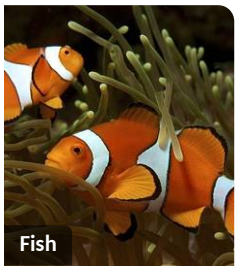
LEARN WITH AKSHADA · PHOTO LESSON

Animal groups: who belongs where?

Scientists sort animals into groups, just as we sort clothes into shirts, socks and caps. Animals in the same group share the same **body features**.


Mammal


Bird


Fish


Reptile


Amphibian


Insect

For the parent *read in 1 minute*

We sort animals by **what their body is like**, not by where they live or whether they fly. So a **bat** is not a bird, a **dolphin** is not a fish, and a **penguin** is still a bird.

Ask three questions: **What covers its body?** (hair, feathers, scales, moist skin) **How are its babies born?** (born alive or from eggs) **How does it breathe?** (lungs or gills)

Animals with a backbone

Feel the bumpy bones down the middle of your back: that is your backbone. Animals with one are called **vertebrates**.

Mammals · Birds · Fish · Reptiles · Amphibians

Animals without a backbone

Called **invertebrates**. Most animals on Earth are like this.

Insects · Spiders · Worms · Snails · Crabs

Talk about it *before turning the page · 5 minutes*

1. **A hen and a crow look different. Why do we put them in the same group?**
   Listen for: both have feathers, a beak, two wings and two legs, and both lay eggs.
2. **Can you think of an animal that lives in water but is not a fish?**
   Listen for: dolphin, whale, frog, turtle, crocodile, duck. Living in water does not make an animal a fish.
3. **Which animals did you see today? Do they have a backbone?**
   Listen for: dog, cat, crow, pigeon, cow (backbone); ant, mosquito, fly, earthworm (no backbone).

How to use these pages

- Pages 2 to 4: one or two groups a day. Cover the fact line and let your child guess first.
- Page 5 puts all six groups side by side, with the "tricky ones". Page 6 has games to play at home and the key points.
- Finish with the quick check on page 7. The answers are on page 8.

Mammals has a backbone

hair or fur | babies born alive | babies drink milk | breathe with lungs | warm-blooded: body stays warm



Cow and calf

Hair on the body; the baby drinks milk

This calf in Gujarat is drinking its mother's milk. All mammal babies feed on milk.



Asian elephant

Babies born alive

A mother elephant carries her baby inside her for almost two years before it is born.



Dolphin

Lives in water but breathes air

It comes up to breathe through a hole on top of its head. It is a mammal, not a fish.

Tricky: the bat

- A bat **flies**, but it is a **mammal**, not a bird.
- It has fur, not feathers, and feeds its babies milk.
- You are a mammal too!

Birds has a backbone

feathers | a beak, no teeth | two wings, two legs | lay eggs with hard shells | warm-blooded



Kingfisher

Feathers, a beak, two wings, two legs

It digs a tunnel in a riverbank and lays its eggs at the end.



House sparrow

Lays eggs with hard shells

It often builds its nest in a hole in a wall, close to our homes.



Penguin

Cannot fly, but it is a bird

It has feathers and lays eggs. Its stiff wings work like flippers for swimming.

Only birds have feathers

- Bats and insects fly, but have no feathers.
- Ostriches, emus and penguins cannot fly, but they have feathers and lay eggs, so they are birds.

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Fish has a backbone

scales | fins to swim | gills to breathe in water | live only in water | most lay eggs | cold-blooded



Goldfish
Scales, fins and gills

It takes in water through its mouth; the gills take the air out of the water.



Clownfish
Lives in the sea, lays eggs

It hides among the stinging arms of a sea anemone without getting hurt.



Whale shark
The biggest fish in the world

It is a shark, not a whale: it breathes with gills. Look how small the people are!

Fish near you

- Rohu, catla, pomfret and hilsa are fish we eat in India.
- A seahorse is a fish too: it has fins and gills.

Reptiles has a backbone

dry, scaly skin | lay eggs on land | breathe with lungs | cold-blooded: need the sun to warm up



House gecko (chhipkali)
Dry, scaly skin

It climbs walls and can drop its tail to escape. A new tail grows back.



Rat snake (dhaman)
No legs; scaly skin

This snake is not poisonous. It eats rats, so it helps farmers.



Indian star tortoise
Hard shell; lives on land

It digs a hole in the soil and lays its eggs there.



Crocodile
Cold-blooded; lays eggs on land

It lies in the sun to warm up its body, often with its mouth open.



Scales up close (kingsnake)
Dry scales cover the body

Snakes grow a new skin under the old one, then wriggle out of the old skin.

Cold-blooded?

- A reptile's body is as warm or as cool as the air around it.
- That is why lizards and crocodiles lie in the sun in the morning, and hide in the shade when it is very hot.
- Turtles live in water, but come onto land to lay their eggs.

Amphibians has a backbone

moist, smooth skin, no scales | live on land and in water | lay eggs in water | young (tadpoles) live in water



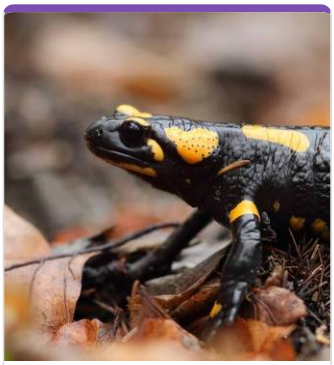
Common toad
Lives on land and goes back to water to lay eggs

Toads have drier, bumpier skin than frogs, but they are still amphibians.



Tree frog
Moist, smooth skin

Sticky pads on its toes help it climb leaves and branches.



Fire salamander
Moist skin, no scales

It looks like a lizard but is an amphibian. Its young start life in water.

Two lives

- **Amphibian** means "two lives".
- A frog starts as a tadpole in water and breathes with gills, like a fish.
- It grows legs and lungs, and can then live on land.

Insects no backbone

six legs | three body parts | two feelers | most have wings | no backbone: a hard outer covering



Ant (weaver ant queen)
6 legs, 3 body parts, 2 feelers

Count them: head, middle and back part, with three legs on each side.



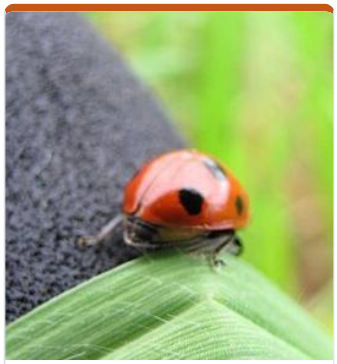
Monarch butterfly
Six legs and four wings

It starts life as a caterpillar that hatches from a tiny egg.



Honeybee
Wings, feelers, six legs

It drinks nectar to make honey and carries pollen from flower to flower.



Ladybird
A beetle with hard wing covers

Its spotted covers protect thin wings folded underneath. It eats tiny plant pests.

Is it an insect? Count the legs!

- A **spider has 8 legs** and only two body parts, and no feelers, so it is **not** an insect.
- Earthworms, snails, centipedes and crabs have no backbone either, but they are not insects.
- *For curious minds:* the three body parts are called the **head**, **thorax** (middle) and **abdomen** (back). The legs and wings grow from the thorax.

Sort it! The six groups side by side

Read across a row to describe one group. Read down a column to compare the groups.

Group	Body covering	How babies are born	Where they live	Examples
Mammals	Hair or fur	Born alive; drink mother's milk	Mostly on land; some in water (whale, dolphin); bats fly	cow, dog, elephant, human
Birds	Feathers	Hatch from eggs with hard shells	Land, trees, water, air	sparrow, crow, peacock, duck
Fish	Scales, wet and slimy	Most hatch from soft eggs laid in water	Only in water	rohu, goldfish, shark
Reptiles	Dry scales or a hard shell	Hatch from eggs laid on land	Mostly on land; some in water	lizard, snake, tortoise, crocodile
Amphibians	Moist skin, no scales	Hatch from jelly-covered eggs in water, as tadpoles	Young in water; grown-ups on land and in water	frog, toad, salamander
Insects	Hard outer covering; no backbone	Most hatch from tiny eggs	Almost everywhere	ant, bee, butterfly, ladybird

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Tricky ones

These animals fool many people. Remember: we sort by the **body**, not by where an animal lives or how it moves.

Bat
Flies, but has fur and feeds its babies milk: a **mammal**.

Whale and dolphin
Live in water, but breathe air, are born alive and drink milk: **mammals**.

Penguin
Cannot fly, but has feathers and lays eggs: a **bird**.

Ostrich
The biggest bird. It cannot fly but runs very fast, and lays the biggest eggs: a **bird**.

Tortoise and turtle
Both are **reptiles** and lay eggs on land. A tortoise lives on land and has stumpy legs; a turtle lives mostly in water and has flippers.

Spider
8 legs, 2 body parts, no feelers: **not an insect**. It has no backbone.

Whale shark
The biggest **fish**. It is called a whale because it is so big, but it has gills and fins.

Salamander
Looks like a lizard, but has moist skin with no scales: an **amphibian**.

Try at home

1. Animal sorting cards

Cut 24 small cards. Write one group on six of them: **Mammals, Birds, Fish, Reptiles, Amphibians, Insects**. Write these animals on the rest:

dog | crow | rohu | lizard | frog | butterfly
goat | peacock | seahorse | snake | toad | ant
bat | hen | shark | turtle | mosquito | dolphin

- Put the group cards in a row and sort the animals under them. Say one body clue for each.
- Then sort again a new way: *has legs / no legs*, or *lives in water / on land*. See how the groups get mixed up!

Answer key: mammals: dog, goat, bat, dolphin · birds: crow, peacock, hen · fish: rohu, seahorse, shark · reptiles: lizard, snake, turtle · amphibians: frog, toad · insects: butterfly, ant, mosquito.

2. Bug hunt (look, do not touch)

- Spend 15 minutes in a garden, park or on a balcony with pots. Look under leaves, on flowers and near the soil.
- For each small creature, **count its legs**. Six legs: an insect. Eight legs: a spider. No legs: maybe a worm or a snail.
- Draw two you found and label the head, middle and back parts.

Safety: observe only; do not pick them up. Some ants bite and bees sting. Keep away from nests and hives. Wash your hands after touching soil or plants.

3. "Who am I?" riddles

- One player thinks of an animal. The others ask yes/no questions about its body: *"Do you have feathers? Do you lay eggs? Do you have six legs?"*
- Guess the group first, then the animal. Swap turns.

Try these:

1. I have fur and I fly at night.
2. I have dry scales, no legs, and I shed my skin.
3. I have six legs and I make honey.

Answers: 1. a bat (mammal) 2. a snake (reptile) 3. a honeybee (insect)

4. Zoo, aquarium or pet visit

On a visit to a zoo, aquarium, pet shop, farm or a friend's pet, tick each group when you spot it:

☐ a mammal: _____	☐ a bird: _____
☐ a fish: _____	☐ a reptile: _____
☐ an amphibian: _____	☐ an insect: _____
☐ a tricky one, and why it is tricky: _____	

Safety: do not tap on glass or feed zoo animals. Keep fingers out of cages. Touch a pet only with the owner's permission, gently, and wash your hands afterwards.

Key points

- Animals **with a backbone**: mammals, birds, fish, reptiles and amphibians. Insects have **no backbone**.
- Body covering is the best clue: **hair** (mammals), **feathers** (birds), **wet scales and fins** (fish), **dry scales** (reptiles), **moist skin** (amphibians).
- Mammal babies are born alive and drink milk. Birds, reptiles, amphibians, insects and most fish hatch from eggs.
- Insects have **six legs** and **three body parts**.

Always remember

Never pick up or chase a wild animal: frogs, lizards, snakes and birds should be watched quietly from a distance. If you see a snake, move away and tell an adult. Wash your hands with soap after touching soil, plants or any animal.

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Quick check 10 questions · answers on page 8

1. Which animal has **feathers**?
   (a) bat (b) parrot (c) frog (d) snake

2. Which group breathes with **gills** all its life?
   (a) mammals (b) birds (c) fish (d) reptiles

3. A dolphin lives in the sea. It is a:
   (a) fish (b) mammal (c) amphibian (d) reptile

4. How many legs does an insect have?
   (a) 4 (b) 6 (c) 8 (d) 10

5. True or false: a spider is an insect.
   ☐ True ☐ False

6. Match each animal to its group. Write the letter.

1. Cow ___	A. reptile
2. Crocodile ___	B. bird
3. Frog ___	C. mammal
4. Sparrow ___	D. amphibian

7. Which animal has **no backbone**?
   (a) cat (b) pigeon (c) ant (d) goldfish

8. **Odd one out:** snake, lizard, tortoise, frog. Which one is **not** a reptile?

.....

9. A penguin cannot fly. Why is it still a bird? Give one reason.

.....

10. **Who am I?** I have moist, smooth skin. I start my life as a tadpole in a pond, and later I hop on land.

.....

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Answers

1. (b) parrot. Only birds have feathers.
2. (c) fish.
3. (b) mammal. It breathes air with lungs, and its baby is born alive and drinks milk.
4. (b) 6.
5. False. A spider has 8 legs and two body parts.
6. 1-C, 2-A, 3-D, 4-B.
7. (c) ant. It is an insect; insects have no backbone.
8. Frog. It is an amphibian; the others are reptiles.
9. Any one: it has feathers; it has a beak; it lays eggs with hard shells; it has two wings and two legs.
10. A frog.

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