

Living Science Materials

Catalog



Living Science Materials Center



(210) 370-5688 Fax (210) 370-5756



Living Science Materials Catalog

The materials listed in this catalog are available to teachers in school districts that subscribe to the **Living Science Materials Cooperative**. Included in this catalog section are ordering and receiving instructions, safety tips, aquarium guidelines, and an annotated listing of all the materials that are available for checkout from the Living Science Materials Center. For additional information, contact:

Carol Waddell, Operations Manager
Living Science Materials Center
(210) 370-5688
livingscience@esc20.net

Requesting Materials

Teachers ordering materials from the Living Science Materials Center should follow these instructions:

<http://portal.esc20.net/portal/page/portal/esc20public/livingscience>

Make sure that the teacher's name and e-mail address are included on each order.

Materials requested for pick up must be ordered before 12:00pm and can be picked up the next afternoon after 3:00pm and before 5:00pm, at 1314 Hines Avenue, San Antonio. The Living Science Center is open Monday through Friday from 7:30 A.M. until 5:00 P.M.

Some materials require special ordering instructions. This information is noted beside the item listing in this catalog. Also note the quantity limits on some items.

Important Note: If, materials are not available for the requested date, your confirmation e-mail will let you know. Should you still need these items they may be reordered for your next delivery or pick up.



Delivery & Return of Living Materials Living materials are delivered weekly to Region 20 clients. Out of region clients should check with your school or Service Center for delivery schedule. Materials are available for pick up after 24-hour notice is given (if teacher selects this option).

NOTE: Live materials will not be delivered the Monday following a holiday.

Most materials are not to be returned. Those materials that are to be returned are clearly marked and **must be returned on the date indicated on the shipping invoice.**

Rats, mice, gerbils and hamsters do not have to be returned. Teachers must have their own cages and water bottles. Before returning an animal, call the Living Science Center to request a cage for transportation. Adequate food must be placed in the cage when returning animals to ESC-20.

All animals and materials will be delivered in ESC-20 owned containers and/or cages. **All animal cages and fish containers must be returned to ESC-20 on the next van pickup/delivery date following receipt of the animal. All animal cages and fish containers must be returned to Region 20 within 14 days.** If special arrangements are required, contact the Operations Manager of the Living Science Materials Center.

Also, please return all mealworm containers, culture jars, and distilled water containers so they can be reused.

Live snakes, turtles, and tarantulas when available, are loaned for a **two-week period** and are shipped in locked cages. Keys must be returned with the snake. All items with a two-week checkout should be returned to the pick-up point in the school/district the morning before the Region 20 pick-up is scheduled or the items should be returned directly to Region 20 Living Science Materials Center.

Safety in Handling Animals

Animal Bites

All persons handling animals (small mammals, turtles, snakes) should wash hands thoroughly after handling animals.

Though small animals occasionally bite when handled, those produced in the Living Science Materials Center are rabies free. However, possibility of infection should always be considered if someone is bitten. If a bite occurs, the following steps should be taken:

- Contact the School Nurse
- Wash bite with soap and water
- Apply antibiotic ointment
- See that the victim gets a tetanus shot. (Optional)

You may bring the animal, in a cage, to the Living Science Center marked with district name, school name, teacher name, name of person bitten, and date of bite.

The animal will be observed by the Living Science Center for a period of ten days. The status of the animal will be reported to the teacher at the end of the ten-day period.

Safety In Handling Bacteria

Despite every precaution, supposedly pure cultures of bacteria can become contaminated. The chances that a contaminate is pathogenic cannot be ruled out. In order to protect yourself and the students, follow the procedures listed below when working with bacteria in the classroom.

Techniques to be used by students during laboratory periods should be demonstrated by the teacher before going into the laboratory. It should be repeatedly stressed that cultures are completely safe if, and only if, they are handled as if they are pathogenic.

Autoclave all cultures before disposing of bacteria by heating at 15 lbs. pressure for 15 minutes in a pressure cooker.

The importance of stressing that safety is assured as long as proper techniques are employed cannot be overemphasized. As the public generally believes that all bacteria are pathogenic, a parent is understandably distressed to learn his child is working with bacteria unless reassured of safety.

Living Materials Use and Care Tips

Tips on Protozoan Cultures

In general, do not place protozoans in refrigerators or in a location of excess heat or sunshine. Normal room temperatures should be satisfactory. Open all culture jars upon arrival and aerate with a clean pipette. Cover loosely with top. Check light colored animals (amoeba) against dark field background, others against white field background.

Clean cloudy cultures for clear inspection as follows: Using a dissecting microscope, check to see that the majority of animals have settled to the bottom. Pour off top half of water and replace with fresh water. Permit animals to settle again and repeat until clean. Distilled, rain, or spring water may be used.

Do not use tap water. The chlorine content will kill the cultures.

Care of Mealworms

Mealworms may be cultured in an open jar, dish pan or other deep container. Cornmeal or bran can be used as the medium, with slices of raw potato or apple for moisture. Wadded up or shredded newspaper may be placed in the container for the worms to crawl on.

Handling Petri Dishes

Prepared petri dishes must be refrigerated to prevent contamination until time for use. Contaminated dishes **must be bagged in grocery size paper or plastic bags** when being returned to the Living Science Center for disposal. Only these smaller size bags will fit in the autoclave. The van drivers will not pick up oversized bags or loose contaminated dishes.

Use of Rooting Hormone

There should be as little time as possible between making cuttings, treating with rooting hormone and planting.

Cuttings should be moistened and the excess moisture shaken off before treating with the rooting hormone.

Dip basal ends of cuttings into rooting hormone.

Shake off excess hormone by tapping cuttings.

Plant treated cuttings in soil or perlite, being careful not to rub off rooting hormone.

Tips For Healthy Aquariums

Overfeeding, overcrowding, and incorrect water temperature contribute to fish death rate by causing disease and shock. An aquarium heater is recommended. Temperature should remain close to 78 degrees for most fish. Goldfish do not require a heater, except in severely cold weather.

Algae eaters will starve to death if added to an aquarium too soon. Wait until the aquarium has been established several weeks before adding the algae eater.

The following guidelines will help maintain a healthy aquarium:

Maximum Recommended Fish Per Tank

- 1-Gallon Fish Bowl: 3 goldfish or 6-8 guppies and 1 algae eater
- 5-Gallon Aquarium: 5-6 medium-size fish (tetras, goldfish and mollies) or 12 small fish (guppies) and 1 algae eater
- 10-Gallon Aquarium: 10-15 small and medium fish mixture and 1 algae eater
- 20-Gallon 20-Gallon Aquarium: 20-25 small and medium fish mixture and 2 algae eaters

Handouts (Limit 1 per teacher)

The following handouts provide information on the use and care of many of the living materials available for checkout from the Living Science Center.

LMP-92 Fish in the Classroom

Lists the procedures for properly introducing new fish to an aquarium and for taking care of them.

LMP-127 Crayfish Care

Provides information on the care and feeding of crayfish.

LMP-125 Cricket Care

Provides information on the care of crickets.

LMP-157 Brine Shrimp

Provides information about brine shrimp and explain how to hatch their eggs.

LMP-202 Feeding Aquarium & Terrarium Animals

Describes how to feed and what to feed snails, fish, salamanders, toads, frogs, alligators, lizards, snakes, turtles, guinea pigs, rats, and mice.

LMP-17 Snails

Information on obtaining and caring for snails.

LMP-7 Algae

Information on different types of algae provided by the Living Science Materials Center and how to care for them.

LMP-165a Tadpoles

Provides information on caring, collecting and raising tadpoles.

LMP-165 Frog Care

Explains how to care for frogs.

LMP-302 Tarantulas/Spiders

Basic information on handling and care for tarantulas and on spiders in general.

LMP-203 Food Requirements

Lists the food needs for baby birds, chameleons, dragonflies, frogs, horned toads, lizards, minnows, praying mantis, baby rabbits, salamanders, snakes, spiders, squirrels, tadpoles, toads, and turtles.

LMP-170 Reptiles

Provides general information on snakes and turtles and their care.

LMP-23b Handling Drosophila

Describes the proper way to handle drosophila in genetic experiments.

LMP-23a Life Cycle of Drosophila

Describes the life cycle of fruit flies.

LMP-126 Mealworm Care

Provides information on the care and feeding of mealworms.

LMP-207 Setting Up an Aquarium

Explains what is needed and how to set up an aquarium.

LMP-101 Small Mammal Care

Explains how to care for rats, mice, gerbils, hamsters, and guinea pigs.

LMP-12 Maintaining Hydra

Provides information on feeding and caring for Hydra.

LMP-16 Earthworms

Provides information on care and feeding of live earthworms.

LMP-13 Planeria

Information on the care and maintenance of planeria in the classroom.

LMP-15 Vinegar Eels

Information about and culturing vinegar eels.

LMP-70 Plant Care

Basic information and care on the plants offered by the Living Science Center.

LMP-164 African Dwarf Frogs

Information and basic care instructions on the aquatic frogs.

LMP-3 Protista

Basic information on the types and culturing of protistas offered through the Living Science Center.

ENRICHMENT ACTIVITIES

The following information sheets describe classroom activities and experiments using materials that are available from the Living Science Center.

LME-214 Animal Behavior: Response to Light

An activity for grades 10-12 designed to show how light affects the behavior of animals.

LME-93 Animal Tissues And Organs: Blood Circulation

Describes a classroom activity for observing blood circulation in a goldfish.

LME-40a Bacterial Growth/Effects of Antiseptic on Bacterial Growth

Describes a classroom activity for demonstrating that bacteria do grow anywhere and how antiseptics work on killing them.

LME-40 Staining Bacteria

Activities where students can sub-culture and watch the bacteria grow.

LME-216 Carbon Dioxide In Plants

An activity for grade 6 designed to demonstrate that carbon dioxide is a nonflammable gas produced as a by-product of photosynthesis.

LME-210 Chemicals in Water: Effect on Protozoans

An activity for grade 7 demonstrating that the population of protozoans is, in part, controlled by the presence of chemicals in the water.

LME-213 Fuel From Cactus

An activity for grade 10 demonstrating that plant materials can be converted into fuel.

LME-211 Perspiration

An activity for grade 7 demonstrating the cooling effects of perspiration.

LME-206 School Terrarium/Terraria

Provides information about a variety of terrariums types: desert, woodland, bog and semi-aquatic.

LME-172 Earthworm Dissection

Dissecting and identifying the different parts of an earthworm.

LME-32 Frog Dissection

Dissecting and identifying the parts of a frog.

LME-304 Basic Eye Diagram

Basic parts to look for when dissecting the sheep eye.

LME-72 Bottle Biology

Provides instructions for making an ecosystem in a 3-liter Soda bottle.

LME-166 Incubating Eggs

Explains the procedures for incubating and hatching eggs

LME-215 Plant Phototropism

An activity for grade 10 demonstrating that green plants grow toward the light.

LME-209 Snakes and Man

An activity for grade 7 designed to show that snakes could be both helpful and harmful to man.

LME-212 Temperature and Growth of Bacteria

An activity for biology classes demonstrating there are certain temperatures at which various bacteria grow best

LME-11 Experimenting With Hydra

Describes three classroom experiments using Hydra.

LME-23d Giant Chromosomes

Describes a classroom exercise for teaching the technique of slide making and for showing how chromosome mapping might take place.

LME-61b Plant Cells: Plasmolysis

Describes a classroom activity demonstrating osmosis and what happens to protoplasm in the cells of a plant.

LME-79 Plant Growth

Describes an experiment designed to show how roots and stems respond to gravity and how a plant develops from seed.

LME-61a Plants and CO₂

Presents a classroom activity showing that plants use carbon dioxide in the presence of light.

LME-71 Plants and Their Resources: Light Requirements

Describes a classroom activity demonstrating that plants need light to make starch by photosynthesis.

LME-23e Population Study With Drosophila

Describes the procedure for conducting a study of drosophila population growth.

LME-117 Regulation of Growth By Hormones

Describes a classroom experiment designed to show how hormones act in the regulation and control process such as growth.

LME-2 Structure & Function in Paramecium

Describes activities for examining the structures and functions of paramecium.

LME-201 Use of the Microscope and Supported Cover Slips

Presents an activity to teach students how to prepare slides using supports for the cover slips and how to prepare slides of living materials.

LME-14 What Is the Nature of Embryo Development in the Turbatrix

Aceti

Describes an activity for observing the embryo development in the turbatrix aceti (vinegar eels).

LME-200 Constructing An Egg Incubator

List the materials needed and procedures for building an egg incubator.

LME-205 Making A Classroom Terrarium

List the materials needed and procedures for setting up a classroom terrarium.

LME-303 Owl Pellet Diagram

A list and description of some of the things to look for when dissecting owl pellets, such as feathers, bones, etc..

LIVING SCIENCE MATERIALS for CHECKOUT

ALGAE

These are starter cultures shipped in jars of 25 to 30. Open jars upon arrival. Maximum order--six jars, based on availability.

Anabaena

Blue - green algae.

Chlamydomonas

Small flagellate possessing chlorophyll.

Oedogonium

Green unbranched algae--At some stages the zoospores with their collar of cilia may be observed showing one method of asexual reproduction.

Oscillatoria Formosa

Long unbranched filaments of blue-green algae.

Spirogyra

Green algae with an interesting spiral arrangement of the chloroplasts.

AMPHIBIANS

Live Frogs (*Rana pipens*) (not for dissection)

When ordering live frogs, also order adult crickets for food (one container per week). Live frogs are not available all of the time. Order Limit: 1 per teacher

Tadpoles

2 per teacher, limited to quantities on hand.

Seasonal.

Plain Preserved Frogs (*Rana pipens*)

Used for dissection -- Order 1 per two students. A dissection diagram is available upon request.

African Dwarf Frogs

Small aquatic frogs that live in tanks with community fish.

Green Tree Frog (2 week checkout)

Small green or tan frogs with sticky pads on feet for climbing. Order ½ grown crickets for food (one container per week)



ANNELIDA

Preserved Earthworms (*Lumbricus terrestris*)

Order 1 per two students. Used for dissecting and anatomy studies. A dissection diagram is available upon request.

Live Worms (20 per container)

Small red wigglers, not suitable for dissection.

ANTIBIOTIC DISCS (50 discs per vial)

Tetracycline (30 mcg.)

Antibiotic impregnated discs for use in bacteria studies.

Penicillin (2 units)

Antibiotic impregnated discs for use in bacteria studies.

Streptomycin (5 mcg.)

Antibiotic impregnated discs for use in bacteria studies.

Erythromycin (15 mcg.)

Antibiotic impregnated discs for use in bacteria studies.

AQUATIC PLANTS

Duckweed (*Lemna minor*)

A minute-leafed plant often covering the top of water like a green carpet.

Elodea (*Anachris*) 5-6 sprigs per bunch

A bottom rooted water plant, which is widely used to oxygenate aquaria. May be used in metabolism experiments.

Hornwort

A bottom rooted water plant, which can adapt to higher temperature (25-30 degrees Celsius). Also does well floating on top of the water. 5-6 sprigs per bunch.

ARTHROPODA

Crickets (12 per container)

For use in food chain experiments. Please specify number of containers needed.

Crickets ½ Grown (12 per container)

For feeding tree frogs, anoles or smaller animals. Please specify number of containers needed.

DROSOPHILA (Starter cultures, only)

Used for genetic studies or cultured for food for terrarium animals. The following strains provide easy visual observation of phenotype differences with mutations occurring on the chromosomes indicated with Roman numerals.

Drosophila, apterous

(Wingless, Chromosome II)

Drosophila, dumpy

(Chromosome II)

Drosophila, sepia eye

(Chromosome III)

Drosophila, vestigial wing

(Chromosome II)

Drosophila, white eye

(Chromosome I, Sex linked)

Drosophila, wild

(Red eye)

Drosophila, yellow

(Chromosome I)

Mealworms

Food for frogs, lizards, etc. Also shows metamorphosis from beetle to egg, to larva, to pupa. Allow several weeks for metamorphosis. Specify number of containers needed (20 per container)

BACTERIA

These are starter cultures. Each test tube will culture another 12 to 15 plates or tubes. Quantities are limited.

Bacillus cereus

A common spore-forming bacillus bacterium. (Gram positive)

Bacillus megaterium

Very large bacillus. (Gram positive, motile)

Bacillus subtilis

Spore-forming rods, large enough to observe under high power. (Gram positive, motile)

Escherichia coli

A Rod-shaped bacterium. One of the most common intestinal organisms of man. (Gram negative)

Micrococcus luteus

Yellow pigmented, non-motile cocci. (Gram positive)

Rhodospirillum rubrum

A spiral organism of one to three turns can be observed under high power. (Gram negative, motile)

Sarcina lutea

Yellow, motile spheres, arranged in packets that can be observed under high power. (Gram positive)

COLEENTERATA

Hydra littoralis (brown)

Approximately 25 per jar. Difficult to culture in the classroom, but can be done. It is useful in feeding reaction, budding regeneration and structure studies. Note: Brine shrimp eggs may be ordered to hatch for feeding. Order 2 weeks in advance.



FISH

The following fish are all compatible and are common types of freshwater fish for the aquarium. Teachers must have their own aquarium set up before fish arrive.

Algae Eaters

Eats algae to help keep aquarium glass clean. Order only 1 for a 10-gallon tank. It will starve without enough algae to eat and will chase slower fish.

Black Mollies

Medium-size fish that are live bearers and compatible with other tropical fish.

Black Tetras

Similar to angel fish in appearance with black stripes on body. (egg layers)

Goldfish

Common varieties will be furnished. They can be used for circulation experiments.

Guppies

Small, live bearers. Males are colorful.

Platys

Colorful, medium-size, live bearers.

African Dwarf Frogs

Aquatic frog that live in aquariums with community fish, such as the ones we carry.

Note: Large orders of fish and water plants must be ordered at least one week in advance of use date.

FUNGI

These are starter cultures. Each test tube will culture another 12 to 15 plates or tubes. Quantities are limited.

Aspergillus niger

A common airborne fungus.

Penicillium notatum

Asexual reproduction of conidia; sexual asco spores. Source of penicillin.

Physarum polycephalum

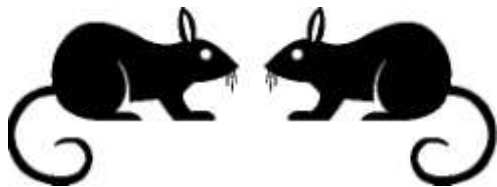
Active plasmodium.

Rhizopus stolonifer (minus)

When the mycelium of this strain comes in contact with that of the plus strain, zygospores are produced.

Rhizopus stolonifer (plus)

Common black mold of bread. Asexual reproduction of sporangiospores formed in sporangia borne on aerial hyphae.



MAMMALS

Teachers must have own cage set up with water bottle when animal arrives. Delivery cages must be returned to ESC-20 on the next pickup day following receipt of the animal.

Gerbils

Small mammals that can be used as classroom pets and for metabolic studies. They require a limited amount of water and select one mate for life.

Hamsters

Small, furry, nocturnal animals with no tail.

Rats (hooded)

Most have black or tan heads and fore-quarters.

Some white and brown rats are also available.

Can be used as classroom pets, for nutrition studies, and for family behavior studies.

Feeder Rat

Inbred Mice are useful for nutrition and metabolic studies and can be kept as classroom pets. They are also useful for long-term genetic studies. A variety of colors are available.

Black Mice

Brown Mice

Piebald Mice (Two-colored)

White Mice

FEEDER Mice

Pinkie FEEDER Mice

Feeder mice are limited and will only be shipped when there is an excess supply.

NEMATODA (aschelminthes)

Vinegar Eel (Turatrix aceti)

A vinegar eel that lives on the fungus forming the "mother."

PLANT HORMONES

Rooting Hormone

A rooting enhancer. Can be used in plant growth experiments. Shipped in vials. Each vial will root 20+ cuttings.

PLANTS (not potted)

Fern Prothallia Kits

Small, macroscopic fern gametophytes that may show development of archegonia and antheridia. **Order several weeks in advance** of use to allow for growth.

Marchantia (Liverwort) (secondary use only)

A vegetative liverwort. At some stages it may show archegonia and antheridia development. Shipped in small quantities. Not always available.



PLANTS (potted) Plants will not be shipped the week before Easter or Mother's Day

Quantities are limited. Elementary teachers may order a total of 24 plants per school year (in any combination); middle school teachers may order a total of 30 plants per year; and high school teachers may order a total of 36 plants per year. **Plants are for classroom instruction and experiments only.** Most are suitable for cuttings.

Assorted plants (6 per set)

A selection of all plants available. (Our Choice)

Bryophyllum (succulent)

An excellent example of vegetative propagation. At some stages small plantlets can be seen growing from the leaf margins.

Coleus

Plant with variegated leaves and a small flower stalk.

Geranium

Green, leafy plants that flower. Usually not available until the end of September.

Begonia

Green, leafy plant that blooms. Easy to propagate.

PLATYHELMINTHES (flatworms, 25 per jar)

Planaria (*Dugesia tigrina*)

Used for demonstration of structure and regeneration. Difficult to culture in the classroom, **(limited quantities)**

PRESERVED SPECIMENS

Earthworm (*Lumbricus terrestris*)

Used for dissection and anatomy studies. Approximately 10" to 12" in size. Order 1 per two students.

Frogs (*Rana pipiens*)

Plain, preserved specimens for dissection. Order 1 per two students.

Owl Pellets

Castings of undigested materials (skeletal bones, beaks, claws, etc.) from what the owls eat. Used for dissecting. Synthetic pellets will be sent. Wild pellets sent upon request due to availability. Order 1 per two students.

Sheep Eyes

Used for dissection. Order 1 per two students.

PROTISTA

These are starter cultures. Each jar contains enough for a class of 25 to 30 students. Open jar when it arrives and keep away from extreme heat. Quantities are limited.

Amoeba (Chaos)

Classical example of a rhizopod. Delicate, very small, and difficult to see and to culture. Use wheat seed and spring water only

Blepharisma

Large, slow-moving, pink paramecium-shaped ciliate. Easily cultured and superior to paramecium for observation of ciliate structure. Useful in observation of light response and occurrence of giants

Chlamydomonas

Small flagellate containing chlorophyll.

Euglena gracilis

Small active example of a flagellate. Easy to culture in the classroom and used for demonstration of light response and as an example of flagellate structure. (Difficult to observe structure because of small size.)

Mixed Protozoans

Recommended when diversity of structure is to be observed. Jar will usually contain three different specimens (our choice).

Paramecium caudatum

This species has a massive macro- nucleus and a compact micronucleus.

Paramecium multimicronucleatum

Conjugation types A and B. Large, brown, fast-moving paramecium that can be used to demonstrate ciliate structure, response to stimuli, and conjugation. Easily cultured.

Spirostomum

An elongated cylindrical protozoan.

Stentor

Large ciliate, blue-green in color, easy to culture, and used for example of variation in ciliate structure.

Other Materials & Services



REPTILES

Snakes

A variety of nonpoisonous snakes are available for two-week checkout. Most are native to Texas. All **cages are locked**.

Turtles (Land)

A limited stock of land turtles. Two-week checkout. Order adult crickets for food. (1 container per turtle per week).

Turtles (Water)

A limited stock of water turtles. Two-week checkout. Order adult crickets for food. (1 container per turtle per week).

Green Anole

Small green lizard that changes color. Two-week checkout. Order ½ grown crickets for food. (1 container per lizard per week)

SEEDS

Each seed package contains approximately 50 seeds. All should be viable and useful in germination experiments.

Barley

Brassica Rapa (Turnip) not a Fast Plant

Corn, Green:Albino Genetic (for secondary grade level)

Corn seed from an albino strain giving a 3:1 green- albino ratio in seedlings. (100 seeds per package.)

Field Corn

Flower Seeds (variety may vary)

Green Beans, Blue Lake Bush

Lima Beans, small pole.

Mung Beans

Oats

Peanut

Peas

Pinto Beans

Radish

Rye

Squash

Sunflower

Wildflower

Sterile Petri Dishes (with agar)

Poured with nutrient agar for use in bacterial studies. Order exact number needed. Must be refrigerated until use.

Sterile Petri Dishes (no agar) 20 per bag.

Empty, sterile petri dishes.

Prepared Slants

Slants poured with nutrient agar for use in bacterial studies. Shipped only in small quantities, order exact number needed. Must be refrigerated until use.

Ant Farm

A complete kit for setting up an Ant Farm. Everything supplied except the ants. Order form for ants included.

Brine Shrimp Eggs

Eggs shipped in small vials for hatching in the class- room. They make excellent food for Hydra.

Crayfish--Live (1 per teacher)

Shipped as available. For classroom observation, only. Not for dissection.

Deionized Water

Available in one-gallon containers. Containers must be returned on next ESC-20 delivery/ pickup date. Not for aquarium use!

PTC Paper (phenylthiocarbamide)

Seven out of 10 persons will detect a definite taste in this paper. The characteristic is genetic. (50 papers per vial)

Tarantula, Live

A limited stock of tarantulas. Two-week checkout. Order adult crickets for food. (1 container per tarantula per week)

Hissing Cockroaches

Madagascar Hissing Cockroaches sent in pairs. Two-week checkout.

Media Materials

LIVING MATERIALS TRANSPARENCIES

The following transparencies are from National Geographic. They can be checked out for two-weeks only.

The Cell

Contains 40 transparencies of plant and animal cell.

Looking at Living Things

Introduces students to life forms in the bio sphere, investigates shared characteristics.

Structure of Invertebrates

Study of diversity of animals without backbone

Looking at Ecosystems (two-week checkout)

Study different types of ecosystems and learn how living things interact with each other.

Structures of Vertebrates 1 (two-week checkout)

Cold-blooded. Observe characteristics, structural features and how they are related to how they live.

Structure of Vertebrates 2(two-week checkout)

Study of warm-blooded vertebrates; characteristics of mammals and birds.

Plants: What It Means to Be Green(two-week checkout)

How important plants are to the environment and how we depend on them. Conservation.

Venomous Snakes of Texas(two-week checkout)

Four major venomous snakes of Texas with facts and habitat. Two DVDs and venomous snake poster.

Turtles of Texas(two-week checkout)

Land and sea turtles. Three DVDs, two posters and printed material to copy for classroom worksheets.

Models/Kits

Texas Poisonous Spider Model (two-week checkout)

Brown Recluse and Black Widow. List of common nonpoisonous spiders and a book on spiders and their kin.

Texas Wild (two-week checkout)

Posters, DVDs and educational materials to the eco regions of Texas plus more.

Snake I.D. Mount (two-week checkout)

To identify venomous and non-venomous snakes in the United States.

Copperhead Model (two-week checkout)

Coral Snake Model (two-week checkout)

Cottonmouth Model (two-week checkout)

Rattle Snake Model (two-week checkout)