

## FOSS CA ENVIRONMENTS MODULE

### Quantities for Multiple-Class Use

#### ADDITIONAL MATERIALS

There are enough consumable materials in the **Environments** kit for use with TWO classes of UP TO 32 students on the same day. To insure that each class has the same experiences, you may need to purchase the additional materials in the quantities listed in the table below.

#### ORDERING INFORMATION

The suggested materials can be ordered from [Delta Education](#).

ITEM	Delta Part #	Quantity in package	2 classes	3 classes	4 classes
Aluminum foil, heavy duty, 25' roll*	060-1050	1 roll	0	1	1
Basin, clear plastic, 6-liter	023-2803	1	16	32	48
Basin cover, plastic	120-5710	1	16	32	48
Containers, plastic, 1/2-liter	030-6426	9	40	80	108
Cup lids, plastic, 250-ml (9 oz.)	120-2937	50	50	100	150
Cups, plastic, 250-ml (9-oz.)	031-0419	25	50	100	150
Self-stick notes, small, 100 / pad*	120-2475	1 pad	0	2	4
Salt, kosher, 1.36 kg/box	192-5890	1	0	1	1
Seeds, corn, 100/pkg*	190-1294	1 pkg	0	3	6
Seeds, pea, 100/pkg*	190-1525	1 pkg	0	3	6
Straws, jumbo, wrapped*	191-7410	50	0	25	50
Tape, transparent, in dispenser	200-4640	1 roll	0	2	4
Tray, FOSS, plastic	200-5080	1	8	16	24
Tubes, plastic, tray columns, 3 cm diameter	200-5112	1	16	32	48
Zip bags, 4-liter (1-gal.)	021-1331	20	40	80	120

\* Consumable item

TEACHER-SUPPLIED ITEMS	
<ul style="list-style-type: none"><li>• Darkling beetles</li><li>• Isopods</li><li>• File folders (stiff paper)</li><li>• Plastic wrap</li><li>• Newspaper</li><li>• Paper towels</li><li>• Soil</li><li>• Apple, carrot, potato*</li><li>• Bus trays or other flat containers</li><li>• Bran or chick starter mash</li><li>• Chart paper</li><li>• Flowers</li><li>• Marking pens</li><li>• Lined paper</li></ul>	<ul style="list-style-type: none"><li>• Water</li><li>• Ice</li><li>• Vinegar</li><li>• Plant matter</li><li>• White paper</li><li>• Hot-water bottle (optional)</li><li>• Amphipods (Gammarus)</li><li>• Goldfish</li><li>• Elodea sprigs</li><li>• Lemna (duckweed)</li><li>• Small pond snails</li><li>• Aged tap water or bottled water</li><li>• Overhead projector (optional)</li></ul>

#### OTHER THINGS TO CONSIDER

- Duplicate student sheets
- Activity 2: To save on aluminum foil, runways could be made by one class and reused by all classes although there is value in having the students follow directions to make their own.
- Activity 6: There should be only one set of salt solutions for a class. At the end of the class, any remaining water should be tossed. The next class will make up a new salt solutions for watering the plants.

## FOSS CA LIVING SYSTEMS MODULE

### Quantities for Multiple-Class Use

#### ADDITIONAL MATERIALS

There are enough consumable materials in the **Living Systems** kit for use with TWO classes of UP TO 32 students on the same day. To insure that each class has the same experiences, you may need to purchase the additional materials in the quantities listed in the table below.

#### ORDERING INFORMATION

The suggested materials can be ordered from [Delta Education](#).

ITEM	Delta Part #	Quantity in package	2 classes	3 classes	4 classes
Vial holders	222-0195	1	8	16	24
Vials, 12 -dram	220-0824	1	32	64	96
Zip bags, 1-liter	021-1353	25	0	50	75
Yeast, bulk pack, 0.5 kg/bag	250-0266	5	0	1 bag	1 bag

\* Consumable item

#### TEACHER-SUPPLIED ITEMS

- Flip chart
- Marking pen
- DVD player and monitor
- Celery with leaves
- Jar
- Knife
- Plastic bags
- Animal crackers
- Breakfast cereal samples
- Flour
- Ice chest or large coffee urn
- Paper towels
- Soda bottles, 2-liter
- Sugar
- Water
- Hot water

#### OTHER THINGS TO CONSIDER

- Duplicate student sheets.

## FOSS CA MAGNETISM AND ELECTRICITY MODULE

### Quantities for Multiple-Class Use

#### ADDITIONAL MATERIALS

There are enough consumable materials in the **Magnetism and Electricity** kit for use with TWO classes of UP TO 32 students on the same day. To insure that each class has the same experiences, you may need to purchase the additional materials in the quantities listed in the table below.

#### ORDERING INFORMATION

The suggested materials can be ordered from [Delta Education](#).

ITEM	Delta Part #	Quantity in package	2 classes	3 classes	4 classes
Bulbs, flashlight, #222	020-5809	10	0	2	2
D-cells, alkaline*	023-1153	8	8	16	24
Dots, adhesive, 1/2" diameter, blue*	040-2103	250	0	200	200

\* Consumable item

#### TEACHER-SUPPLIED ITEMS

- Pencils
- Masking tape\*
- Student sheets
- Paper\*
- Different gauges of wire
- Paper clips, large
- Cardboard
- Clear packing tape (optional)
- Wool or synthetic sweaters
- Flip chart
- Assorted magnets (optional)
- Marking pen
- Sneakers
- Additional test objects
- Transparent tape
- Combs, hard rubber
- Paperback books
- Plastic bottles
- Index cards

\* Consumable item

#### OTHER THINGS TO CONSIDER

We do not recommend using rechargeable D-cells with elementary students. We have found that when the students make a short-circuit, the cells discharge so quickly that the plastic insulation will melt off the wire. This is too dangerous in the classroom.

## FOSS CA MATTER AND ENERGY MODULE

### Quantities for Multiple-Class Use

#### ADDITIONAL MATERIALS

There are enough consumable materials in the **Matter and Energy** kit for use with TWO classes of UP TO 32 students on the same day. To insure that each class has the same experiences, you may need to purchase the additional materials in the quantities listed in the table below.

#### ORDERING INFORMATION

The suggested materials can be ordered from [Delta Education](#).

ITEM	Delta Part #	Quantity in package	2 classes	3 classes	4 classes
Sponges, small	190-9775	8	8	24	32

#### TEACHER-SUPPLIED ITEMS

- Pencils
- Masking tape\*
- Paper\*
- Paper, two colors\*
- Matches
- Marking pens
- Index cards or scratch paper
- Colored pencils or pens
- Chocolate chips
- Apple or orange (optional)\*
- Cardboard (17 cm square)
- Clear plastic sheet protectors (optional)
- Corn syrup (light or dark)\*
- Scissors
- Safety goggles
- Chart paper

- Transparent tape
- Water
- Paper towels\*
- Empty cans or bottles
- Vacuum bottle or coffee pot
- Ice cubes\*
- Margarine
- Tennis balls or softballs
- Transparencies
- Liquid dishwashing detergent
- Vinegar
- Clip-on lamp, additional (optional)

\* Consumable item

#### OTHER THINGS TO CONSIDER

- Duplicate student sheets.
- Plan for room-temperature, hot water, and ice water, as well as ice cubes.
- Some containers must be dried between uses.
- Check thermometers to make sure none are broken.
- Investigation 2, Part 2: Apples and oranges are used in an optional investigation.

## FOSS CA MIXTURES AND SOLUTIONS MODULE

### Quantities for Multiple-Class Use

#### ADDITIONAL MATERIALS

There are enough consumable materials in the **Mixtures and Solutions** kit for use with TWO classes of UP TO 32 students on the same day. To insure that each class has the same experiences, you may need to purchase the additional materials in the quantities listed in the table below.

#### ORDERING INFORMATION

The suggested materials can be ordered from [Delta Education](#).

ITEM	Delta Part #	Quantity in package	2 classes	3 classes	4 classes
Baking soda, 450 g/container*	021-1200	1	0	1	2
Calcium chloride, 480 g/container*	031-2608	1	0	1	2
Citric acid, anhydrous, granular, 480 g/container*	031-2212	1	0	3	6
Cups, plastic	031-0419	25	0	25	50
Diatomaceous earth (powder), container*	040-2236	1	0	1	2
Evaporating dishes, plastic lids, small	050-0708	10	0	20	40
Filter papers, round, coffee*	160-4844	50	0	75	150
Gravel, container	070-2558	1	0	1	2
Sticky Notes*	160-8144	5 pads	0	2	4
Salt, kosher, container*	191-1117	1	0	1	2
Salt, kosher, box*	192-5890	1	0	1	1
Epsom salts, container	050-1159	1	0	1	2
Sticks, craft, wooden	190-5914	50	0	50	50
Tray, FOSS™, plastic	200-5080	1	4	8	12
Vials, 12-dram, with caps	220-0824	1	12	24	36
Bottles, clear plastic with caps	021-1221	1	16	32	48
Zip bags, 1-liter (1-qt.)*	025-2430	25	0	25	50

\* Consumable item

FOSS California Mixtures and Solutions Module continued

TEACHER-SUPPLIED ITEMS

- Paper cups, 3-oz.
- Small piece of chalk
- White vinegar
- Lined paper
- Scratch paper
- Food coloring (optional)
- Paper towels
- Transparent tape
- Water
- Container for drinking water
- Can of Kool Aid®, 24-oz.
- Large stirring spoon
- Flip chart
- Paper plates (optional)
- Thermos bottle
- Margarine\*
- 30–40 product packages, empty

OTHER THINGS TO CONSIDER

- Duplicate student sheets

## FOSS CA SOLID EARTH MODULE

### Quantities for Multiple-Class Use

#### ADDITIONAL MATERIALS

There are enough consumable materials in the **Solid Earth** kit for use with TWO classes of UP TO 32 students on the same day. To insure that each class has the same experiences, you may need to purchase the additional materials in the quantities listed in the table below.

#### [ORDERING INFORMATION](#)

The suggested materials can be ordered from [Delta Education](#).

ITEM	Delta Part #	Quantity in package	2 classes	3 classes	4 classes
Gravel, green*	070-2074	1 bag	0	1 bag	1 bag
Gravel, red*	070-2063	1 bag	0	1 bag	1 bag
Oyster shell*	190-9698	1 bag	0	1 bag	1 bag
Paper plates*	160-2798	35	0	70	70
Vials, 12-dram, with caps	221-4145	50	44	88	132
Trays, FOSS	200-5080	1	8	16	24
Calcite, small	180-0776	5	0	20	30
Calcite, large	180-2987	5	10	20	30
Basalt	180-5660	10	10	20	30
Limestone	180-1030	5	20	40	60
Marble, white	180-1095	5	10	20	30
Sandstone, gray	180-1216	5	10	20	30
Granite, pink	180-3251	5	10	20	30
Stream tables	200-5090	1	8	16	24
White clay, 1 lb/bag	030-4920	1 bag	3 bags	6 bags	9 bags
Fine sand, 3 lb/bag	190-9027	10 lbs	9 bags	18 bags	27 bags
Duct tape, 20 m/roll (20 yards)*	200-0261	1 roll	0	1	1
Food coloring, 4 colors/set*	060-1325	1 set	0	1 set	1 set
Overlay Grid, transparency	150-0630	1	18	36	54
Labels, sticky note pads, 100/pad	120-5709	4 pads	0	2	2
Zip bags, 1-liter	021-1353	25	25	50	75



FOSS California Solid Earth Module continued

TEACHER-SUPPLIED ITEMS

- Alum (optional)
- Flip chart
- Marking pen
- Safety goggles (1 per student)
- White flour
- Paper towels
- Bleach (optional)
- Clock with second hand
- Egg cartons, foam styrene
- Newspaper
- Sturdy plastic bag
- Water
- Basin or bucket
- Large magnifying lens (optional)
- Colored pencils or pens
- Salt
- Chalk
- Vinegar
- Glass bottle with tight-fitting cap
- Dustpan and broom
- Map of the western U.S. or the U.S.
- Pitchers
- VCR and monitor

\* Consumable item

OTHER THINGS TO CONSIDER

- Duplicate student sheets

## FOSS CA STRUCTURES OF LIFE MODULE

### Quantities for Multiple-Class Use

#### ADDITIONAL MATERIALS

There are enough consumable materials in the **Structures of Life** kit for use with TWO classes of UP TO 32 students on the same day. To insure that each class has the same experiences, you may need to purchase the additional materials in the quantities listed in the table below.

#### ORDERING INFORMATION

The suggested materials can be ordered from [Delta Education](#).

ITEM	Delta Part #	Quantity in package	2 classes	3 classes	4 classes
Basin, clear plastic, 6-liter	023-2803	1	2	4	6
Bus tray, 18 x 38 x 51cm	200-4661	1	2	4	6
Cat food, dry, 16g/bag*	031-0441	1 pkg	0	1	1
Container lids, plastic, for 1/4-liter	120-1970	5	0	10	20
Containers, plastic, 1/2-liter	030-6426	9	0	2	3
Containers, plastic, 1/4-liter	031-3147	5	0	10	20
Crayfish houses, plastic, 4/set	031-0452	1 set	2 sets	4 sets	6 sets
Filter paper, round, coffee, 20-cm diam.*	160-4844	50	0	25	50
Gravel, 1 kg (2 lb.)	070-7046	1 bag	0	4 bags	6 bags
Hydroponic plant holder	080-0755	1	4	8	12
Seeds, bush bean, pkg*	190-1228	1 pkg	0	2 pkgs	4 pkg
Seeds, lima bean, pkg*	120-0957	1 pkg	0	1 pkg	1 pkg
Seeds, pea, pkg*	190-1525	1 pkg	0	1 pkg	2 pkg
Seeds, popcorn, pkg*	190-1613	1 pkg	0	1 pkg	2 pkg
Seeds, sunflower, pkg*	190-1701	1 pkg	0	1 pkg	2 pkg
Sprouter	190-9742	1	1	2	3
Straws, jumbo*	190-6497	50	0	25	50
Yarn, 30-cm, 4 colors/set*	250-0156	1 set	0	1 set	1 set

\* Consumable item

FOSS CA Structures of Life continued

TEACHER-SUPPLIED ITEMS

- Bean or pea pods
- Selection of fruits
- Newspaper
- Paper or plastic plates
- Paper towels
- White glue
- Bleach, about 50-ml
- Transparent tape
- Crayfish
- Permanent marking pen
- Water plants (Elodea)
- Masking tape
- Scissors
- Water (aged)
- Overhead projector (optional)
- Paper, unlined
- Land snails
- Carrots or spinach
- Rubber bands
- Chalk
- Flashlights
- Thread
- Knife
- Isopods
- Pitcher or bucket (optional)
- Ice (optional)
- Flip chart or chart paper
- Chalk, eggshells, or cuttlebone
- Flashlights (optional)
- Lamp, 75W (optional)
- Watch with second hand

OTHER THINGS TO CONSIDER

- The best way is to have a set of crayfish (2 trays, total 8 crayfish) for each class and have them reside in the regular classroom (not the science resource room).

## FOSS CA SUN, MOON, STARS

### Quantities for Multiple-Class Use

#### ADDITIONAL MATERIALS

There are enough consumable materials in the **Sun, Moon, and Stars** kit for use with TWO classes of UP TO 32 students on the same day. To insure that each class has the same experiences, you may need to purchase the additional materials in the quantities listed in the table below.

#### ORDERING INFORMATION

The suggested materials can be ordered from [Delta Education](#).

ITEM	Delta Part #	Quantity in package	2 classes	3 classes	4 classes
Chalk, sidewalk	030-3401	16 pieces	16	32	48

#### TEACHER-SUPPLIED ITEMS

- Masking Tape
- Transparent Tape
- Marking pen
- Scissors
- Transparencies
- Overhead projector
- Flip chart or chart paper
- Globe, 9–12-inch diameter
- Paper fasteners (optional)
- Glue (optional)
- Extension cord (optional)

\* Consumable item

#### OTHER THINGS TO CONSIDER

- Duplicate student sheets
- Investigation 1 Part 2: Plan on enough outdoor drawing space for students to draw shadows.

## FOSS CA WATER PLANET MODULE

### Quantities for Multiple-Class Use

#### ADDITIONAL MATERIALS

There are enough consumable materials in the **Water Planet** kit for use with TWO classes of UP TO 32 students on the same day. To insure that each class has the same experiences, you may need to purchase the additional materials in the quantities listed in the table below.

#### [ORDERING INFORMATION](#)

The suggested materials can be ordered from [Delta Education](#).

ITEM	Delta Part #	Quantity in package	2 classes	3 classes	4 classes
Container lids, plastic, flat	120-1970	5	5	10	20
Cups, plastic	031-0419	25	50	100	150
Dome lids, plastic	120-5720	72	18	36	72
Graduated cylinder, 50-ml	070-2085	1	8	16	24
Beaker, 100 ml	020-9218	1	8	16	24
Tray, cafeteria, plastic	180-1216	5	8	16	24
Cardboard sheet, 28 x 30 cm	031-4621	1	0	16	32
Containers, plastic, 1/4-liter	031-3147	5	0	16	32
Container lids with slits, plastic	120-2497	10	0	16	32
Potting soil	190-0249	1 bag	0	1 bag	1 bag

\* Consumable item

#### TEACHER-SUPPLIED ITEMS

- Chart paper
- Earth Globe
- DVD player and monitor
- Water
- Pieces of white paper
- Index cards or scratch paper
- Masking tape
- Pencils
- Scissors
- Paper towels
- Hand lenses (optional)
- Assorted containers
- Objects for freezing
- Ice
- Colored pens or pencils
- Newspaper (optional)
- Water
- Clock or watch with second hand
- Thermos bottle
- Water bottle, plastic, 1/2-liter
- Water-supply map
- Cooler (optional)
- Pennies
- Cardboard strips ( 6.5 X 81 cm)
- Objects for freezing
- Plastic cup, clear, large
- Clipboards
- Local weather maps for 4 consecutive days
- Glue
- Tape, clear packing (optional)
- Fork, metal
- Marking pen
- Overhead projector
- Transparency

#### OTHER THINGS TO CONSIDER

- Duplicate student sheets
- Investigation 2, Part 2 and Part 3: If you are working with more than two classes, you will either need to purchase extra thermometers, graduated cylinders, and beakers or borrow from another Measurement Kit to complete this investigation.