Arthropods Part 1

Learning Target:

An arthropod is an invertebrate that has a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ body covered with a hard outer \_\_\_\_\_\_\_\_\_\_\_\_\_\_. The outer skeleton is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Arthropods can have many pairs of \_\_\_\_\_\_\_\_\_\_\_\_ and other parts that extend from their body, like \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Many arthropods live in \_\_\_\_\_\_\_\_\_\_\_, but most live on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The exoskeleton allows arthropods to live in any environment. It completely covers the body of an arthropod and acts like a \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ protecting their soft body. On land, the exoskeleton keeps cells, tissues and organs from \_\_\_\_\_\_\_\_\_\_\_\_\_\_ out.

The arthropod's skeleton has \_\_\_\_\_\_\_\_\_\_\_\_\_, places where the exoskeleton is thin and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. An arthropod body typically has \_\_\_\_\_\_\_\_\_ sections: a \_\_\_\_\_\_\_\_\_ at one end, a \_\_\_\_\_\_\_\_\_\_\_ in the middle, and an \_\_\_\_\_\_\_\_\_\_\_\_\_at the other end. Legs are jointed, as are other parts attached to the body, such as antennae and \_\_\_\_\_\_\_\_\_\_\_\_\_\_. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ attach to the exoskeleton as it grows.

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An arthropod must shed its exoskeleton as it \_\_\_\_\_\_\_\_\_\_\_\_. This process is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_. For an arthropod, the times when it molts are dangerous because its soft body is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to predators.

Arthropods have well-developed body systems.

* A nervous system with a \_\_\_\_\_\_\_\_\_\_\_\_ and many different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_organs
* A \_\_\_\_\_\_\_\_\_\_\_\_\_\_ system with a stomach and intestines
* A circulatory system with an \_\_\_\_\_\_\_\_\_\_ circulation of blood. There are no blood vessels.
* A reproductive system that uses only \_\_\_\_\_\_\_\_\_\_\_ reproduction

Scientists have so far identified over 700,000 insect species.

* Included Are:
  + ​

\_\_\_\_\_\_ pairs of legs

\_\_\_\_\_\_body segments

\_\_\_\_\_\_ pair of antennae

Most live on \_\_\_\_\_\_\_\_\_\_.

Insects show great \_\_\_\_\_\_\_\_\_\_\_\_\_\_in appearance. Many species have adaptations in color and shape that allow them to \_\_\_\_\_\_\_\_\_\_\_\_ into their environments.

Many insects have \_\_\_\_\_\_\_\_\_\_\_ eyes and antennae, which are sensory organs. Compound eyes have poor image resolution, however, they provide a wide angled view and the ability to sense fast moving objects. This is why it is so hard to catch a fly. It's not that they see your hand...they perceive the sudden movement.

Many insects are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Some insects, for example, ants termites, and some bees, are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_l insects. They must live in groups in order to survive. Members of the group work together to gather food, maintain the nest, and care the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Often with social insects, just one female, called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_, produces and lays eggs.

During their life cycle, insects undergo a process in which their appearance and body systems many change dramatically. This process is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. There are three states to complete metamorphosis.

Not all insects go through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ metamorphosis, for example, grasshoppers are born in a smaller version of their adult selves. They molt several times before becoming adult size. This is called \_\_\_\_\_\_\_\_\_\_\_\_ metamorphosis. A caterpillar is the larva form of a butterfly. A mosquito is larva when it is swimming in water feeding on algae.

Google how to draw a cricket. Draw a cricket below and label the following; head, thorax, abdomen, antennae, legs.