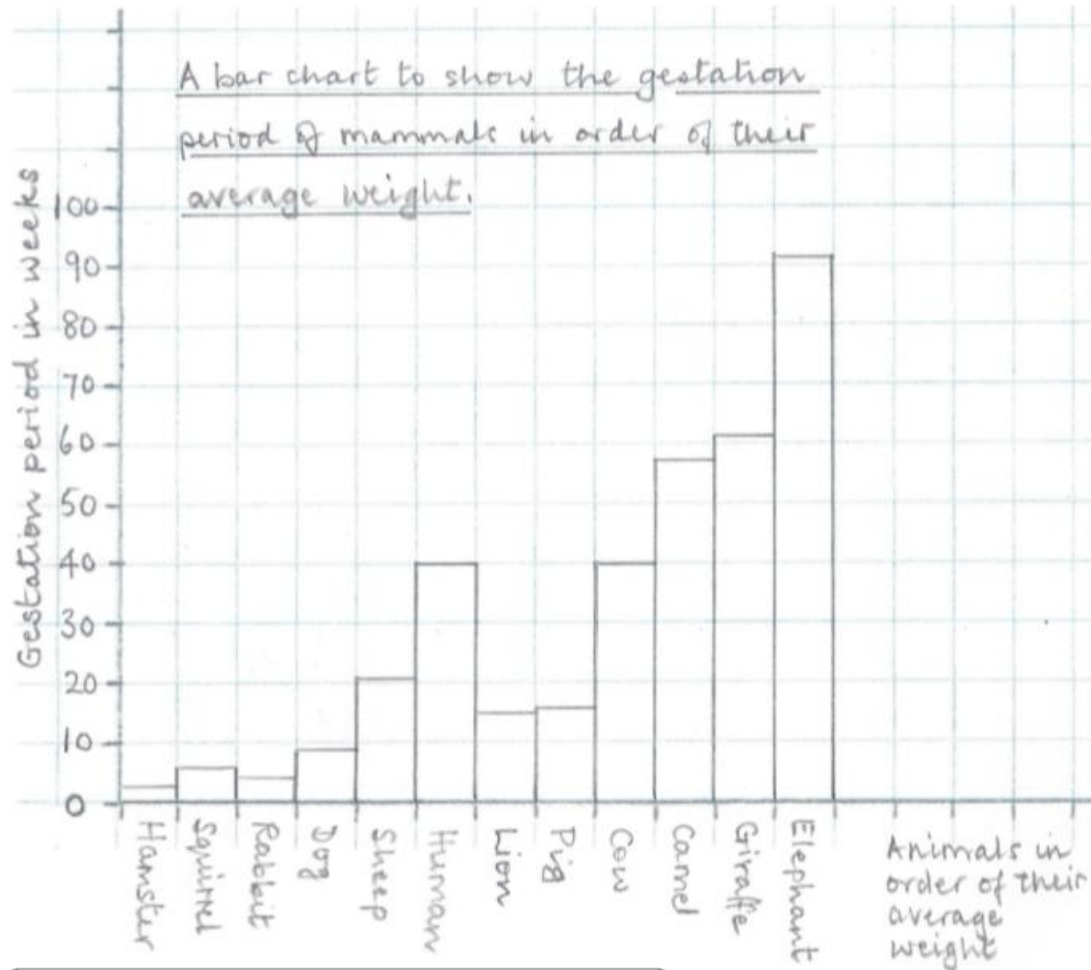
Sperm: A male reproductive cell is called a **sperm**.

Life cycle: Every animal has a **life cycle** which represents the stages the animal goes through during its life.

Mammal: A **mammal** is an animal that gives birth to live young and provides milk.

Possible learning outcome for reviewing your work.

I can compare the gestation periods for different mammals and look for patterns.



Check your bar chart has labelled axes and a title.

Your explanation should recognise the pattern and comment on some of the unusual results.

There are many different questions you can ask about gestation periods.

Gestation period in mammals.

I noticed there was a pattern that the heavier the female mammal, the longer the gestation period. The smallest mammal, a hamster, had a gestation period of two weeks. The largest mammal, an elephant, had a gestation period of ninety two weeks. Not all the animals fitted the pattern. A squirrel is smaller than a rabbit but it has a longer gestation period. The human has a much longer gestation period than a sheep even though they are similar weights.

My questions

Are there other mammals that do not fit the pattern like humans?

Do different breeds of the same animal have the same gestation period?

Does the number of young in one litter make a difference to the gestation period?