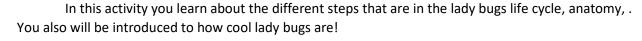


Ladybugs



What is a life cycle?

A life cycle is the steps that an organism goes through from baby to adult. Lady bugs have 4 steps to their life cycle.

What are the steps that us humans have in our life cycle?











Life Cycle





Label the above cycle with the words Adult, Eggs, Pupae, Larvae.

Larvae: Is the stage of the organisms that looks extremely different from the adult. It typically is between the egg and pupae stage.

Pupae: This is the inactive form and is between the larvae and adult stages.

Adult: The final stage in the life cycle.

Egg: Where an organism develops.



Why do you think some organisms have distinct stages in their life cycle like the Lady Bug or Butterfly?

How would these organisms' benefit from having distinct stages in their life cycle?

In butterflies an adult butterfly feeds on nectar from flowers and the caterpillar feeds on plants. The two different stages don't compete for food. This is not so for the ladybug, the adult and larvae both feed on aphids. Aphids are small soft bodied bugs that feed on plant sap.





Now that you have learned about the life cycle of the ladybug lets learn about the anatomy of the ladybug.

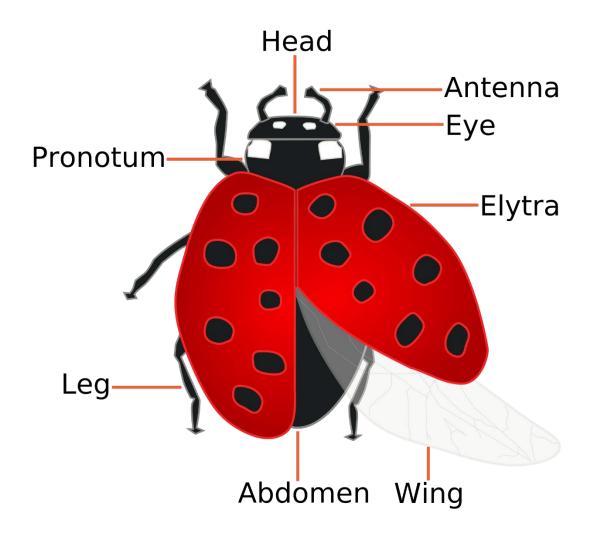
Ladybugs have an exoskeleton. Their skeleton is on the outside giving them a hard exterior.

What are some benefits to having an exoskeleton?

Can you think of another organism that has an exoskeleton?



All insects have an exoskeleton. This hard covering keeps them dry and helps keep the moisture in. It protects them from predators and from falling. Insects also have the ability to shed their exoskeleton when they are ready to grow.



Above is a diagram of a ladybug with body parts labeled. These parts are defined below.



Pronotum: A hard covering (harder than the exoskeleton) that covers only a section on the body. It acts as body armor for the insect.

Elytra: Is the hard covering over the wings. In some insects this is still a true wing.

Head: Where the eyes and the antenna are located.

Abdomen: The last segment or part of the insect. This is where all the digestive organs are stored.

Antenna: Help the insect smell and locate food, mates, and predators.

Wing: A thin membrane that is used in flight.

Leg: Insects have 6 segmented legs.

Eye: Insects have mini-eyes in a bunch that make up one large eye.

Draw any bug you like your favorite or a made-up bug. Or use craft supplies around your house and create a bug. The only rule is that your bug has to have all the parts labeled above. Take a picture of your creation and share it with us!

Thank you for taking part in Sanctuary One Education. I hope you has as much fun as I did. If you haven't already check out the other activities on the blog.