



Lesson Plan: Grouping of Animals

Grade Level: 3

Subject: Life Science

Duration: 45–60 min

NGSS 3-LS3-1: Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.

Learning Objectives

By the end of this lesson, students will be able to:

- **Classify** animals into two main groups: vertebrates and invertebrates based on physical features



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Materials Needed: (all links are included in this PDF)

- Printed copies of the Study Guide (<https://newpathworksheets.com/api/guide/study-guide-science-grade-3-grouping-of-animals.pdf>)
- Vocabulary matching worksheet (<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-grouping-of-animals-1.pdf>)
- Activity Lesson for guided practice (<https://newpathworksheets.com/api/activity-lesson/activity-lesson-science-grade-3-grouping-of-animals-4.pdf>)



- Practice Worksheets (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-grouping-of-animals-1.pdf>)
- Assessment Quiz (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-grouping-of-animals-0.pdf>)

Lesson Procedure

Step 1: Introduction (5 minutes)

- Hook students by asking: "Can anyone name an animal that has a backbone? What about one that doesn't?"
- Discuss that scientists group animals to better understand their diversity and unique characteristics.

Step 2: Direct Instruction (10 minutes)



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- Assign the practice worksheet where students label animals and identify their group characteristics. (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-grouping-of-animals-1.pdf>)
- Have students choose one vertebrate group and draw an animal belonging to it, listing two of its physical features.

Step 5: Assessment (5 minutes)



- Administer the lesson quiz to evaluate student understanding of animal classification. (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-grouping-of-animals-0.pdf>)
- Review answers as a class to clarify any misconceptions about specific animal groups.

Differentiation Strategies

For advanced learners:

- Ask students to research the hierarchical system (Phylum, Class, Order) and classify a specific animal using all levels.

For learners needing support:

- Provide a picture chart of the five vertebrate groups to help students categorize animals during independent practice.



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- Activity Lesson PDF (<https://newpathworksheets.com/api/activity-lesson/activity-lesson-science-grade-3-grouping-of-animals-4.pdf>)
- Worksheet PDF 0 (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-grouping-of-animals-0.pdf>)
- Worksheet PDF 1 (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-grouping-of-animals-1.pdf>)
- Worksheet PDF 2 (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-grouping-of-animals-2.pdf>)



- Worksheet PDF 3 (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-grouping-of-animals-3.pdf>)
- Vocabulary PDF 1 (<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-grouping-of-animals-1.pdf>)



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GROUPING OF ANIMALS

Animals can be **classified**, or grouped together, by the things they have in common, such as how they act, where they live, or how they look. This is one way scientists organize what they are studying.

Scientists separate animals into two main groups related to whether the animal has a backbone in its body or not. Those animals **with backbones are part of the vertebrates group**. Those animals **without a central backbone are invertebrates**.

Vertebrates

There are **five main groups of vertebrates** based on specific animal traits and characteristics. Those groups include fish, birds, reptiles, amphibians, and mammals.



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Fish are vertebrates that live their whole lives in water. Fish breathe oxygen through their gills and have scales on their bodies.



Birds are also a group of vertebrates. A bird has feathers, wings, and a beak. Birds breathe oxygen through their lungs.



Reptiles are also a group of vertebrates. Snakes, crocodiles, and turtles are all examples of reptiles.

Reptiles breathe through their lungs.



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Mammals are also vertebrates. Mammals are animals that have hair, breathe through their lungs, and feed their babies milk from the mother. Examples of mammals are dogs, cats, and humans.

Lesson Checkpoint: What are the five main groups of vertebrates?

Invertebrates

Now for the animals without backbones. **Invertebrates** are animals that do not have a backbone.



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Four Kinds of Invertebrates

There are four major kinds of **invertebrates**: sea jellies, arthropods, worms, and mollusks.

Sea jellies have soft bodies, they live in the ocean, and they have body parts that can sting. Jellyfish are examples of sea jellies.



Arthropods' skeletons are on the outside of their bodies. Arthropod bodies are made up of several parts and sections. An example of an arthropod is a beetle.



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Lesson Checkpoint:

What are the four major kinds of invertebrates?



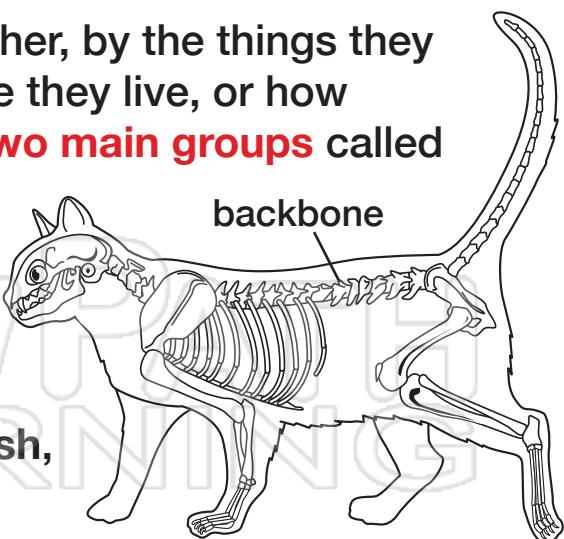
Grouping of Animals

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Name _____ Class _____ Date _____

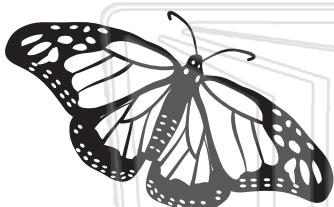
Animals can be **classified**, or grouped together, by the things they have in common, like by how they act, where they live, or how they look. Scientists separate animals into **two main groups** called **vertebrates** and **invertebrates**.

Vertebrates are animals that have a **backbone**. There are **five main groups** of vertebrates based on specific animal traits and characteristics. Those groups include **fish, birds, reptiles, amphibians, and mammals**.

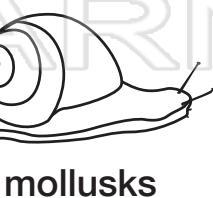
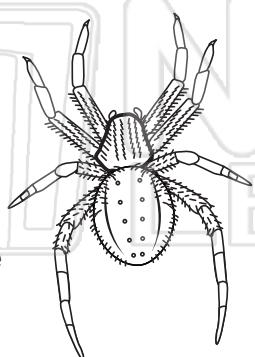


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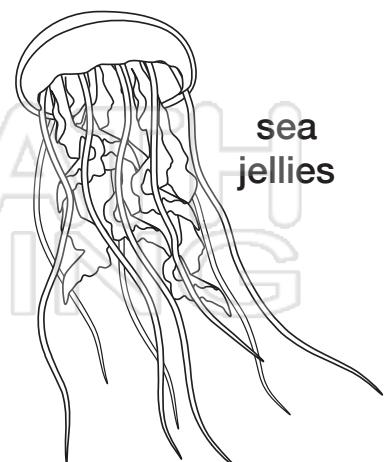
Invertebrates are animals that do not have a backbone. Instead, they have a soft body. Invertebrates are the largest group of animals. There are **four major kinds** of invertebrates, which include arthropods, worms, sea jellies and mollusks.



arthropods include insects & spiders



worms



sea jellies

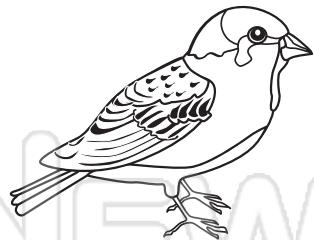
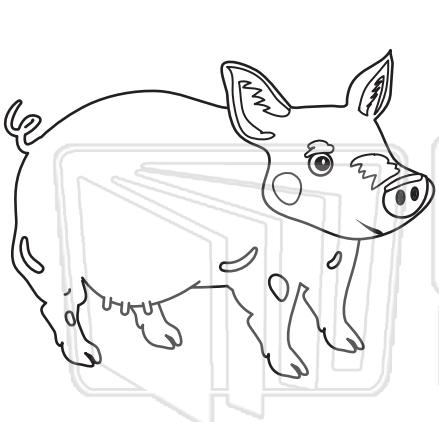


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Name _____ Class _____ Date _____

Draw a line to match each animal with the correct group.



mammals

amphibians



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fish

These animals are all _____ because they
have _____.

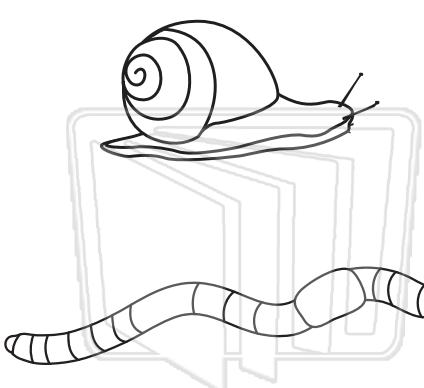


Grouping of Animals

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C

Name _____ Class _____ Date _____

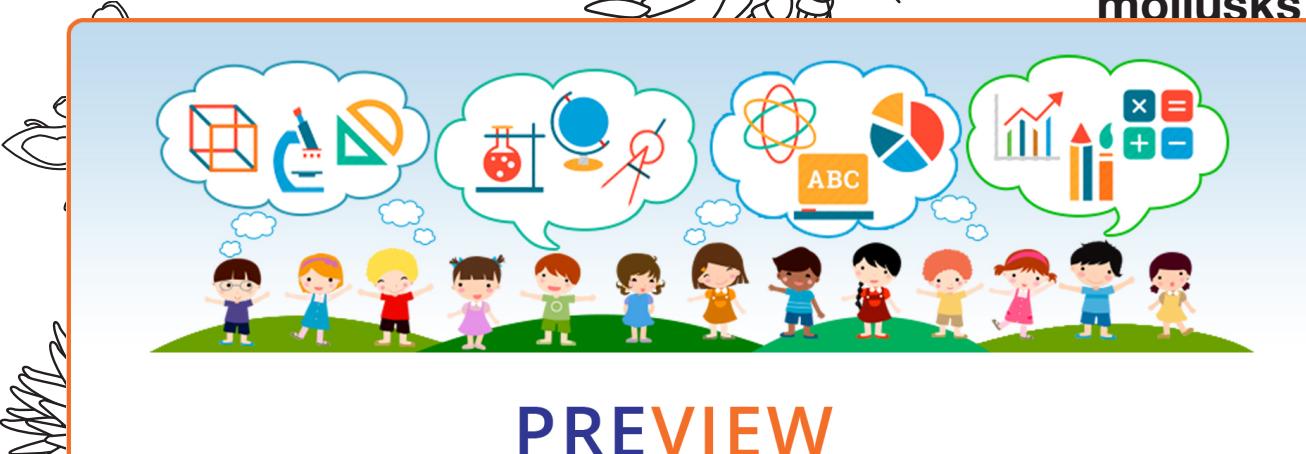
Draw a line to match each animal with the correct group.



worms

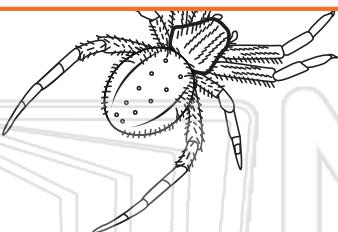


mollusks



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arthropods

These animals are all _____ because they
do not have _____.

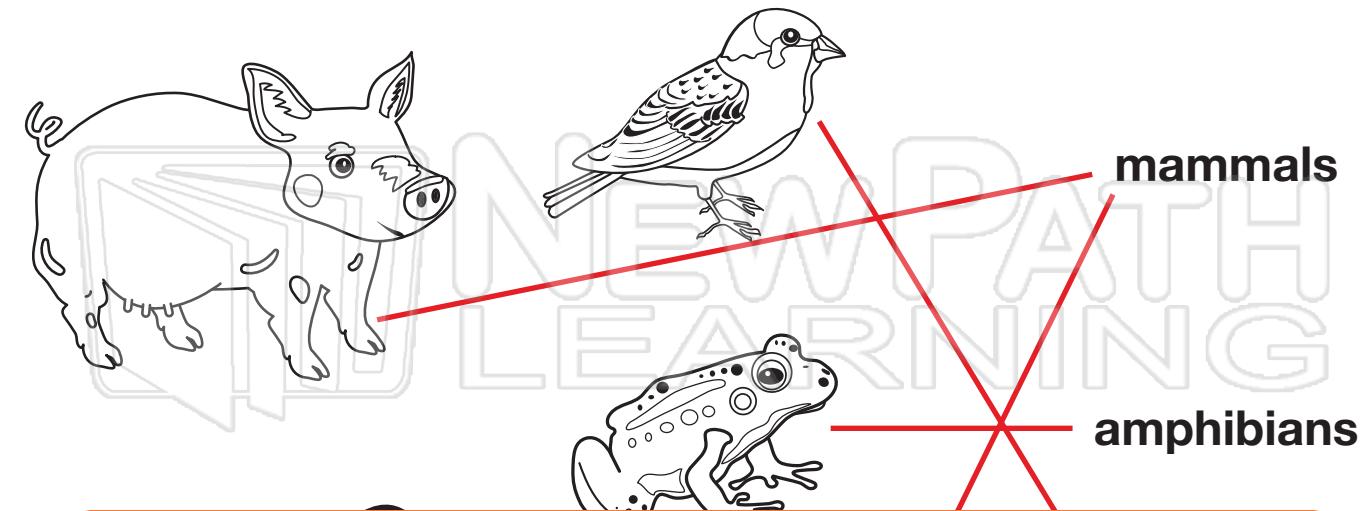


Grouping of Animals

Sci
C

Answer Key

Draw a line to match each animal with the correct group.



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These animals are all vertebrates because they
have backbones.

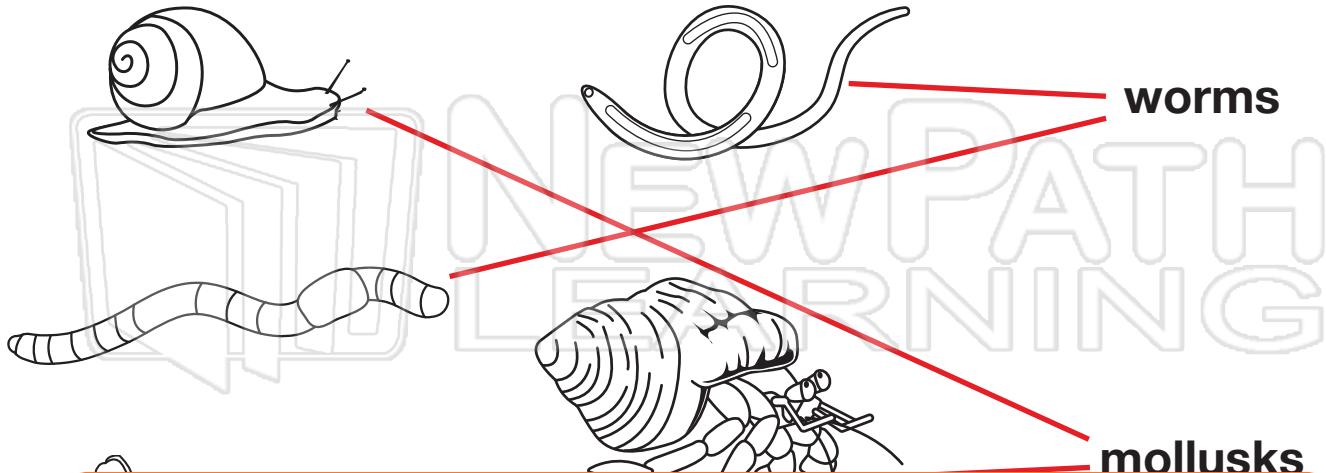


Grouping of Animals

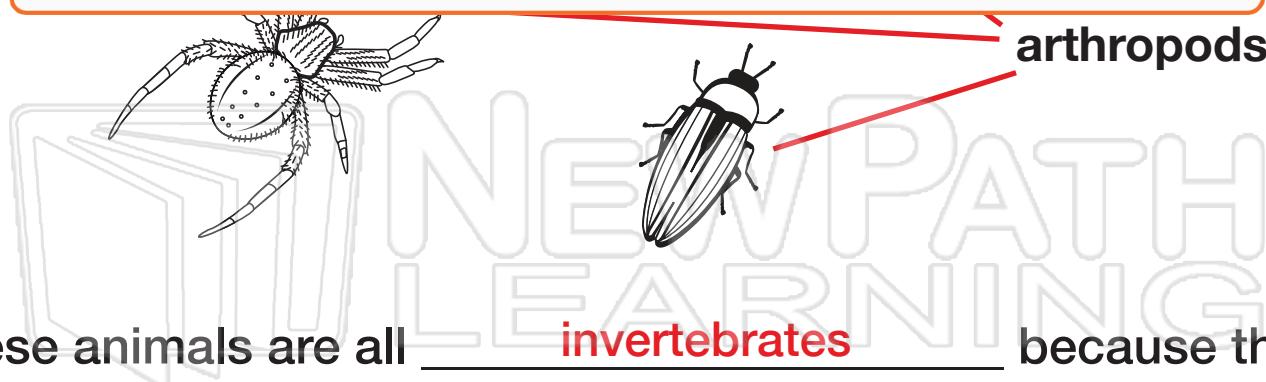
Sci
C

Answer Key

Draw a line to match each animal with the correct group.



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These animals are all invertebrates because they
do not have backbones.



Name _____ Class _____ Date _____

1

Animals can be _____, or **grouped together**, by the things they have in common, such as how they act, where they live, or how they look.

- A separated
- B divided
- C counted
- D classified



2

Animals can be classified into **two main groups**: those that have a backbone and those that do not. These two groups are called _____.



- A birds and reptiles
- B animals and fish
- C humans and animals
- D vertebrates and invertebrates

3

_____ are animals that **have a backbone**.

- A Snails
- B Vertebrates
- C Insects



4

There are _____ **main groups of vertebrates** based on specific animal traits and characteristics.

- A one
- B three



5

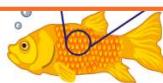


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D shells



D Birds



9

A bird has feathers, wings, and a beak. **A bird however does not have _____.**

- A claws
- B teeth
- C eyes
- D lungs



10

This animal is an example of a _____.

- A vertebrate
- B invertebrate
- C mammal
- D reptile





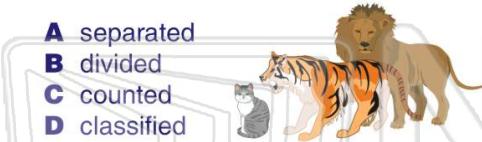
Name _____ Class _____ Date _____

1

Animals can be _____, or **grouped together**, by the things they have in common, such as how they act, where they live, or how they look.

- A separated
- B divided
- C counted
- D classified

D



2

Animals can be classified into **two main groups**: those that have a backbone and those that do not. These two groups are called _____.



D

- A birds and reptiles
- B animals and fish
- C humans and animals
- D vertebrates and invertebrates

3

_____ are animals that **have a backbone**.

- A Snails
- B Vertebrates
- C Insects



B

4

There are _____ **main groups of vertebrates** based on specific animal traits and characteristics.



C

- A one
- B three

5



D

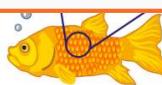
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D

D shells



D Birds



9

A bird has feathers, wings, and a beak. **A bird however does not have** _____.

- A claws
- B teeth
- C eyes
- D lungs



B

10

This animal is an example of a _____.

- A vertebrate
- B invertebrate
- C mammal
- D reptile



A



Name _____ Class _____ Date _____

1

Birds breathe **oxygen** through their _____.

- A** gills
- B** lungs
- C** feathers
- D** scales



2

Which is a **group of vertebrates**?

- A** Arthropods
- B** Mollusks
- C** Worms
- D** Reptiles



3

Snakes, crocodiles, and _____ are all examples of **reptiles**.

- A** fish
- B** crabs
- C** turtles



4

How do reptiles **breathe**?

- A** through their lungs
- B** through their gills
- C** through their eyes
- D** through their

5



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- C** scales
- D** a heart



9

Mammals are **vertebrates** that have hair, breath through their lungs, and _____.

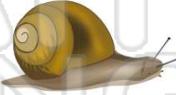
- A** feed their babies milk from the mother
- B** grow scales
- C** have feathers
- D** have only 2 feet



10

Invertebrates are animals that _____.

- A** have bones
- B** have a backbone
- C** do not have a backbone
- D** have gigantic bodies





Name _____ Class _____ Date _____

1 Birds breathe **oxygen** through their _____.

- A** gills
- B** lungs
- C** feathers
- D** scales



B

2 Which is a **group of vertebrates**?

- A** Arthropods
- B** Mollusks
- C** Worms
- D** Reptiles



D

3 Snakes, crocodiles, and _____ are all examples of **reptiles**.

- A** fish
- B** crabs
- C** turtles



C

4 How do reptiles **breathe**?

- A** through their lungs
- B** through their gills
- C** through their eyes
- D** through their

A

5



D

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A

- C** scales
- D** a heart



9 **Mammals** are **vertebrates** that have hair, breath through their lungs, and _____.

- A** feed their babies milk from the mother
- B** grow scales
- C** have feathers
- D** have only 2 feet



A

10 **Invertebrates** are animals that _____.

- A** have bones
- B** have a backbone
- C** do not have a backbone
- D** have gigantic bodies



C



Name _____ Class _____ Date _____

Match each of the following terms to its definition:

Vertebrates

Classification

Invertebrate

1. - the process of grouping items together according to their similarities



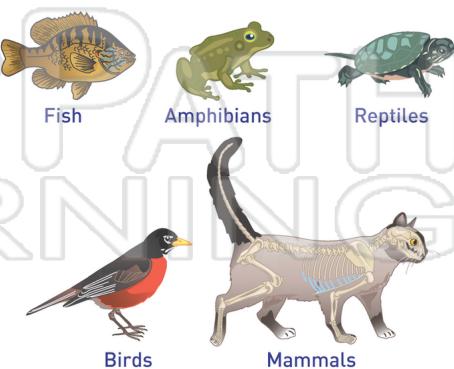
2. have of in work



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3. - animals that have a backbone; five main groups of vertebrates: fish, birds, reptiles, amphibians and mammals





Name _____ Class _____ Date _____

Match each of the following terms to its definition:

Vertebrates

Classification

Invertebrate

1. classification - the process of grouping items together according to their similarities



2. in
back
inver
wor



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3. vertebrates - animals that have a backbone; five main groups of vertebrates: fish, birds, reptiles, amphibians and mammals

