

1 How are animals classified?

Circle all the animals.



Images (top left to right): Brilliance stock, suns07butterfly, K.Decor, Valentina Razumova, grey_and, Scisetti Alfio, Vladimir Volodin, COZ, pan demin, Daniel Prudek, Eric Isselee, Bildagentur Zoonar GmbH/Shutterstock.com

1 How are animals classified?

KEY TERMS

eukaryotic

a type of cell that contains a nucleus and other small structures

heterotrophic

must consume parts of other organisms (living or dead) as food

multicellular

made of many eukaryotic cells

Match the key term with the correct field.

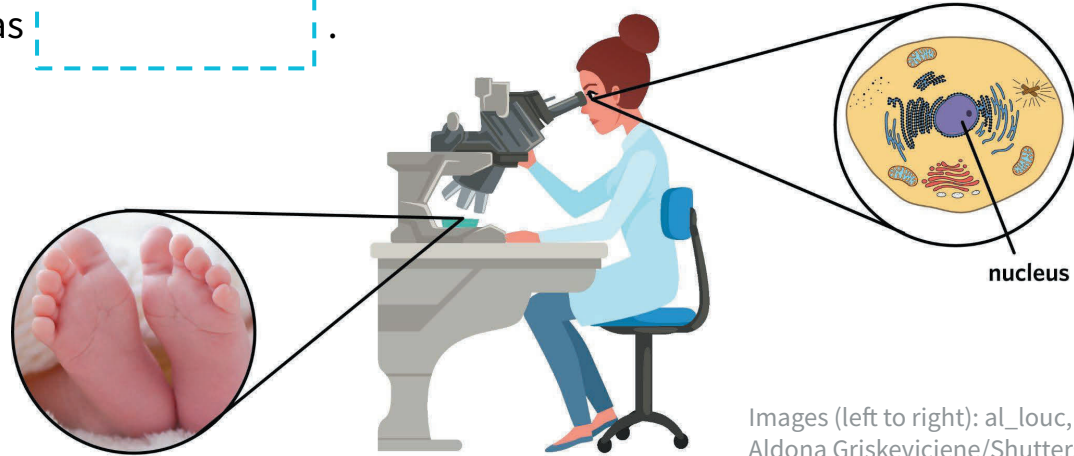
MEMORY DEVICE

YOU are (eukaryotic)
YOU-karyotic.

Organisms are made up of very small building blocks called cells. Animals, including humans, are made up of cells that contain a nucleus.

Another feature that animals have in common is that they contain more than one eukaryotic cell, so they are .

Unlike plants, animals need to eat other organisms for food and are therefore classed as .



Images (left to right): al_louc, NotionPic, Aldona Griskeviciene/Shutterstock.com

1 How are animals classified?

KEY TERMS

invertebrates

animals that do not contain a backbone

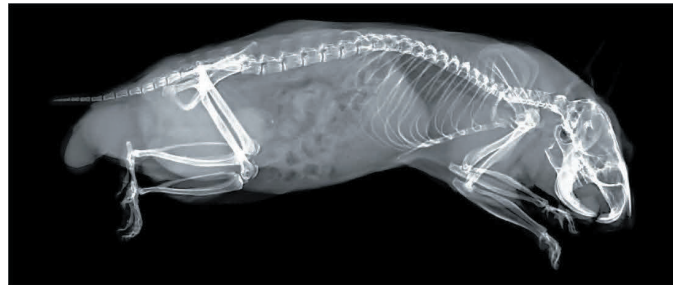
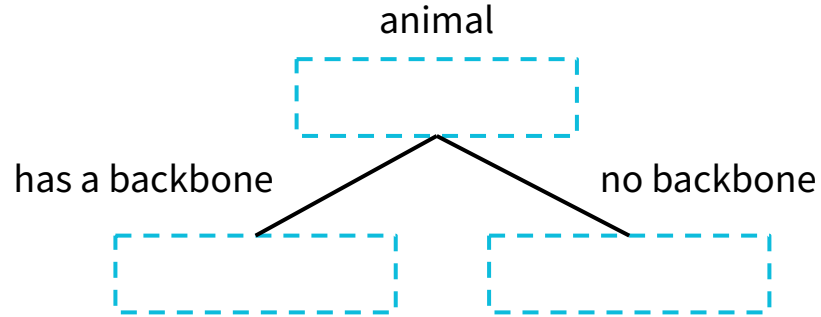
kingdom

the highest level of classification (taxa)

vertebrates

animals that contain a backbone

The Animal kingdom consists of two groups, those which have a backbone and those which do not.



backbone



no backbone

Images (left to right): BillieBonsor, Valentina Razumova/Shutterstock.com

1 How are animals classified?

KEY TERMS

exoskeleton



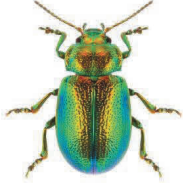



an external support that some invertebrates have to protect the body

invertebrates

animals that do not contain a backbone

The majority (98%) of animal species are .

Some invertebrates, such as crabs, snails, and beetles, have an that gives support to the organism on the outside. Other invertebrates, such as jellyfish and octopus, have soft bodies.

examples of invertebrates with an exoskeleton	examples of soft-bodies invertebrates
 <p>snail</p>  <p>prawn</p>  <p>beetle</p>	 <p>slug</p>  <p>jellyfish</p>  <p>octopus</p>

Images (left to right): COZ. Aleksandar Dickov, Anton Kozyrev, Eric Isselee, pan demin/Shutterstock.com

1 How are animals classified?

Cows are heterotrophs. Which statement is correct:

- A** Heterotrophs need to eat other organisms for energy.
- B** Heterotrophs can produce their own energy from sunlight.



Image: Eric Isselee/Shutterstock.com

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Which of the following is the correct classification for these animals?

	vertebrate	invertebrate
A	worm	dog
B	dog	worm

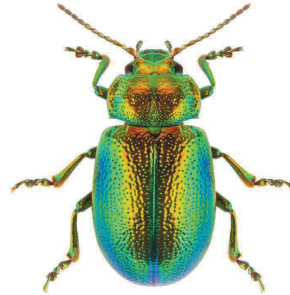


Images (left to right): SasaStock, Valentina Razumova/Shutterstock.com

1 How are animals classified?

Tick the correct statement.

A	All insects are invertebrates.	Some insects have an exoskeleton.
B	Some insects are invertebrates.	All insects have an exoskeleton.







Images (top left to right): suns07butterfly, anat chant, Anton Kozyrev, guy42/Shutterstock.com



1 How are animals classified?

Classify the following animals by placing a **tick** in the correct column.

type of animal	eukaryotic	multicellular	heterotroph	vertebrate	invertebrate
human 					
rabbit 					
jellyfish 					
frog 					
dragonfly 					

Images (top to bottom): Dasha Petrenko, Eric Isselee, Bildagentur Zoonar GmbH, Sergejus Byckovskis/ Shutterstock.com

1 How are animals classified?

Success measure

I can explain the common features of animals, and categorise examples as invertebrates and vertebrates.



not yet



with help



by myself

2 What class are you in?

KEY TERMS

mammals

class of vertebrates with fur or hair, visible ears, that feeds milk to their young and has different types of teeth

reptiles

class of vertebrates with smooth, dry skin, and that mostly lay soft eggs

MEMORY DEVICE

MR FAB can help you remember the five vertebrate groups! Mammals, Reptiles, Fish, Amphibians, Birds.

MR FAB is an acronym for the five classes of vertebrates.

M 	R 
 <small>gifs.com</small>	 <small>gifs.com</small>

2 What class are you in?

KEY TERMS

amphibians

class of vertebrates with moist smooth skin, lay eggs in water without a hard shell, have four legs or none







birds

class of vertebrates with feathers, that lays eggs with hard shells, has two legs

fish

class of vertebrates with scales that lays eggs in water without a shell, has a streamlined body and paired fins

MR FAB is an acronym for the five classes of vertebrates.

F 	A 	B 
		

2 What class are you in?

I am a vertebrate, have scales and lay eggs in water.

Who am I?

Tick the correct answer.

- A a fish
- B an amphibian



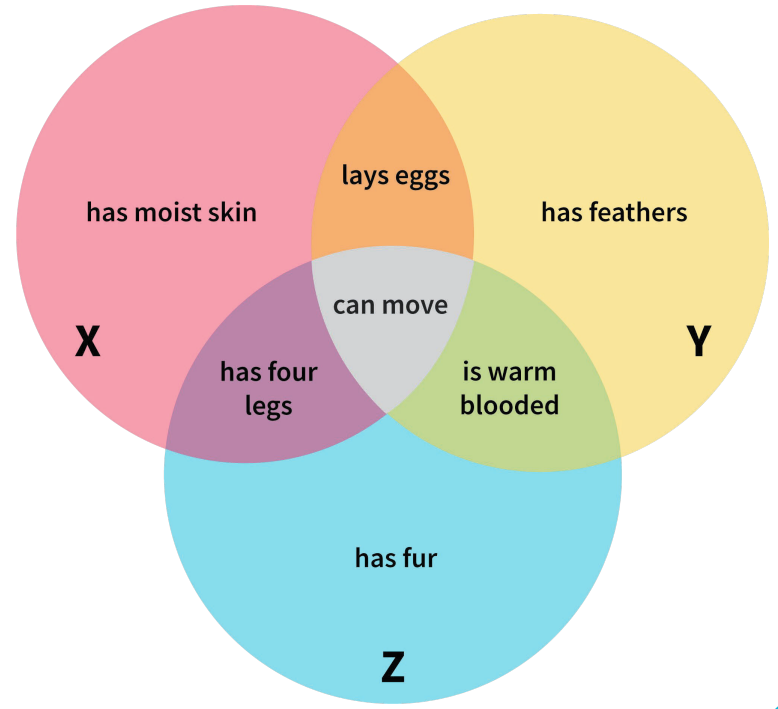
2 What class are you in?

Use the Venn diagram to determine the classes of animals X, Y and Z.

Hint: Mammals and birds are warm-blooded.
Reptiles, fish and amphibians are cold-blooded.

Tick the correct statement

- A** organism Z could be a dog
- B** organism Y could be a frog
- C** organism X could be a parrot



2 What class are you in?

I am a crocodile. I have smooth dry skin and I lay eggs.

Which class do I belong to?

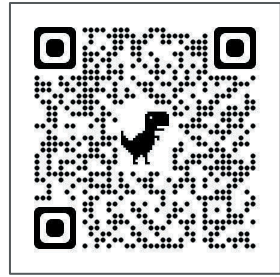
- A reptiles
- B amphibians



2 What class are you in?

ClimateWatch is a citizen science program developed by EarthWatch Australia, the University of Melbourne, and the Bureau of Meteorology. It looks at the effect of temperature and rainfall on the seasonal behaviour of Australian animals and plants. It also contains lots of information about different species.

Go to <https://www.climatewatch.org.au/> and download the free ClimateWatch app and use it to **complete the table**. An example of an amphibian has been completed for you.



Class of vertebrate	Common name (optional add photo)	Binomial name (from drop-down list in app)	Reason for classification in this class	Where to look to find this organism (from app)
Amphibian	Eastern banjo frog	<i>Limnodynastes dumerilii</i>	Has smooth, moist skin	South-eastern Australia, urban areas, near still water

2 What class are you in?

Success measure

I can categorise examples of vertebrates according to their class.



not yet



with help



by myself