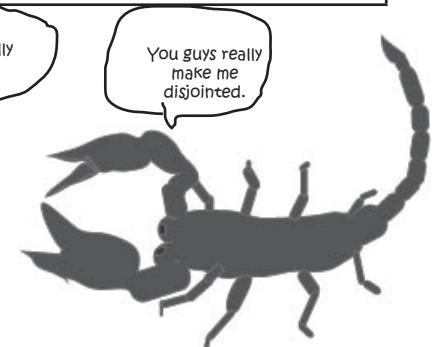
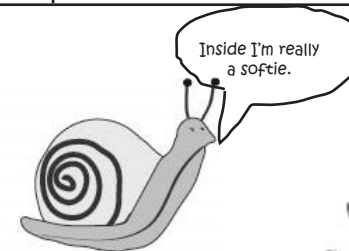
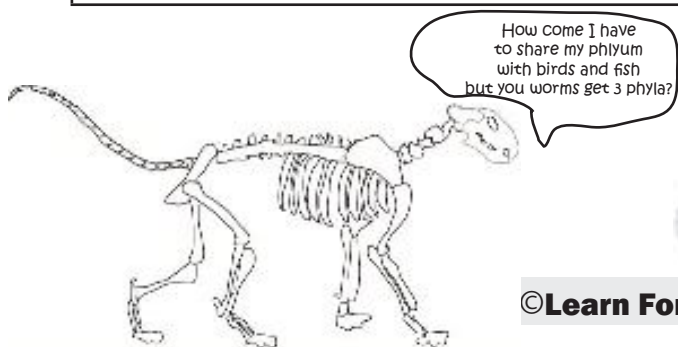


Compare nine different animal phyla from simplest to most complex.

PORIFERA	CNIDARIA	PLATYHELMINTHES
NEMATODA	ANNELIDA	MOLLUSCA
ECHINODERMATA	ARTHROPODA	CHORDATA



Compare nine different animal phyla from simplest to most complex.

Phyla = plural of phylum

Make a mobile of nine phyla and one animal from each. Note how the complexity of organs and systems increases.

<p>PORIFERA Multi-celled sea animals that stay attached to a rock or sea bottom</p> <p>"Pores"</p> <p>a sac with pores</p> <p>no real organs</p> <p>SPONGES</p>	<p>CNIDARIA Two layers of cells that form a hollow sac and has a single opening for food to enter and waste to leave</p> <p>"hollow intestines"</p> <p>no real organs</p> <p>CORAL HYDRA JELLYFISH</p>	<p>PLATYHELMINTHES Flat worms</p> <p>Tube with flat bottom</p> <p>Bilateral symmetry</p> <p>Has organs and simple systems</p> <p>Can grow new body parts</p>
<p>NEMATODA Round worms</p> <p>Simple cylinder shape</p> <p>Bilateral symmetry</p> <p>Has organs and simple systems</p> <p>Reproduces by laying eggs</p>	<p>ANNELIDA Segmented worm</p> <p>Cylinder divided into ringed sections</p> <p>Bilateral symmetry</p> <p>Organs contained in a middle layer</p> <p>LEECHES EARTHWORMS</p>	<p>MOLLUSCA Soft bodied animals that usually have a shell</p> <p>"soft-bodied"</p> <p>SNAILS CLAMS OYSTERS</p>
<p>ECHINODERMATA Organs are arranged around the center of the animal, like spokes around a wheel.</p> <p>"spiny skinned"</p> <p>radial symmetry</p> <p>STARFISH SAND DOLLARS</p>	<p>ARTHROPODA Contains different sections that are connected by joints</p> <p>Exoskeleton</p> <p>"joint feet"</p> <p>Different organs are in different sections.</p> <p>INSECTS SPIDERS CRAYFISH LOBSTERS</p>	<p>CHORDATA Has a backbone and spinal cord</p> <p>Endoskeleton</p> <p>"chord"</p> <p>Different organs are in different sections.</p> <p>MAMMALS FISH BIRDS REPTILES</p>

Note: Vertebrate is one of 4 sub-phylum. The other 3 have simple cords without vertebrate and are sometimes called "pre-vertebrate." They are not included here at the elementary level.

How come I have to share my phylum with birds and fish but you worms get 3 phyla?

We get around pretty well without all those appendages in the way.

Approximately 30 different animal phyla have been identified. The most common phyla with over 10,000 species are listed here.

Inside I'm really a softie.

You guys really make me disjointed.

Zoology 10 Information Pieces

To Make Your **MatchCard** more durable:

1. Put the student MatchCard and instructor MatchCard back to back in a clear plastic page protector.
2. Laminate the information pieces. Or you can make them sturdier by covering the paper with transparent tape prior to cutting the pieces out.
3. For more ideas on how to use the MatchCards, and for keeping a notebook for review, see the Instructor's Guide.

Multi-celled sea animals that stay attached to a rock of sea bottom Z-10
Two layers of cells that form a hollow sac with a single opening for food to enter and waste to leave Z-10
Flat Worms Z-10
Round Worms Z-10
Segmented Worms Z-10
Soft bodied animals with a shell Z-10
Organs and arranged around the center of the animal like spokes around a wheel Z-10
Contains different sections that are connected by joints Z-10
Has a backbone and spinal cord Z-10

A sac with pores Z-10
No real organs Z-10
No real organs Z-10
Tubes with flat bottoms Z-10
Bilateral symmetry Z-10
Has organs and simple systems Z-10
Can grow new body parts Z-10
Simple cylinder shape Z-10
Bilateral symmetry Z-10
Has organs and simple systems Z-10
Reproduces by laying eggs Z-10

Cylinder divided into ringed sections Z-10
Bilateral symmetry Z-10
Organs contained in a middle layer Z-10
Radial symmetry Z-10
Different organs are in different sections Z-10
Different organs are in different sections Z-10

EXOSKELETON Z-10
ENDOSKELETON Z-10

<i>"Pores"</i> Z-10
<i>"Hollow Intestines"</i> Z-10
<i>"Soft-bodied"</i> Z-10
<i>"Spiny-skinned"</i> Z-10
<i>"Joint feet"</i> Z-10
<i>"Chord"</i> Z-10

Sponges Z-10
Coral Z-10
Hydra Z-10
Jellyfish Z-10
Earth Worms Z-10
Leeches Z-10
Snails Z-10
Clams Z-10
Oysters Z-10
Starfish Z-10

Sand Dollars Z-10
Insects Z-10
Spiders Z-10
Crayfish Z-10
Lobsters Z-10
Mammals Z-10
Fish Z-10
Birds Z-10
Reptiles Z-10