

ANIMAL PHyla CHARACTERISTICS

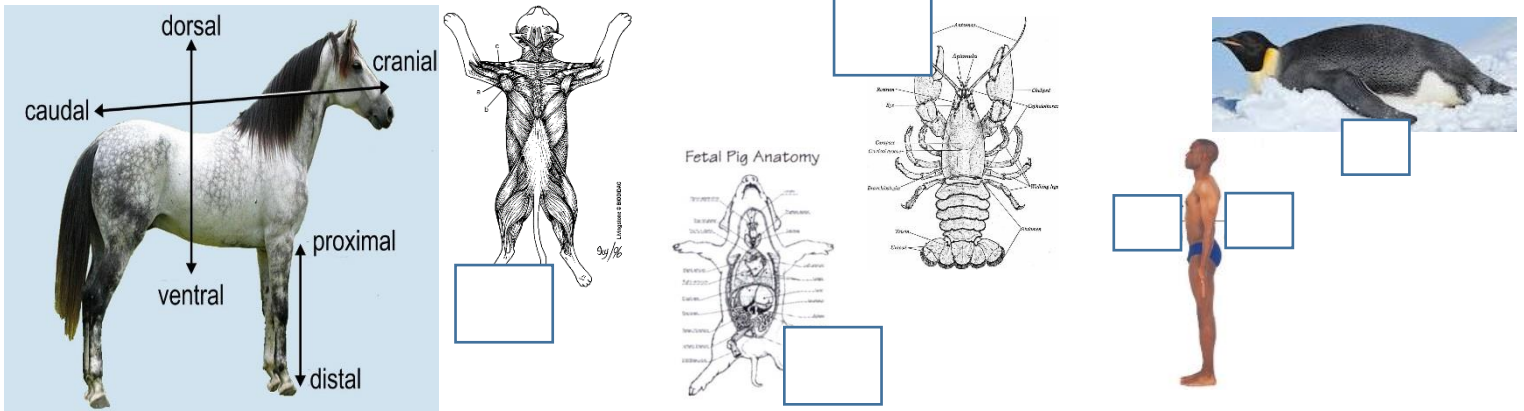
You may need to "research" this information to answer the questions.

Answer the Following questions about the Animal Kingdom:

1. What are 9 phylums that fall under the animal kingdom?

- | | | |
|----------|--------------------|--------------------|
| a. _____ | d. <u>Nematoda</u> | g. _____ |
| b. _____ | e. _____ | h. _____ |
| c. _____ | f. _____ | i. <u>Chordata</u> |

2. What is the difference between dorsal and ventral sides to an organism? Looking at the picture of the horse as a reference, label **(D)** for the **dorsal** (on the backside) and **(V)** for the **ventral** (on the stomach side) sides on the other animals.

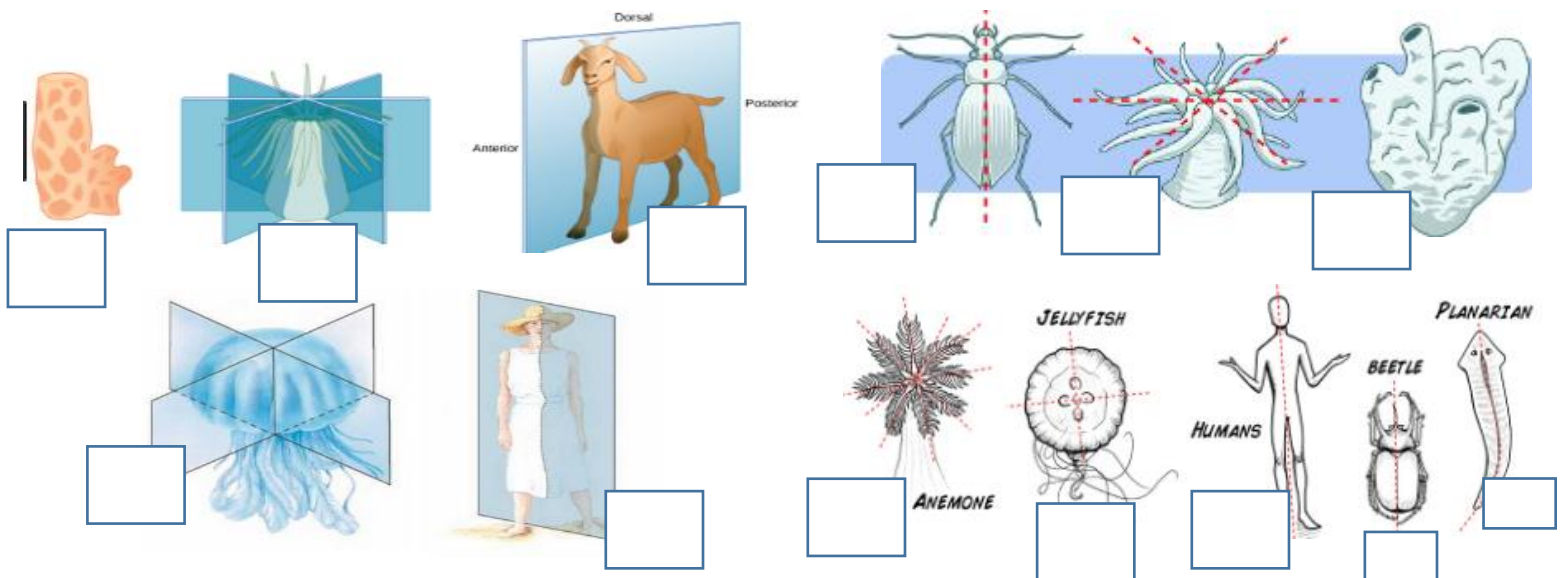


Symmetry is a "balance". Something with symmetry has similar parts facing each other or around an axis. A car has bilateral symmetry, a daisy has radial symmetry and a crumpled paper bag has asymmetry.




3. What are the different types of symmetry? There are three main types of symmetry in the animal kingdom. They are:

- **Asymmetry** (no symmetrical at any point), abbreviate as **(A)**
- **Radial** (symmetrical like a pizza, in a circular form at the center point), abbreviate as **(R)**
- **Bilateral** (symmetrical on one line. If sliced in half, both sides would look the same) **(B)**.

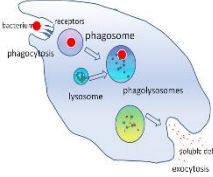

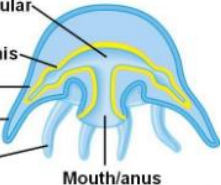
Match the description with the types of symmetry.



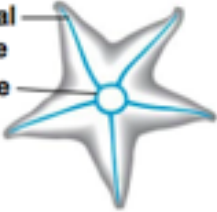
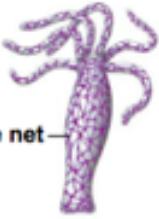
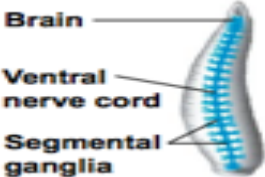
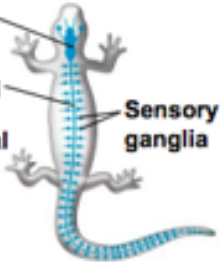
4. There are three different types of skeletal systems within the animal kingdom. They are **exoskeleton**, **endoskeleton** and **hydroskeleton**. Match the description with the skeletal system types.

<p>The internal skeleton; bony and cartilaginous structure (especially of vertebrates). A skeletal structure internal to an organism</p> 	<p>A skeleton that consists of water-filled body cavities controlled by muscles.</p> 	<p>Hard shell like external skeleton that supports and protects an animal's body</p> 
<p>Skeleton Type:</p>	<p>Skeleton Type:</p>	<p>Skeleton Type:</p>

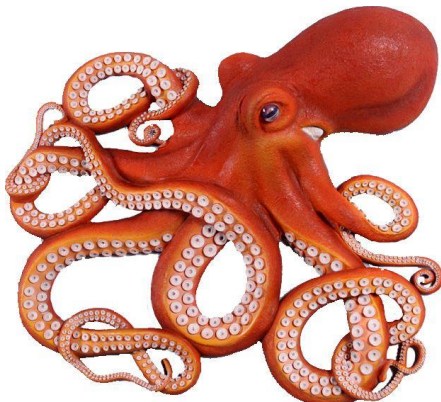
5. There are three different types of digestive systems within the animal kingdom. They are **extracellular**, **incomplete** and **complete**. Match the description with the digestive system types.

<p>Food is broken down outside the cell either mechanically or with acid by special molecules called enzymes.</p> 	<p>This digestive system has an opening for the mouth and a separate opening for the anus at the end of the digestive track.</p> 	<p>The digestive system shares the same opening for the mouth and the anus.</p> 
<p>Digestive Type:</p>	<p>Digestive Type:</p>	<p>Digestive Type:</p>

6. There are four main types of nervous systems within the animal kingdom. They are **Dorsal (central nervous system)**, **Ventral**, **Net**, **Ring**. Match the description with the nervous system types.

<p>A nervous system that is webbed together joined in the center by a ring and branches out from there.</p> 	<p>The simplest form of a nervous system. A nerve net consists of interconnected neurons lacking a brain.</p> 	<p>Central nervous system with a dorsal brain linked to a ventral nerve cord that consists of paired segmental ganglia running along the ventral midline of the thorax and abdomen.</p> 	<p>Nervous system composed of the brain and spinal cord on the dorsal side of the organism.</p> 
<p>Nervous System Type:</p>	<p>Nervous System Type:</p>	<p>Nervous System Type:</p>	<p>Nervous System Type:</p>

7. This is a picture of an octopus. Describe at least 3 examples of its external features (features that describe the phenotypes)?



1. _____
2. _____
3. _____