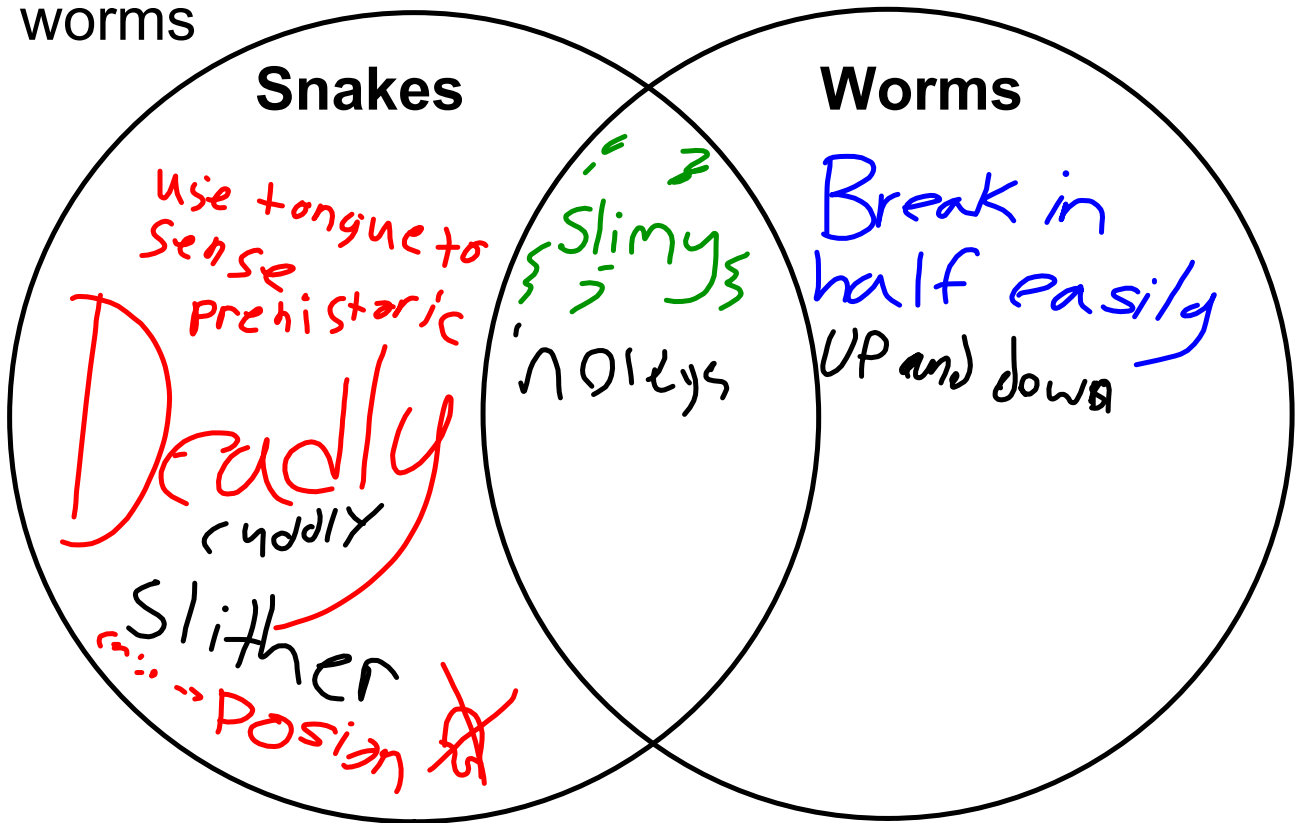


Fill in the venn diagram comparing snakes and worms



Do snakes and worms belong to the same kingdom?

How many **DOMAINS** ?

3 Bacteria, Archae, Eukarya

How many **KINGDOMS**?

6 Eubacteria
Archaeobacteria
Protista
Fungi
Plantae
Animalia



Do snakes and worms belong to the same kingdom?

How many **DOMAINS** ?

3 Bacteria, Archae, Eukarya

How many **KINGDOMS**?

6 Eubacteria
Archaeobacteria
Protista
Fungi
Plantae
Animalia



Kingdom Animalia:

multicellular

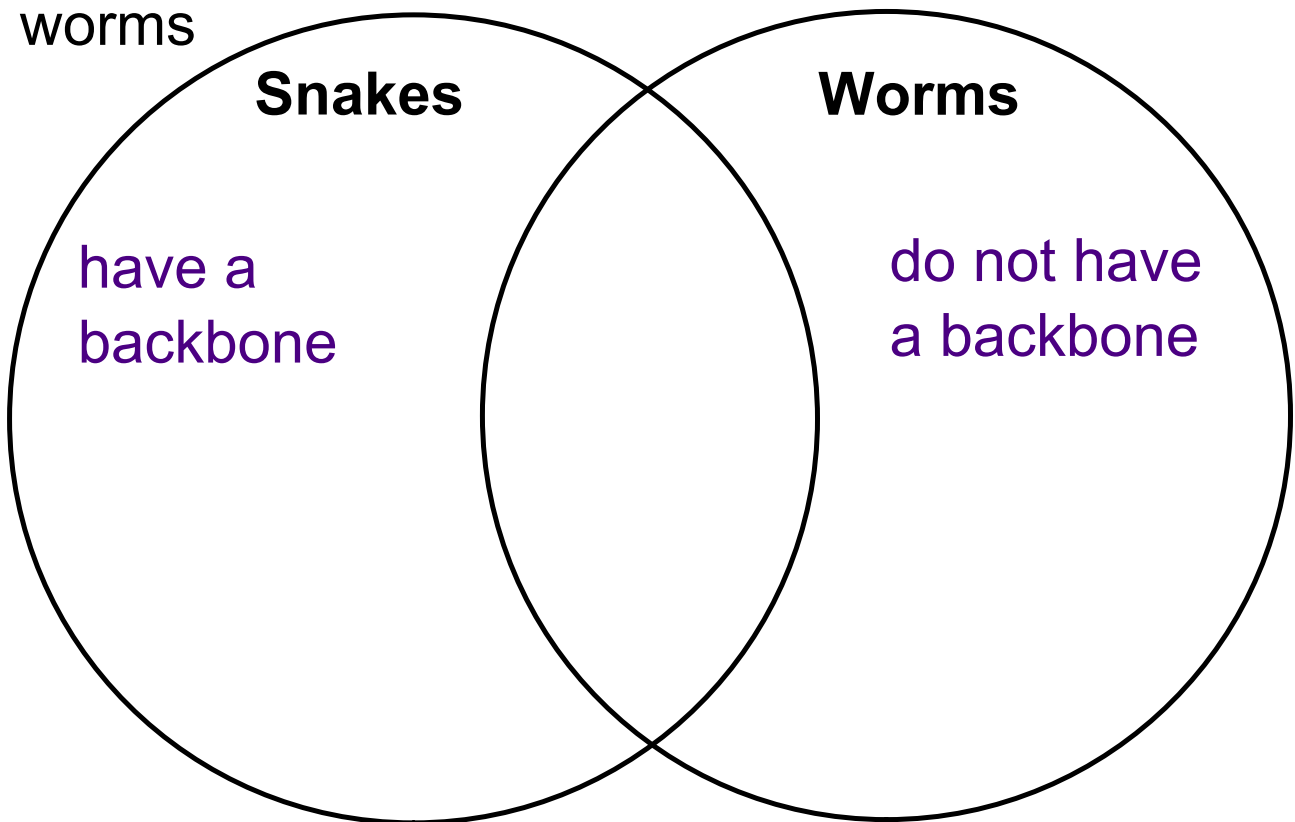
do not have cell walls

cannot make their own food (must get their food by eating other organisms)

most can move from place to place

Classifying Invertebrates

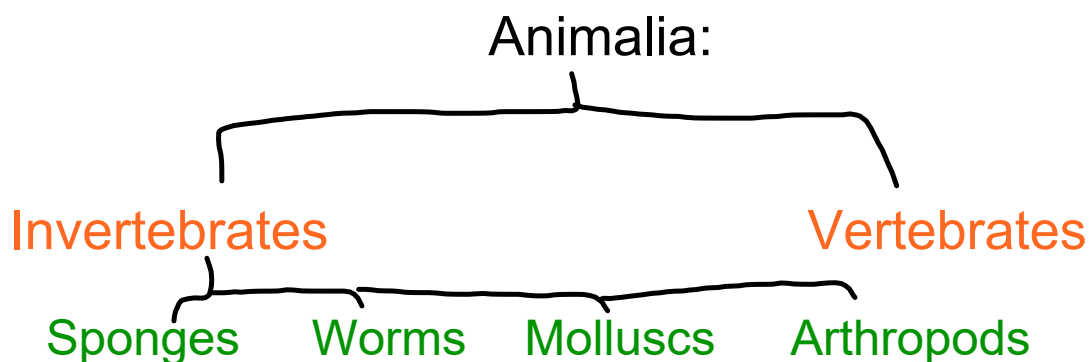
Fill in the venn diagram comparing snakes and worms



Invertebrates: animals without backbones

Vertebrates: animals with backbones.

98% of all animals are invertebrates!



Classifying Invertebrates

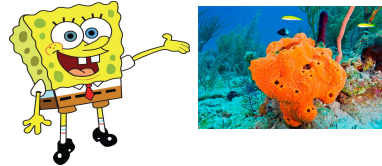
Invertebrates

Sponges Worms Molluscs Arthropods

Using your invertebrate phyla chart, classify each of the following as one of the above phyla.



Snail
soft body parts, with shell



Sponge:
soft, spongy tissue



Earthworm
soft body parts, without shell



Crayfish
hard skin covering
joined body parts
10 legs



Ant
hard skin covering
joined body parts
six legs and no wings



soft body
no hard shell covering



The octopus is a mollusc but because it does not have a shell to protect itself, it has adapted by having a large and complex brain.

Test Your Memory:

How many domains of life are there?

How many Kingdoms are there?

How many phyla are there in the invertebrates of Kingdom Animalia?

What are these four phyla?

Test Your Memory:

How many domains of life are there?

3: bacteria, archae, eukarya

How many Kingdoms are there?

6: eubacteria, archaebacteria, protista, plantae, animalia, fungi

How many phyla are there in the invertebrates of Kingdom Animalia?

4

What are these four phyla?

sponges, worms, molluscs, arthropods

Of all the invertebrate phyla, arthropods contain the greatest diversity of animals.

Arthropods include:

lobsters

centipedes

spiders

crabs

scorpions

shrimp

and insects

Arthropods are found in more habitats in the world than any other animal group. Their **adaptations** are what make them so successful in different habitats.

What is an adaptation?

Adaptations are special features that help living things survive in different habitats.

Some adaptations of arthropods are:

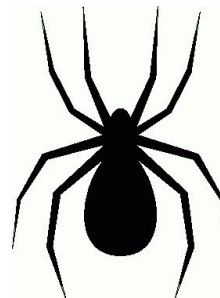
harder outer body covering called an exoskeleton (ex: beetle)



specialized mouth parts (ex: mosquito can suck victim's blood)



jointed legs (ex: spider)



segmented body (ex: centipede)



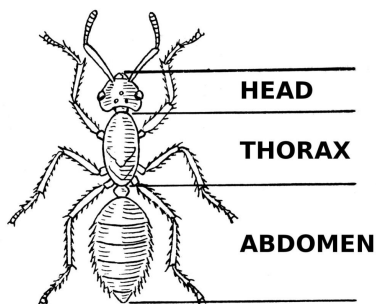
Is a spider an insect?

All arthropods are not the same!

Although spiders and insects are classified as arthropods, they belong to different subgroups.

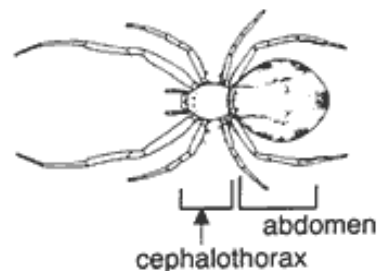
Insects:

- have three main body parts (head, thorax, abdomen)
- have six legs
- have up to four wings that come out of the thorax.

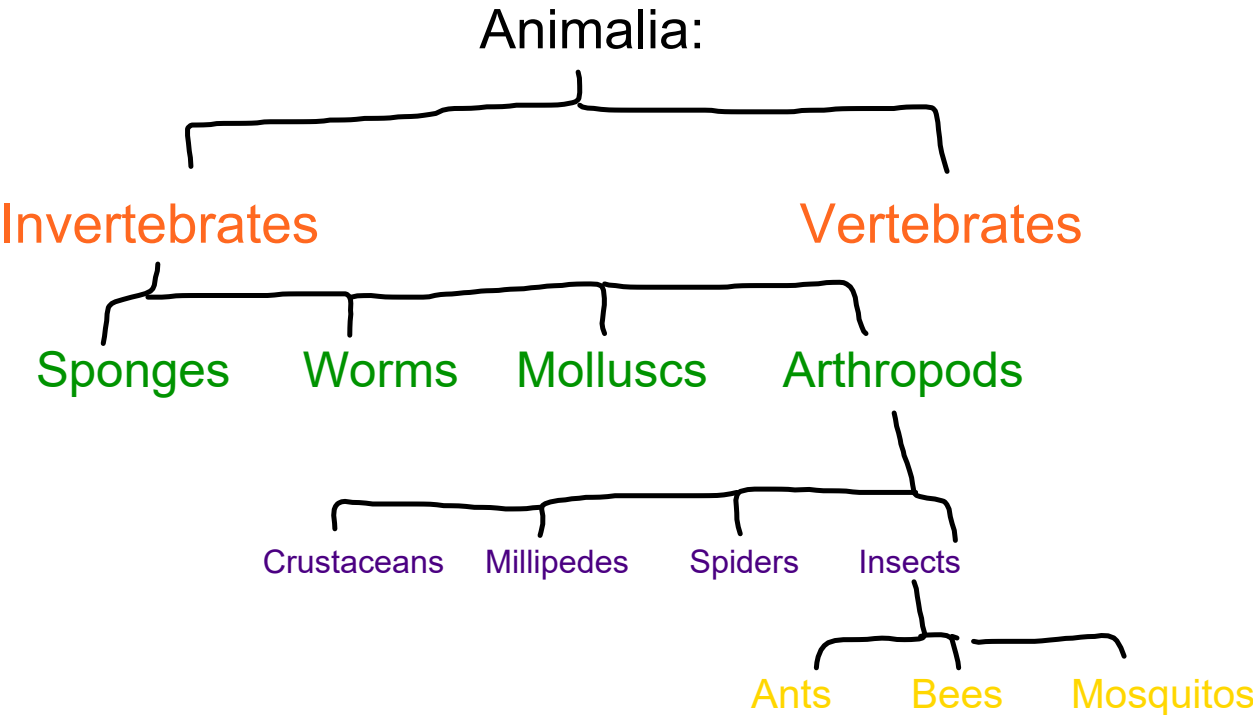


Spiders:

- have two body parts (head and thorax combined and the abdomen)
- have eight legs.



Classifying Invertebrates



The Worm:

Place your worm on a piece of paper and use a magnifying glass to investigate the following.

Does it have a head?

Does it have a tail?

Does it have legs?

Is it segmented? (Is the body made up of sections?)

Is there anything else you want to investigate with this worm?