

**Garden Earth Naturalist Science Night Kit
Master List of Contents**

2 - 45 gallon wheeled containers

8 – Banners with 2-part stands each packed in its own zippered bag

- Air Cleaning Department
- Biodiversity Department
- Food Production Department
- Garden Earth Naturalist
- Pest & Disease Control Department
- Pollination Department
- Soil & Recycling Department
- Water Purification Department

Binder with activity descriptions/ Envelope with evaluations

31 – Activities bagged individually

Garden Earth Naturalist: Eco-service Manager Badges

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- Sample badge
- Templates of Eco-service Managers
- 150- copies of Eco-Service Manager Badges (assorted)
- 150- Safety Pins
- Contact paper to be cut into 3 ½ x 5” squares to cover badges

What you need to provide:

- *Tape to attach safety pin*
- *Scissors*
- *Crayons or Markers or Colored pencils*

Garden Earth Naturalist: Face Painting

- Table sign, laminated
- Explanation, laminated
- Garden Earth Naturalist logos, laminated on easel
- Face paints (assorted colors)
- Q-tips

What you need to provide:

- *Wipes for clean-up*

Garden Earth Naturalist: Let's Make a Nature Journal

- Instructions, laminated
- Quotes, laminated

What you need to provide:

- *Yarn or metal clasps*
- *Contact paper*
- *Cardstock covers*
- *Blank paper*
- *Hole punch*
- *Colored pencils, markers or crayons*

Garden Earth Naturalist: Meet the Eco-service Managers

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- Large circle of Eco-service Departments, laminated with Velcro in each section
- 8- Eco-service Manager badges, laminated with descriptions and Velcro on back (Sol Sun, Madame Squirrel, Old Man Spruce, Suga Magnolia, Mrs. Mantis, Oli Earthworm, Dr. Arrow, Mr. Dipper)

Garden Earth Naturalist: Passport

- Table sign, laminated
- Explanation, laminated
- Sample Instructions and Passport, laminated
- Instructions, laminated on easel
- 8 – Passport Questions, laminated (one each Department - Air Cleaning, Biodiversity, Climate Control, Food Production, Pest & Disease Control, Pollination, Soil & Recycling, Water Purification)
- Template of Passport (back and front)
- 150- copies of the Passport

What you need to provide:

- *Prizes for completing the Passport activity (optional)*

Garden Earth Naturalist: Puppets (13 + 6)

- Bat
- Bee
- Chipmunk
- Earthworm
- Foreco
- Hummingbird
- Ladybug
- Monarch butterfly
- Old Man Spruce with 6 finger puppets attached
- Praying Mantis
- Spider
- Squirrel
- Suga Magnolia

Additional puppets added by SMMA.

- Breezy (wind)
- Dolphin
- Hedgehog
- Mr. Dipper (bird)
- Mushroom

Script of Puppet Play (*Additional scripts can be find in the binder of activity descriptions.*)

Air Cleaning Department: Craft Leaf Identification

- Table sign, laminated
- Explanation, laminated
- Tabletop Easel
- ID Chart on Foam board
- Leaf Characteristics and Terms, laminated on easel
- 14 - Leaf Cards in bags (**do not remove from bags**)
- Sample Leaf ID Guide, laminated
- Template for making additional copies of the 2-page Leaf ID Guides
- 150 – copies of blank Leaf ID Guides

What you need to provide:

- *Crayons for rubbings*

Air Cleaning Department: Make a Seed Necklace

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- Template of Zinna tag sheet to copy
- 150 – copies of Zinna tags
- 5- Pipettes
- 2- Sample Seed Necklaces
- 3- plastic bins
- 3 – lidded containers
- Toothpicks for pushing cotton into mini-centrifuge tubes
- 150- Zinnia seeds
- Yarn
- 150- Mini-Centrifuge tubes
- Cotton balls
- Model of Seed Growth (boxed)

What you need to provide:

- *Water*

Biodiversity Department: Make a Herbal Teabag

- Table sign, laminated
- Explanation, laminated
- 2- Instruction sheets, laminated on easels
- 4- Tea Information cards, laminated
- 2- Containers, labeled – 1 each of Chamomile and Peppermint teas
- 2 - spoons
- 300- Tea sacs
- 300- Tags with strings
- Sample of Completed Tea Bags in a Ziploc with information card
- 150- Snack-sized Ziplocs
- Template for tea information cards
- 150- copies of tea information cards

What you need to provide:

- *Staplers and staples*
- *Pencils or Pens*

Climate Control Department: Bulbs for Birds

- Explanation, laminated on easel
- Compact Fluorescent bulb in plastic box
- 2- Sample pledge cards, laminated
- 150- copies of pledge card

What you need to provide:

- *Pens*

Climate Control Department: Global Warming - What's our Score?

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- What's Your Score Chart, laminated with Velcro
- 5 – Arrows, laminated with Velcro
- Greenhouse Effect/ Global Warming Information, laminated on easel
- 2- Wheel calculators, laminated

Climate Control Department: Make a UV Bracelet

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- 2- Sample bracelets
- 150- UV-sensitive pony beads
- 300- Various colored pony beads
- 150- Pipe Cleaners

Food Production Department: Bird Feeders

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- Sample pinecone feeder in Ziploc

What you need to provide:

- *Bird seed*
- *Yarn*
- *Lard with applicator*
- *Rice cakes or pine cones*
- *Ziplocs*
- *Paper towels*
- *Wipes*

Food Production Department: Bird Hats

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- 4- Bird Description sheets, laminated (Summer Tanager, Blackburnian Warbler, Black and White Warbler, and Broad-winged Hawk)
- Sample hat, laminated
- Copies of wings, head tail and beak to make 150 bird hats
- Extra Construction paper for cutting into head bands
- Templates for beaks, wings, head and tail

What you need to provide:

- *Stapler/ Staples*
- *Pens*
- *Scissors*

Food Production Department: Bird Migration Journey

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- Finish sign, laminated
- 6- Dice
- 1 - Roll flagging tape
- 24- Cards
- 26- Clothespins
- Yarn

Food Production Department: Camouflage and Warning Color Masks

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- 2- Warning Color sheets, laminated - snakes, butterflies
- Camouflage sheet, laminated - snakes and butterflies
- 1 each - sample butterfly mask and snake visor, laminated
- 2- Pieces of camouflage fabric for decoration
- Templates for snake visor and butterfly mask
- 150-copies of snake visor and butterfly mask (combined)
- Yarn

What you need to provide:

- *Hole punch*
- *Tape*
- *Scissors*
- *Crayons or markers*

Food Production Department: Can You Make this Food Chain/Web?

- Table sign, laminated
- Explanation, laminated
- Instructions with food chain web pictures, laminated on easel
- 3- Puzzles, laminated
 - Food Chain (5 pieces - sun, wheat, mouse, snake, hawk)
 - Pond Food Web (10 pieces - food, pond, Mosquitofish, largemouth bass, bluegill, algae, mosquito larva, web, sun, beaver)
 - Soil Food Web (9 pieces - plants, worms and animals, worms and protozoa, worms and fungi, bacteria and organic matter, arthropods, web and bird, sun and soil, food)

Food Production Department: Match the Tracks *(Packaged in two bags.)*

BAG 1

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- 2- Placemats with animal photos, laminated

BAG 2

- 12- Tracks (2 cottontail, pied-billed grebe, 2 fox, wood duck, 2 grey squirrel, pheasant, crow, Canada goose, woodpecker/blue jay)

Pest & Disease Control Department: Investigating Termites

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- Termite information, laminated
- 2- Pens
- 2 – Small Paintbrushes
- 2 – sheets of white paper

What you need to provide:

- *Live termites*

Pest & Disease Control Department: Who Is Living in Your Garden?

- Table sign, laminated
- Explanation, laminated
- Instruction sheet, laminated
- Results Board, laminated on easel
- Point Chart, laminated on easel
- 2- Who Is Living in Your Garden? Boards, laminated with 6 Velcro strips
- 20- Cards, laminated with Velcro on back describing the plants and animals listed below:

Aphid	Honeybee
Bark beetle	Japanese honeysuckle
Beautyberry	Kudzu
Chanterelle fungi	Ladybeetle
Chinese privet	Milkweed
Conidia fungi	Orb-weaving spider
Coral honeysuckle	Poison ivy
Dragonfly	Praying mantis
Earthworm	Purple coneflower
Gypsy moth	Weevil

Pollination Department: Acting as a Pollinator

- Table sign, laminated
- Explanation, laminated
- Pollination board with instructions, laminated
- 19- Pieces of pollen, laminated with Velcro
- 6- Pollinators, laminated with Velcro (bat, butterfly, moth, bee, beetle, hummingbird)

Pollination Department: Balancing Monarchs

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- 2-sided Butterfly ID sheet, laminated
- 2- Samples
- 150-copies of Monarch butterfly template

What you need to provide:

- *Scissors*
- *Orange crayons or markers*
- *Tape for attaching pennies*
- *2 - Pennies for each Monarch butterfly to be made*

Pollination Department: Can You Find These Flower Parts?

- Table sign, laminated
- Explanation, laminated
- Instruction with diagram, laminated on easel
- 3- Hand lenses
- 9- Flowers stems
- Model of flower parts (boxed) w/ laminated assembly directions

Pollination Department: Caterpillar Bracelet

- Table sign, laminated
- Explanation, laminated
- Directions, laminated on an easel
- Instructions for Gulf Fritillary, laminated
- Photo card with Monarch, Gulf Fritillary, and Black Swallowtail, laminated
- 2- Sample bracelets
- 1- Sample on a pencil
- 12- Pencils
- ~ 375 chenille stems (assorted red, black, yellow, white green)

What you need to provide:

- *Scissors*

Pollination Department: Caterpillar to Butterfly Chromatography

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- Sample butterfly, laminated
- 6- Black Vis-à-vis markers
- 150 - Coffee filters

What you need to provide:

- *Scissors*
- *Bowl of water*
- *Drying area or line*
- *Pencils for name writing*

Pollination Department: Name that Pollinator

- Explanation, laminated
- Question card, laminated on easel
- 6-pollinator wheels
- Answer sheet, laminated

Soil & Recycling Department: Investigating Worms

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- Worming Around information sheet, laminated on easel
- 2- Flashlights
- 1- Spray bottle
- 3- Hand lenses

What you need to provide:

- *Live worms*
- *Pickle*
- *Rock*
- *Paper towels*

Soil & Recycling Department: Make a Soil Profile

- Table sign, laminated
- Explanation, laminated
- Information and instruction sheet, laminated on easel
- 2- Additional instruction sheets, laminated
- 2 - Soil Profile information for South GA and Athens GA, laminated
- Horizon A, B, C soil sheets, laminated
- 3- Lidded tubs labeled A, B, and C each with a different soil color
- 9- Spoons
- 150-copies of soil profile card
- Sample card
- Carpet tape, to be cut into 4" pieces

Soil & Recycling Department: Oli's Recipe for Soil

- Table sign, laminated
- Explanation, laminated
- Instructions sheet, laminated
- Bucket with a felt cover that has a slit opening and contains the following 14 items:

Air in a Ziploc	Plastic grocery bag
Aluminum can	Rawhide dog bone
Animal bone	Roach, plastic
Animal scat, rubber replica	Rock
Bacteria in a Petri dish	Rubber band
Leaf, laminated	Twig
Popsicle stick	Water in a film canister
Mushroom	

Water Purification Department: Make Your Own Water Cycle

- Table sign, laminated
- Explanation, laminated
- Instructions, laminated on easel
- 6- Templates, laminated
- 2- Samples
- 6- Fine point black sharpies
- 150-quart-sized Ziploc bags

What you need to provide:

- *Sand*
- *Water*

Water Purification Department: Make Your Own Water Meter

- Table sign, laminated
- Instructions, laminated on easel
- Sample water meter, laminated
- Ribbon
- 150- blue Pony beads
- 150- copies of Water Meter Template

What you need to provide:

- *Glue sticks*
- *X-acto knife for making slits*