

Hedgehogs



A baby hedgehog is called a hoglet.

The gestation period for a hedgehog is 34 - 37 days

The gestation period is the amount of time it takes for the baby to develop inside the mother before being born.



Hoglets are born blind and death with a few spines.

Hedgehogs have altricial young meaning they are born very small, weak, and needs lots of help from its parents to survive and grow.



Litters can have 1-10 hoglets.

Before giving birth a mother hedgehog will make a nest to birth in.

Hedgehogs are mammals so they give birth to live young and produce milk. The mother hedgehog will nurse her hoglets for 3-6 weeks.



There are 17 different
species of hedgehog
worldwide.

Hemiechinus -- 2 SPECIES



Indian Long-Eared
Hedgehog



Long-Eared
Hedgehog

Mesechinus -- 3 SPECIES



Daurian
Hedgehog



Gaoligong Forest
Hedgehog



Hugh's
Hedgehog

Atelerix

4 SPECIES



Four-Toed
Hedgehog



Somali
Hedgehog



North African
Hedgehog



Southern African
Hedgehog

Erinaceus

4 SPECIES



Amur
Hedgehog



Northern White-
Breasted Hedgehog



European
Hedgehog



Southern White-
Breasted Hedgehog

Paraechinus

4 SPECIES



Desert
Hedgehog



Bare-Bellied
Hedgehog



Indian
Hedgehog



Brandt's
Hedgehog

European hedgehog

It is the only native hedgehog species to the uk

They hibernate over winter in the uk, often from October to March

They are a protected species in the uk as unfortunately there numbers are declining



Indian long eared hedgehog

This hedgehog lives on the desert

They have very large ears these are used to hear insects underground and help them cool down in hot weather

This species when threatened will generally run rather than curl into a spiky ball



African Pygmy hedgehog

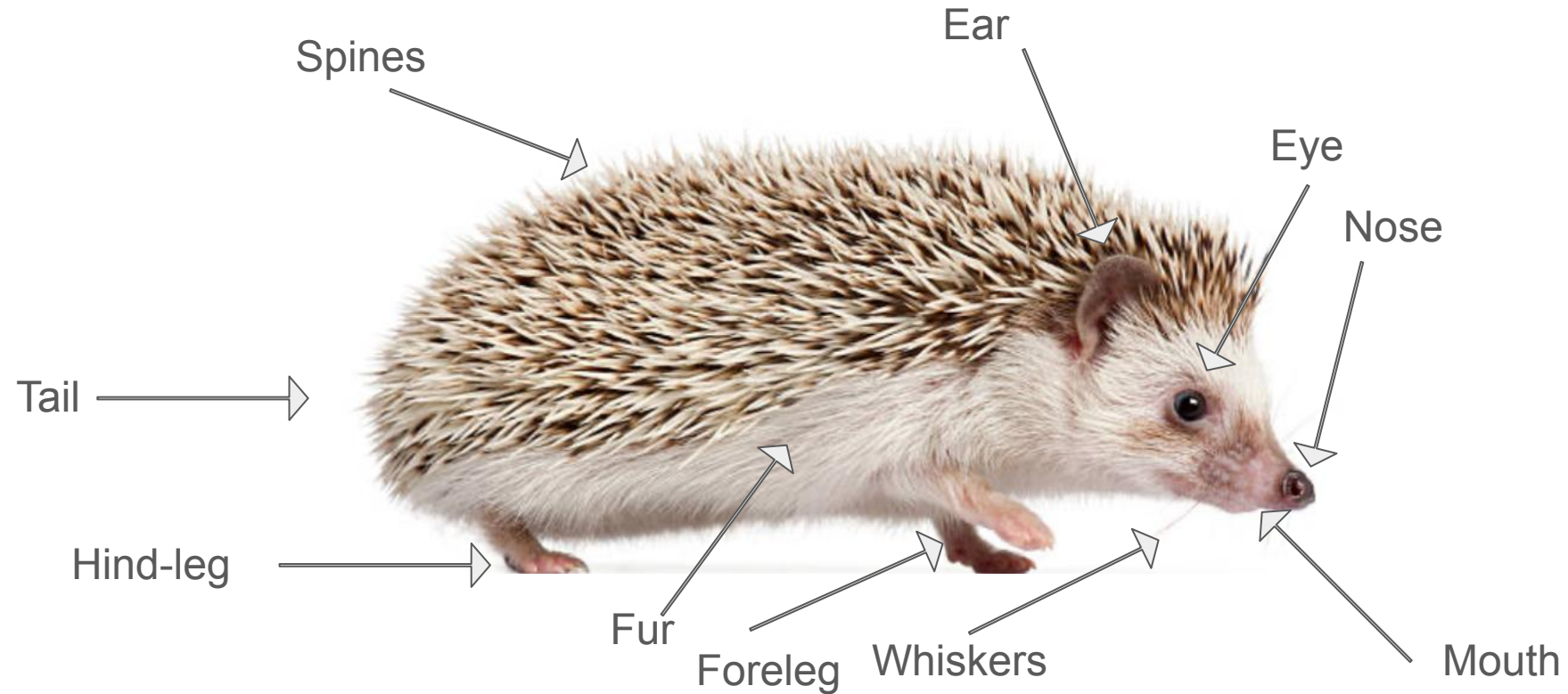
They are also called the four toed hedgehog

This species can be kept as a pet

Weights about 300 - 600 grams



Parts of a hedgehog

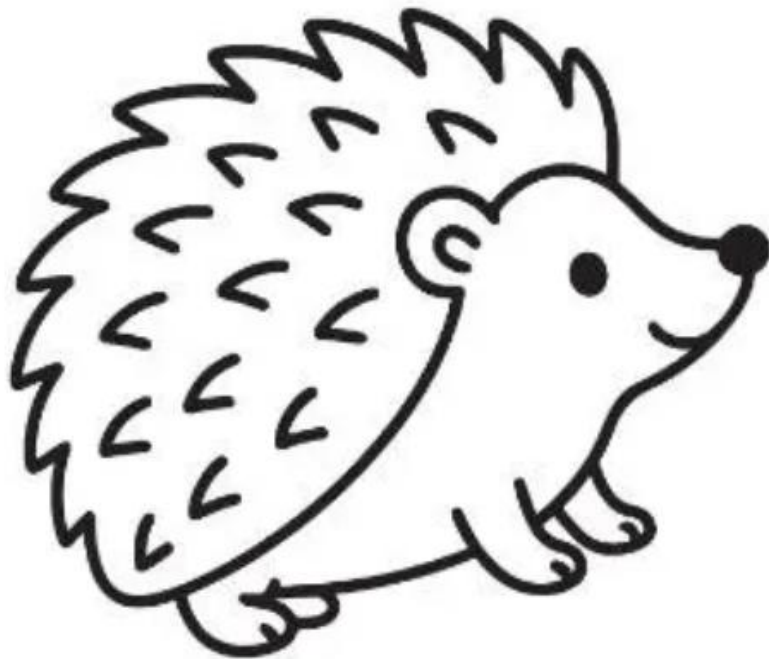


Hedgehog vocabulary

Image	DEFINITION
	A baby hedgehog
	The stiff, sharp spines on a hedgehogs back used for protection.
	A hedgehog sleeping this shows it is probably night time as they are nocturnal

Colour me in

HEDGEHOG

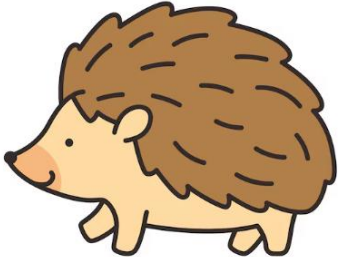


Hedgehog Counting Activity



How many Hedgehogs can you see?

7

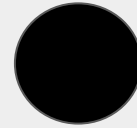


Hedgehog Shapes

What shape is a hedgehogs quill? Triangle



What shape is a hedgehogs eye? Circle



Bedding flooring

Litter box

wheel

Hiding place

Food dish

Water dish

Enrichment accessories eg toys / tunnels

They need to be kept between 72-80 degree



In the UK wild hedgehogs hibernate over the winter. Pet hedgehogs should be kept from hibernating.

To prevent hibernation provide 12 hours of day and night cycle to the hedgehog.





What should you be feeding your hedgehog?

Hedgehogs need healthy food to stay strong and active.

Hedgehogs need a main food of high quality dry cat biscuits. The biscuits should have lots of protein (helps muscles grow) and low in fat (keep them healthy).

They should have 1-3 tablespoons each day of biscuits however you can occasionally give unlimited if they are a healthy weight, have the correct environment, and you're giving them the correct food.

Hedgehogs get fibre mainly from insects these include; mealworms, locust, crickets and dubia roaches.

Hedgehog diet

Scatter feed kibble for enrichment.

Occasional treats can include; plain scrambled eggs, wet cat food, plain chicken, or insects

Provide fresh water daily

Mix 2-3 or more dry cat biscuits for balanced nutrition and variety

Avoid food stating "hedgehog mix"

Fill in the blanks



Hedgehogs need lots of Protein to grow strong.
They should always have fresh Food and water. They
usually eat at Night time (day or night?).

Match the food to the reason

Protein

Water

Insects

Energy

Strong muscles

Hydration



Feed the hedgehog sorting game

Yes

No



Cat kibble, wet cat food, insects, boiled egg,
small amounts of peas/green beans/cooked
squash/softened carrot/berries



Chocolate, grapes, raisins, onion, garlic,
avocado, bread, milk, cheese, fish



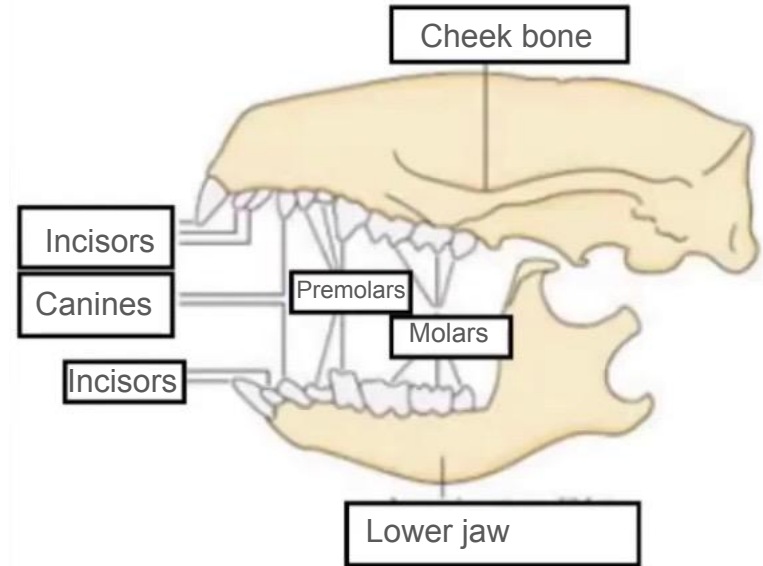
Why shouldn't hedgehogs drink milk?



1. Hedgehogs are **lactose intolerant**, this means their little tummies cannot break down the sugar found in cow's milk.
2. If a hedgehog drinks milk, it gives them a very bad tummy ache and **diarrhea**.
3. As hedgehogs get sick from drinking milk they lose too much water from their bodies (**dehydration**). This makes them very weak.

Hedgehog Teeth

Label the different parts of a hedgehog mouth.



Hedgehog teeth -
label the different
parts of a hedgehog
mouth.

Cheek bone incisors
canines premolars
molars lower jaw

Basic hedgehog care

The Animal Welfare Act 2006 is a law in the UK that acts like a rulebook to keep animals in captivity safe, healthy, and happy. It says that if you own an animal, you have a legal "duty of care" to provide them with five specific things.

The 5 Animal Needs:

1. Suitable Environment : Appropriate enclosure, with comfortable resting areas, and space to explore.
2. Suitable Diet: Fresh water and fresh food to maintain health, appropriate for the individual animal.
3. Normal behaviour patterns: Space to move and play how they would naturally in the wild.
4. Friends or quiet time: To live with other animals or alone.
5. Health care: Keep them clean, check for illness, and visit the vet if needed.

- Provide fresh food and water daily
- Spot clean their cage daily
- Fully clean their cage and accessories weekly
- Trim their nails every 2-4 weeks
- Give them a bath when needed
- Give appropriate environment
- Gentle handling to build trust

Hedgehog facts

Hedgehogs are nocturnal
(active at night) They sleep
during the day.



Hedgehog facts

Hedgehogs have 5000-7000 quills .
Their quills do not shoot out like a porcupine however they can fall out when they are quilling.

Hedgehogs under a year will go through quilling when they shed their baby quills and grow there adult ones. Adult hedgehogs will also shed a few quills at a time throughout their life and regrow them.



Hedgehog facts

When hedgehogs are scared they will go into a ball to protect themselves. You should never try to force a hedgehog to come out of its ball as it can hurt them.

Many people use towels to help hold a hedgehog if they tend to ball up when you hold them. The more often you hold them the more comfortable they will become with you.



Self anointing



Companionship

Hedgehogs generally prefer to live alone. They can enjoy the company of other hedgehogs for short times but can sometimes get aggressive with each other.

Male and females only go together for reproduction (having babies).

However, often you can successfully keep females together if you have a big enough cage enough hides and they get along



Hedgehogs can live up to
4-7 years



Hedgehog vocabulary

WORD		DEFINITION
		A baby hedgehog
		The stiff, sharp spines on a hedgehogs back used for protection.
		The process where young hedgehogs lose their baby quills and grow adult ones
		Being active at night and sleeping during the day
		A deep sleep wild hedgehogs go into during winter (however pet hedgehogs should not).
		The amount of time a baby grows inside the mother before birth

Hedgehog English - Gary's night adventure

Reading - Short Story

Gary the hedgehog wakes up when the sun goes down. He sniffs the air. He finds crunchy insects. After exploring, he curls into a warm, cosy nest and sleeps.

Questions

1. When does Gary wake up ?
2. When does he eat?
3. Where does he curl up?

Challenge

Draw Gary's nest or write one sentence about it.

Hedgehog English - Gary's night adventure answer sheet

Answers

1. When does Gary wake up ?
When the sun goes down (at night).

1. When does he eat?
After he wakes up and explores at night.

1. Where does he curl up?
In a warm, cosy nest.

Challenge

Sentence example: Gary sleeps in a warm, cosy nest made of leaves

Draw example:



Hedgehog maths - Addition and multiplication

Problem 1

Hedgehog amounts 

You have 3 hedgehogs and get 2 more.

How many hedgehogs now?

Problem 2

Hungry hogs 

Each hedgehog eats 4 insects.

If there are 5 hedgehogs, how many insects are needed?

Hedgehog maths - Addition and multiplication answers

Problem 1

Hedgehog amounts 

You have 3 hedgehogs and get 2 more.
How many hedgehogs now?

Step 1: Work out $3 + 2$

Step 2: $1 + 1 + 1 + 1 + 1 = 5$

Answer 5 hedgehogs

Problem 2

Hungry hogs 

Each hedgehog eats 4 insects.
If there are 5 hedgehogs, how many
insects are needed?

Step 1: Work out 5×4

Step 2: Count in 5s. 5, 10, 15, 20

Answer 20 insects

Hedgehog maths - Addition and subtraction

Problem 2

Nail trim

Each hedgehog needs a nail trim.
There are 5 hedgehogs.
How many nail trims are needed?

Problem 3

Weighing hedgehogs

Hedgehog A = 410g
Hedgehog B = 450g
What is the combined weight?

Challenge

Is it less or more than 1kg

Hedgehog maths - Addition and subtraction answer sheet

Problem 2

Nail trim

Each hedgehog has a nail trim
There are 5 hedgehogs.
How many nail trims are needed?

Step 1: Add 1 five times ($1+1+1+1+1$)

Step 2: Count total = 5

Or multiply: $1 \times 5 = 5$

Answer 5 nail trims

Problem 3

Weighing hedgehogs

Hedgehog A = 410g

Hedgehog B = 450g

What is the combined weight?

Step 1: Add the weights ($410+450$)

Step 2: Total amount = 460

Answer 860g

Challenge

Is it less or more than 1kg

Step 1: Remember 1kg = 1000g

Step 2: Compare 860 is smaller than 1000

Answer less than 1kg

Video for problem 3

$$\begin{array}{r} 410 \\ + 450 \\ \hline \end{array}$$

Hedgehog maths - multiplication and division

Problem 4

Feeding time

Each hedgehog needs 3 tablespoons of food.

There are 12 hedgehogs.

How many spoonfuls in total?

Problem 5

Sharing worms

You have 35 worms.

They are shared equally between 7 hedgehogs.

How many does each get?

Hedgehog maths - multiplication and division answer sheet

Problem 4

Feeding time 🍴🥄

Each hedgehog needs 3 tablespoons of food. There are 12 hedgehogs. How many spoonfuls in total?

Step 1: Multiply 12×3 or add 3 twelve times ($3+3+3+3+3+3+3+3+3+3+3+3$)

Answer: 36 spoonfuls

Problem 5

Sharing worms 🐛

You have 35 worms.
They are shared equally between 7 hedgehogs.
How many does each get?

Step 1: Sharing means divide $35 \div 7$

Step 2: Think multiplication what number $\times 7 = 35$

Step 3: Count in 7s. 7, 14, 21, 28, 35

Answer: 5 worms each

Hedgehog maths - Fractions and Percentages

Problem 6

Counting hedgehogs

You have 30 hedgehogs.
Half of your hedgehogs are albino.
The other half include black hedgehogs and 9 pinto hedgehogs.
How many black hedgehogs are there?

Problem 7

Cleaning

You clean cages for $\frac{1}{4}$ of the hedgehogs in the morning.
You then clean another $\frac{1}{4}$ later.
What fraction is that altogether?
Convert this to a percentage.

Hedgehog maths - Fractions and Percentages

Answer sheet

Problem 6

Counting hedgehogs

You have 30 hedgehogs. Half of your hedgehogs are albino. The other half include black hedgehogs and 9 pinto hedgehogs. How many black hedgehogs are there?

Step 1: Find half. Half means divide by 2. $30 \div 2 = 15$. So 15 albino and the you have 15 that are black and pinto left.

Step 2: Remove the pinto hedgehogs $15 - 9 = 6$

Answer 6 black hedgehogs

Problem 7

Cleaning

You clean cages for $\frac{1}{4}$ of the hedgehogs in the morning. You then clean another $\frac{1}{4}$ later. What fraction is that altogether? Convert this to a percentage.

Step 1: Add the fractions $\frac{1}{4} + \frac{1}{4} = \frac{2}{4}$. As they both have the same denominator (bottom number) you can add the top ones together without having to convert it

Step 2: Simplify $\frac{2}{4} = \frac{1}{2}$. You will know if you can simplify it if both the top and bottom number can be divided by the same amount eg 2. $2 \div 2 = 1$ $4 \div 2 = 2$ So $\frac{2}{4} = \frac{1}{2}$

Step 3: Convert to percentage Half = 50% $\frac{1}{2}$ means half of 100 so $100 \div 2 = 50$ so it would be = **50%**

Hedgehog maths - problem solving and reasoning

Problem 8

Encounters

Each encounter includes 3 hedgehogs.

You have 18 hedgehogs available.
How many sessions can you run at once?

Problem 9

Working hogs

You rotate hedgehogs so each works 2 days per week maximum.

With 15 hedgehogs, what is the most working days you can schedule in a week?

Hedgehog maths - problem solving and reasoning answer sheet

Problem 8

Encounters

Each encounter includes 3 hedgehogs. You have 18 hedgehogs available. How many sessions can you run at once?

Step 1: This is grouping. Put hedgehogs into groups of 3. So we divide $18 \div 3$

Step 2: Count in 3s. 3,6,9,12,15,18. That's 6 groups

Answer: 6 sessions at once

Problem 9

Working hogs

You rotate hedgehogs so each works 2 days per week maximum. With 15 hedgehogs, what is the most working days you can schedule in a week?

Step 1: Each hedgehog works 2 days. So multiply 15×2

Step 2: Calculate $15 \times 2 = 30$

Answer: 30 total working days

Hedgehog Geography- Where do they live?

African Pygmy hedgehog

- A warm climate
- Grasslands and Savanna
- Hot days and cooler nights.
- Does not hibernate

European hedgehog

- Cooler climate
- Grasslands and woodlands
- Hibernates in the winter.

Activity - Habitat sorting

Put each item into the correct group.

Leaves - Sand - Snow - Grass - Logs

African

European

Hedgehog Geography- Where do they live? Answer sheet

African Pygmy hedgehog

- A warm climate
- Grasslands and Savanna
- Hot days and cooler nights.
- Does not hibernate

European hedgehog

- Cooler climate
- Grasslands and woodlands
- Hibernates in the winter.

Activity - Habitat sorting

Put each item into the correct group.

Leaves - Sand - Snow - Grass - Logs

Step 1: Remember the clues. African Pygmy hedgehog think: dry, warm, grass and European hedgehog think: forest, leaves cold.

African

Sand

Grass

European

Leaves

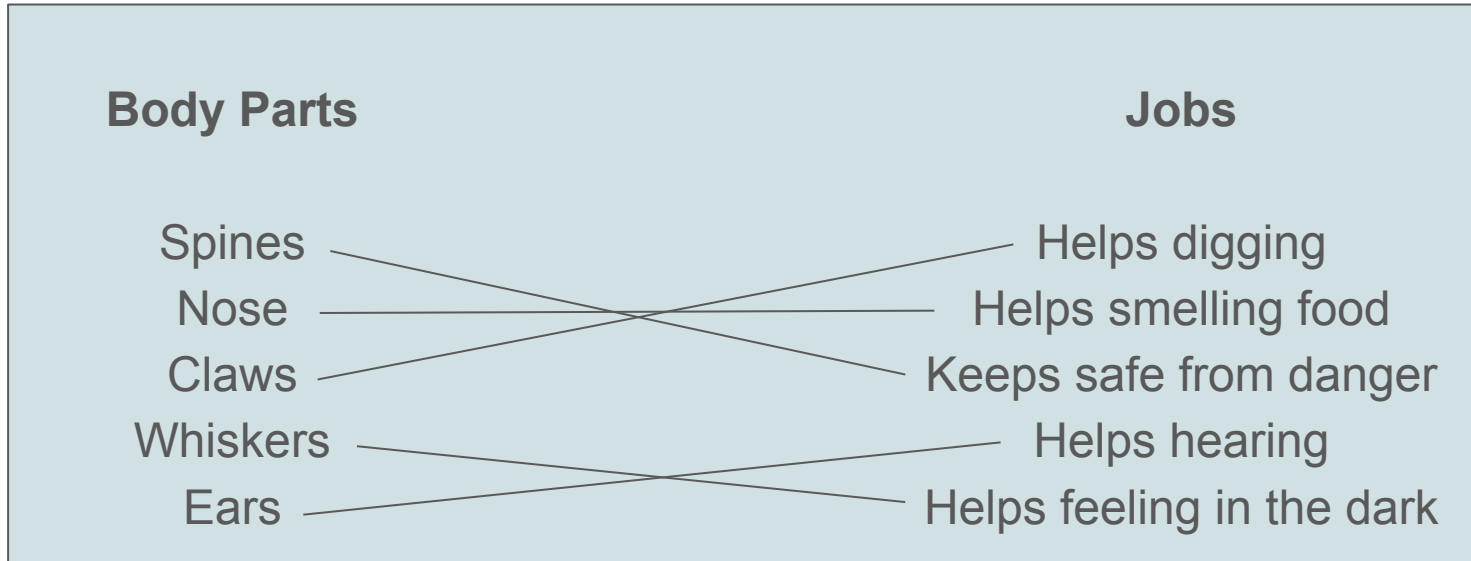
Snow

Logs

Hedgehog Science - Body parts and their jobs

Match the body part to its Job

Body Parts	Jobs
Spines	Helps digging
Nose	Helps smelling food
Claws	Keeps safe from danger
Whiskers	Helps hearing
Ears	Helps feeling in the dark



Moving onto all species not just hedgehogs now



Habitats



What animals below live in either of these habitats, if so which one the jungle or the ocean. There are some animals that may not live in either.

The animals to sort are - monkey, chicken, parrot, dog, whale, snake, fish, tiger, dolphin, camel, and turtle.

Put in categories of jungle, ocean, and neither.

Habitats answer



- Jungle - Monkey, Parrot, Tiger, Snake
- Ocean - Whale, Fish, Dolphin, Turtle
- Neither - Chicken, Dog, Camel

Match the animal to the name

Skink

Bearded dragon

Gecko

Mouse



Draw the home of this chameleon



Animals and their babies matching sheet



Types of pets

Put these animals into 3 categories of common pets, exotic pets, and farm animals.

The animals are - dogs, cats, snakes, chickens, birds, cows, rabbits, lizards, tortoise, fish, hedgehog, pigs, goats, ferrets, sheep.

Common Pets		Exotic pets		Farm animals	
				/	

Land, water, and air

Categorise animals to where they move - walking on land, swimming in water, or flying in the air. The animals include turtles, tortoise, fish, parrot, stingray, zebra, bat, owl, bear

Land		Water		Air	

Repeated Behaviours (Doing the same thing again and again)

Sometimes animals do the same thing again and again.

This can happen where they are:

- Bored
- Tired
- Worried

Some behaviour examples are walking round and around , rocking their body, and chewing the same thing over and over again.

How can we make the animal feel happy?

Draw one thing that could help the animal.

Choose one - A toy, a hiding place, food, people playing with them.

How do you feel when you are bored?

What makes you happy?

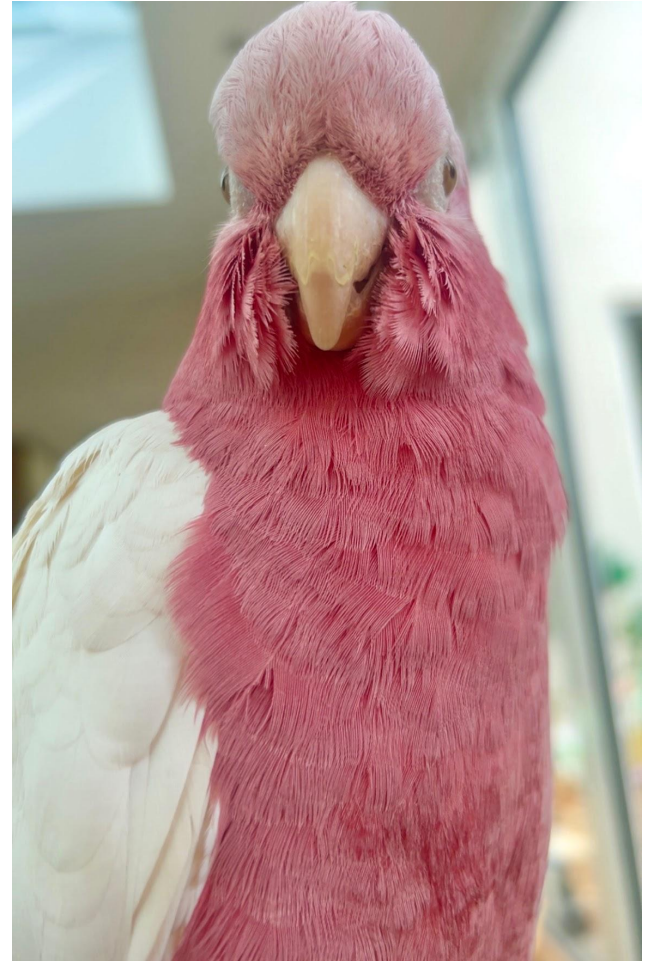
What does extinct mean?

An animal that is extinct means that it no longer exists in both captivity and the wild.



Exotic animal

- Choose one animal and draw it.
- Talk about - What colour it is, what it eats, is it big or small, and where does it live.

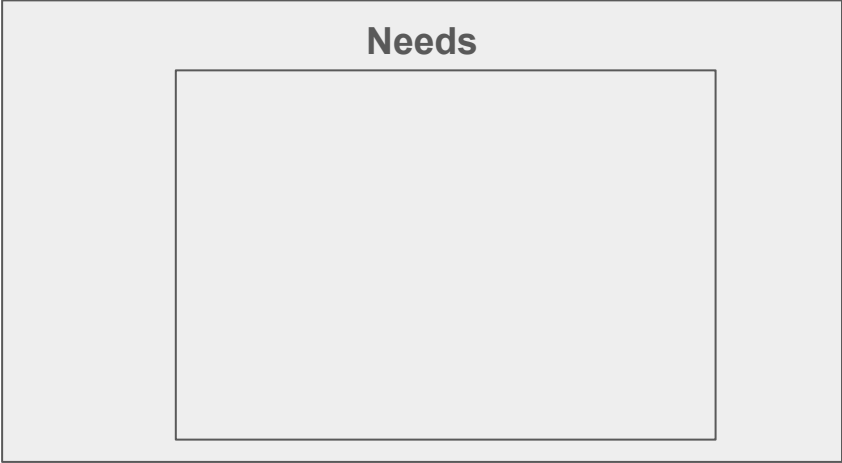


Sorting game - What do all animals need TO SURVIVE

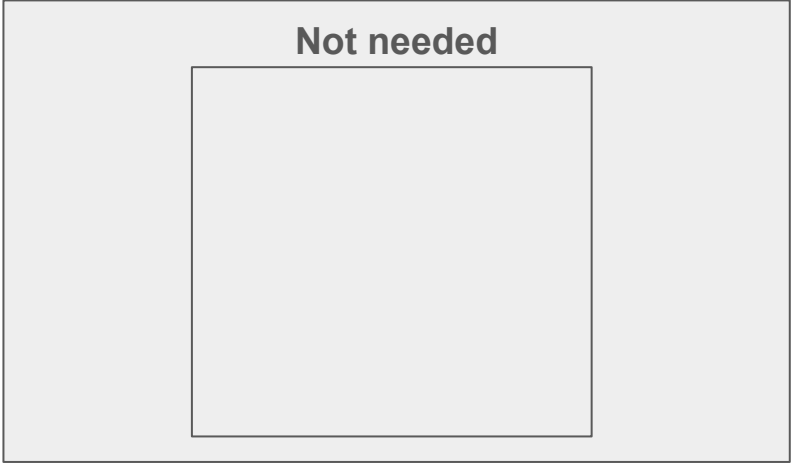
Key list: Water - Food - Toys - Shelter - Money - Air - Warmth - Clothes - Space - Video games - Sleep - Bowls - Decorations - Blankets

Think carefully - Some sound helpful but are not essential to survive

Needs



Not needed



Accommodation

What do we need to think about when creating a piece or accommodation for an animal.

Basic needs

- Clean water
- Correct food
- Fresh air

Space

- Enough room to move
- Space to explore and exercise
- Not overcrowded

Safety

- Secure enclosure (no escapes)
- No sharp edges or gaps
- Safe materials

Temperature

- Warm or cool depending on the species
- Shade or heat if needed

Shelter and comfort

- Nest / bed / hide area
- Correct bedding
- Quiet resting area

Natural behaviour

- Things to dig, climb, or hide
- Day / Night routine
- Enrichment / toys

Cleanliness

- Easy to clean
- Waste removed

Accommodation Challenge

Design a safe home

Choose one animal: Chameleon, sugar glider, parrot, tortoise, or a rabbit.

Now imagine you are this animal. Draw or design a safe and healthy home you would like to live in. What would your dream home include?

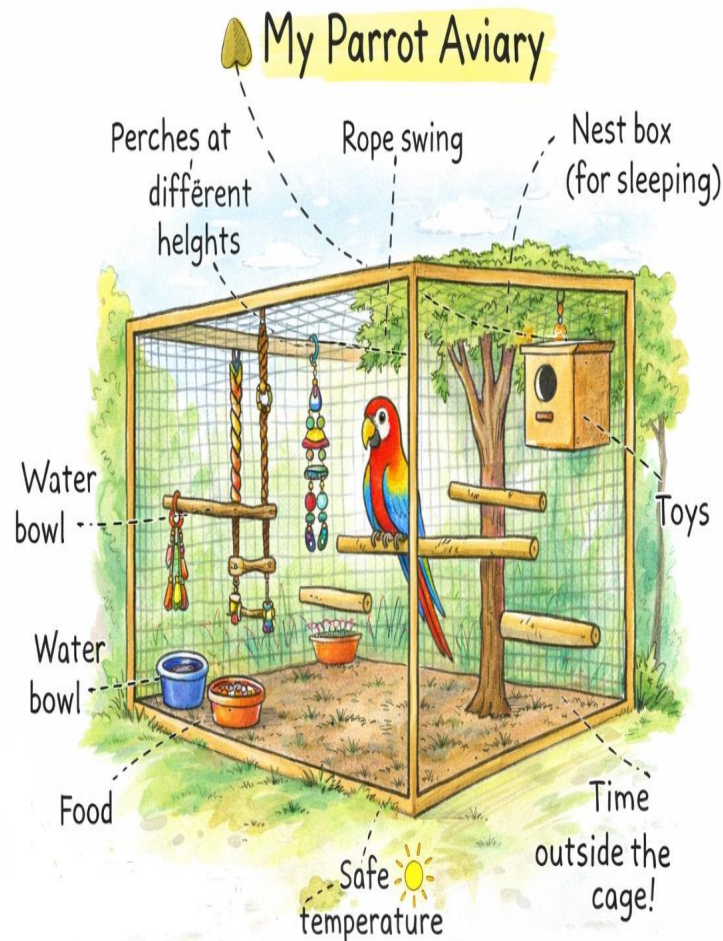
Include and label at least 5 important features. For each label explain why it is needed. Example labels include : Hide box for sleeping. Water source for drinking.

Accommodation challenge example

I have chosen a parrot. The enclosure includes:

- Large aviary cage - Parrots need lots of space to fly and stretch their wings
- Food and fresh water bowls - They need daily food and clean water to stay healthy
- Toys - Parrots need mental stimulation.
- Quiet area - They need a safe place.
- Safe temperature and shelter from drafts - Parrots can get cold easily.

If I were the parrot, living in a aviary my dream home would have: A big outdoor enclosure with trees and branches, swings and ropes to climb, fresh fruit and vegetables every day, a sunny spot to warm up, a quiet sleeping area at night.



Why is detailed and specific enclosure design important

Animal welfare provides enrichment security and comfort.

Visitor experience enhances visibility and education

Animal welfare provides enrichment security and comfort.

How can enclosure design impact an animal's behaviour and health

Sustainability uses eco friendly materials and energy efficient systems.

Animal explorer signage

Choose one animal: Reptile - Amphibian - Mammal - Invertebrate

Animal name: _____

Picture of my animal:

Where is your animal from? Circle or write:
Forest - Jungle - Desert - Ocean - Grassland - Other: _____

Where does your animal live? Write all that apply: Trees, Burrows, Water, Underground, Rocks, and Enclosure.

What does your animal eat? Write all the apply: Insects, Plants, Fruit, Meat, Leaves, Other: _____

How big is your animal? Write all that apply: Tiny (fits in your hand), small (like a shoe), medium (like a cat), large (bigger than you).

Fun facts (choose one or more)

- My animal can _____
- My animal likes _____
- A cool fact about my animal is _____

Extra challenge

- Latin name (if you know it) _____
- Why should we protect this animal _____

Extension activity: Design a zoo sign for your animal - include a big title, one picture, three facts, and one rule to keep the animal safe

How do snakes smell and taste

Snakes use a special organ to help them smell and taste world around them. It is called the Jacobson organ.

The snakes Tongue:

- Snakes have a forked Tongue
- They flick their Tongue in and out
- The Tongue picks up any tiny smell particles from the air and ground.

The Jacobson organ:

- The Tongue carries the smell into the mouth.
- The smell goes to the Jacobson organ , which is on the roof of the mouth.
- This organ sends messages to the brain.

What does it help snakes do:

- The Jackson organ helps snakes find food, follow animal trails, know what is nearby, and find other snakes.
- Snakes do not smell like humans - they taste the air instead.

Fill in the blanks

Snakes use their _____ Tongue to collect smells. The smell goes to the _____ organ.

Circle the correct answers - What does the Jacobson organ help snakes do?

- Fly
- Find food
- Follow smells
- Read books

Animals and their babies

Animals have special ways to find a partner and have babies. This is called courtship.

Courtship means animals show off, sing, dance, or smell nice to find a mate.

Different ways animals care for babies

Mother care:

- The mother looks after the babies some examples include hedgehogs and rabbits.

Father care:

- The father helps protect or feed the babies examples include birds and frogs.

Both parents care:

- Mum and dad both help examples include penguins and many birds.

How animals attract a partner

Animals may

- Show bright colours or feathers
- Dance or move in special ways
- Make sounds or songs
- Use smells or scents
- Compete or show strength

Different family types

Some animals stay with one partner, have more than one partner, or meet only for a short time. All animals are different.

Match the behaviour (choices bird, frog, peacock)

Dance - _____

Sing - _____

Bright feathers - _____

Circle what animals might do in courtship

- Sing
- Dance
- Built a nest
- Ride a bike

How do animals learn?

Animals learn new things every day just like we do!

They learn by:

- Trying new things
- Watching others
- Learning from parents

Trial and error learning

Try - Mistake - Try again - Succeed

Animals keep trying until something works.

Examples include a dog tries different way to open a box, a bird drops nuts until once cracks, a hedgehog tries different foods to find what it likes.

Learning

Learning by watching (observational learning)

Animals watch others and copy them. Examples include young birds watching mum build the nest, young monkeys copy climbing, and puppies copy older dogs.

Activity

Match (choices include climb tree, find food, build nest)

Watch - _____

Copy - _____

Learn - _____

Learning from parents (social learning)

Parents teach their babies how to survive. Examples include what to eat, where to live, and how to stay safe.

Activity

Circle what parents might teach

- How to find food
- How to use a phone
- How to stay safe
- How to ride a bike

How animals stick close to family

Imprinting and bonding

Baby animals need to feel safe and protected. They stay close to their parent or carer to learn and grow.

What is imprinting?

Imprinting means a baby animal quickly learns who to follow and trust just after it is born or hatched. It happens very early in life. A example includes ducklings follow the first moving thing they see (usually mum).

Fill in the blanks

Imprinting happens when animals are very _____ (young/old). They learn who to _____ (follow/ignore).

What is bonding

Bonding means animals make a close friendship or family connection.

Bonding can happen: with parents, babies, brothers and sisters, sometimes with humans.

Why do animals bond?

Bonding helps animals: feel safe, work together, share food, care for babies.

Make your own animal care plan



Red list has nine categories not evaluated data
deficient least concern near threatened
vulnerable endangered critically endangered
extinct in the wild extinct

How do animals impact you companionship and
emotional support economic contributions
cultural significance recreation and leisure
scientific advancements transportation
environmental balance clothing and textiles

Metastatic calcification in guinea pigs
pneumonia in guinea pigs scurvy bordetella
brochiseptica infection adenovirus infection
podo dermatitis salmonella infection yersinia
infection in guinea pigs viral haemorrhagic
disease 2 encephalitozoon cuniculi snuffles
sepsis gastrointestinal gut stasis in rabbits

Define husbandry

define zoonotic

Enrichment gives animal a creative outlet for physical activity and mental exercise legislation freedom to express natural behaviours animal husbandry principle that seeks to enhance to quality of captive animal care provides species appropriate challenges opportunities and stimulation provides the environmental stimuli necessary for optimal psychological and physiological well being gives animals choice and control over how they spend their time

Types of enrichment include food based enrichment sensory enrichment environmental or habitat based enrichment cognitive enrichment or training novelty objects toys or new experiences

In situ advantages
ex situ advantages

In situ disadvantages
ex situ disadvantages

Enteral medication orally via mouth or rectally
via tube to the gastrointestinal tract
parenteral any internal route other than enteral
topical applied to the surface of body eg skin
eyes
Inhalation treatments that are passed directly to
the respiratory system

Prescribed medication
non prescribed medication
Pom v
pom vps
nfa vpa
avm gsl

what is expiry date what is use by date

Stereotypical behaviour

What is nutrition and what is important and why. the importance of water. Providing a balanced diet. body condition scoring. feeding methods grazers browsers filter feeders active hunters ambush hunters scavengers and foragers. food presented in bowl on floor scattered enrichment hand fed. Water provided in bottle in bowl in trough in wallow or pond h₂O balls

Guinea pig normal and abnormal behaviours
how does environmental factors influence their
behaviour monitoring behaviour and recording
behaviour and what is minimum care.

