Cool Classroom Critters – The Basics

(Information from http://www.uky.edu/Agriculture/Entomology/ythfacts/mascots.htm)

In general, the bigger the container, the better. At the very minimum, a container should be at least twice the insect's width and five times its length. Gallon jars, aquaria, and plastic food containers are very easy to find and make great bug houses. Be sure the container is rinsed of any soapy (or other chemical) residues, which may harm the insect. Lids should be ventilated, or use a fine, screen-like material (such as nylon stockings) placed over the top. Secure the lid, you don't want the insect to escape!

Adult insects can get by for a few days with a little moisture (from a clean, wet sponge). Keep the insect by itself (so it is not eaten or doesn't eat others) and keep the container out of direct sunlight, and away from heating or cooling vents and drafts. Most insects are more comfortable with even a minimal habitat such as rocks, sticks and/or crumpled paper towel for the insect to hide in. Immature insects such as caterpillars must have food to survive. Ensure a food supply is available before bringing caterpillars into the classroom.

Long-term visitors have a few more needs. The container will need to be cleaned periodically (caterpillar containers should be changed every few days at least). Research the insect's natural environment, and try to make its container as realistic as possible. Always have a source of moisture available. Make sure you will be able to provide plenty of food for the insect. Is it a predator or a leaf feeder? Where can you get food? If you can't determine what the insect eats, don't plan to keep it for more than a few days. Check to be sure there is enough food and water to tide the insect over on weekends. During long holidays it may be best to either take the insect home or set it free, as weather permits.

Mealworms – A mealworm is the larval stage of the darkling beetle. Once you set up the animals, if kept properly, they will self-propagate and you will be able to maintain a beetle colony of your own.

1. Purpose: Observe complete metamorphosis in another type of insect (butterfly also goes through complete metamorphosis)
2. Habitat: Fill a small critter carrier (found at many pet stores) halfway with cornmeal or bran. The mealworms do not need extra moisture, the moisture will come from the food. Change the meal occasionally to prevent mold and foul smells.
3. Food: Raw potatoes, banana peels or apples, cereal
4. Life Span: Several weeks, but a successful colony will always have some live animals in different life stages.
5. Providers: Local bait or specialty pet shops
6. Reference: http://www.uky.edu/Agriculture/Entomology/entfacts/misc/ef002.htm

Crickets – The house cricket, commonly sold in bait stores, is light tan with dark markings. This insect was brought to the U.S. from Europe and works well as a classroom colony.

1. Purpose: Crickets undergo incomplete metamorphosis and act as a good comparison for either butterfly or mealworm life-cycles (complete metamorphosis)
2. Habitat: Fill a small critter carrier (found at many pet stores) with a thick layer of sawdust, mulch or sand for egg-laying. It should be dry on the bottom and have paper towel rolls for hiding spots.
3. Food: Crickets are leaf-feeders but will eat dog food, crackers and bread. They also need water provided via a wet sponge in a small lid.
4. Life Span: Several weeks, but a successful colony will always have some live animals in different life stages.
5. Providers: Local pet shop or bait shop
6. Reference: http://www.uky.edu/Agriculture/Entomology/entfacts/misc/ef007.htm

Madagascar Hissing Cockroaches – This roach comes from Madagascar and is famous for it's signature hissing sound.

1. Purpose: This roach is a hardy critter and lives for several years.
2. Habitat: Line the bottom of the container with mulch or pieces of toweling, and place a test tube of water stopped with cotton, as well as either paper towel rolls or toilet paper rolls in the container for the roaches to hide and aggregate in. Make sure lid is secure – these roaches are great escape artists. Smear Vaseline along the container's top edges to better contain the roaches.
3. Food: Soft and decomposing vegetables, fruit and dog food
4. Life Span: Several years
5. Provider: Specialty pet shop or Butterfly Pavilion gift shop ($5.00/pair)
6. Reference: http://www.key-net.net/users/swb/pet_arthropod/

Chilean Rose Hair Tarantula – A fairly docile species of tarantula, the rose-hair tarantula is a popular pet species.

1. Purpose: This arachnid is long-lived and easy to care for. Students can compare and contrast arachnid and insect characteristics.
2. Habitat: Terrarium layered on bottom with moistened vermiculite and a clay flowerpot for hiding works well. Note: Tarantulas at times will turn upside down and molt their exoskeleton when they have out grown it – if you see them in this state, leave them alone - they are not dead.
3. Food: Water source and small crickets (do not put in live crickets if tarantula has just molted – the cricket can kill the spider)
4. Life Span: Males 5-10 years, Females 10-25 years
5. Provider: Specialty pet shop
6. Reference: http://exoticpets.about.com/cs/tarantulas/p/chileanrose.htm

Additional references:

Butterfly Pavilion Curatorial Department – 303-469-5441 ext 1875
The Pet Arthropod Page - http://www.key-net.net/users/swb/pet_arthropod/