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| **Monday****4/23/12****Getting Ready for Caterpillars** | Objective:

|  |  |
| --- | --- |
| 1.1 | Describe the life cycle of animals including:* Birth
* Developing into an adult
* Reproducing
* Aging and Death
 |

Vocabulary:Metamorphosis: changes in the form/structure of an animal as it matures (does not look the same from baby to adult)* Discuss with the students that we will be learning about life cycles for the next few weeks. We will be getting live caterpillars to live in our classroom for a while. These caterpillars will turn into Painted Lady butterflies. We will observe how they change into butterflies, and will set them free outdoors.
* Conduct a brainstorming session about what the students already know and want to know about caterpillars and butterflies (KWL)
* In their science notebooks, students will do a “pre-assessment”
	+ Draw a picture of what they think a caterpillar looks like
	+ Show in pictures and words how a caterpillar changes during its life.
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| **Tuesday****4/24/12****Caring for Caterpillars** | Objectives:

|  |  |
| --- | --- |
| 1.1 | Describe the life cycle of animals including:* Birth
* Developing into an adult
* Reproducing
* Aging and Death
 |
| 1.2 | Observe that insects need food, air and space to grow. |
| 1.3 | Observe the different stages of an insect’s life cycle. |

**Vocabulary**:CaterpillarMallow plant**Materials**:1 oz cup with lid and tissue for each student1 tsp of caterpillar food for each cupHand lensesContainer of caterpillars and caterpillar food**Focus Question:** Where do our caterpillars live? How do our caterpillars get food?* Discuss the caterpillar’s food with the class. Discuss their natural food as well as the prepared food we will be using in the class.
	+ They prefer to eat from plants that belong to the Mallow family, such as the Malva neglecta. This is a sprawling plant that grows to be about 2 feet tall. It has rounded heart-shaped leaves with scalloped edges. This is where a female butterfly would lay her eggs. When the caterpillar hatches it already has access to food!
	+ The food our caterpillars will be eating is processed from plants they would eat in the wild.
* Students will each prepare a cup of food for a caterpillar. They will need to pack down the food in the cups. This is an important step because loose food can shift and crush the caterpillars!
* Children will pack the food down with their clean fingers to the bottom of the cup by pushing firmly. Try not to smear food to the sides of the cups.
* Have children observe the food as they are working. What can they observe using their senses? (not taste)
* Observe the food with hand lens
* Transfer the caterpillars from the large cup to the smaller cups one by one using a paint brush, or pencil.
* As soon as the students receive their caterpillars they should place a piece of tissue paper over the cup, and put the lid on. Remove excess tissue from around the edge.
* Explain how the caterpillars will attach to the tissue when they form their chrysalis.
* Have students observe their caterpillars with the hand lens…remind them to never tip the cup upside down.
* Give time for students to record their observations in their notebooks, and answer the focus questions.
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| **Wednesday****4/25/12****Learning More About Caterpillars** | Objectives:SCoS Objective(s):

|  |  |
| --- | --- |
| 1.1 | Describe the life cycle of animals including:* Birth
* Developing into an adult
* Reproducing
* Aging and Death
 |
| 1.2 | Observe that insects need food, air and space to grow. |
| 1.3 | Observe the different stages of an insect’s life cycle. |
| 1.4 | Compare and contrast life cycles of other animals such as ladybugs, crickets, guppies or frogs. |

**Vocabuary**:

| **Concept/Vocabulary Word**  | **Definition**  |
| --- | --- |
| habitat | natural environment of an organism |
| shelter | a place to live that provides protection |
| survive | continue to live |
| thrive | grow or develop vigorously; flourish |

**Focus Question:** What do caterpillars need to live?**Materials:**Caterpillars and hand lenses* Begin by having the students observe their caterpillars. Ask the students to look for signs that tell them the caterpillars are alive.
* Ask, “How do you know something is alive?” Develop/discuss the idea that living things share characteristics. They move, eat, grow, respond, eliminate, and reproduce.
* Discuss the needs that living things have in order to survive. Basic needs include air, water, food, shelter, and appropriate temperature. Ask students if they think the caterpillars have the same needs.
* Have students discuss with their table groups how they think our classroom caterpillars will get each of these needs. How will our caterpillar get food? How will our caterpillar get water? (there is enough water in their food for them to survive) How will our caterpillar get air?
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| **Thursday****4/26/12****Observing the Caterpillars** | SCoS Objective(s):

|  |  |
| --- | --- |
| 1.1 | Describe the life cycle of animals including:* Birth
* Developing into an adult
* Reproducing
* Aging and Death
 |
| 1.2 | Observe that insects need food, air and space to grow. |
| 1.3 | Observe the different stages of an insect’s life cycle. |
| 1.4 | Compare and contrast life cycles of other animals such as ladybugs, crickets, guppies or frogs. |

**Vocabuarly:**

| **Concept/Vocabulary Word**  | **Definition**  |
| --- | --- |
| abdomen | rear section of an insect’s body |
| bristles | short, stiff hairs |
| capsule | shiny, dark covering of a caterpillar’s head that contains its eyes |
| frass | little green pellets of waste eliminated by caterpillars |
| hooks | found on prolegs; attach to plants or threads of silk |
| molt | to shed an outer layer of skin |
| prolex | false legs that act as suction cups when walking on a smooth surface |
| segments | divided parts of a caterpillar’s body |
| simple eye | only distinguishes light and dark |
| spiracles | small breathing holes |
| thorax | middle section of an insect’s body |
| true legs | jointed legs on the first 3 segments of a caterpillar that will become the butterfly’s legs |

**Focus Question:** What can caterpillars do? How is the caterpillar’s body the same/different from other animals?**Materials:**Caterpillars, hand lenses, Smartfile* Have students observe the caterpillars. Tell them today we will be observing/learning about the caterpillar’s body parts.
* Give students time to observe the caterpillar’s body. Ask
	+ What color is the caterpillar? How big is it? How would you describe its shape?
	+ Which end is the head? How can you tell?
	+ How many legs can you count?
	+ Describe how the caterpillar moves. Can it walk on the smooth sides of the cup? On the lid? On the food? On the silk?
* Using the smartfile, discuss the different parts of the caterpillar’s body. (There is a great description of each body part in the teacher’s guide on page 23-24)
* Discuss the caterpillar’s head: simple eyes, antenna, upper lip, spinneret, jaw, lower lip
* Discuss the caterpillar’s body: head, simple eyes, true legs, prolegs, spiracles, and bristles
* Ask students to look and see if they can identify any of these parts on their caterpillars.

\*\*There will be activities to create a caterpillar provided during “downtime” when we need fillers as we wait for our caterpillars to change☺ |
| **Friday****4/27/12** | Early Release |