

BIOLOGY
ARTHROPOD COMPARISON

NAME _____
DATE _____ PER _____

Purpose: To identify similarities and differences among various arthropods.

Materials: Preserved crayfish, preserved spiders

Procedure:

1. Observe the preserved specimens to complete the chart below.
You may need to use your book or the internet as a reference.
2. Label the diagrams of the crayfish and spider.

	CRAYFISH	SPIDER
EXOSKELTON (YES OR NO)		
BODY SEGMENTS (NUMBER AND/OR NAMES)		
NUMBER OF LEGS		
OTHER METHODS OF MOVEMENT		
SENSORY ORGANS		
METHOD OF RESPIRATION		
OTHER INTERESTING FEATURES		
KINGDOM, PHYLUM, AND CLASS NAMES		

Use the following information to help you label the diagrams of the animals:

- Abdomen - the posterior section of the animal, usually segmented except in **spiders**
- Antennae - long, sensory structures located on the head
- Antennules - short, sensory structures on the **crayfish** head that maintain balance and are sensitive to taste and touch
- Carapace - the main protective shell of a **crayfish** covering the cephalothorax
- Cephalic groove - depression that separates the head and thorax of the **crayfish**
- Cephalothorax - body segment of **crayfish** and **spider** consisting of a fused head and chest
- Cheliped - enlarged claw like structure of the **crayfish** used to catch prey
- Compound eye - large eye with many lenses found in **crayfish**
- Chelicerae - fangs of **spider** used in catching food
- Gills - used for respiration, feathery structures under the carapace of **crayfish**
- Legs - segmented, used for walking, usually have a specialized tip for the species for walking on specific surfaces
- Pedicel - the **spider's** waist, it connects the cephalothorax and the abdomen

- Pedipalps - sensory feelers that look like small legs attached to the head of the **spider** and they hang downward, used to taste and handle food
- Spinnerets - where the **spider's** silk is released; located at the tip of the abdomen
- Swimmerets - smaller appendages used to swim and hold eggs in females on the underside of the **crayfish** abdomen
- Telson - the middle part of the tail of the **crayfish**, when flipped up the **crayfish** can move backwards
- Uropods - the four side flaps of the flipper portion of the **crayfish**

