Materials List for Unit 1: Fossils

Item	Quantity
Exercise 1: Fossils T/F in two plastic containers:	2
#1 - Amber (with insect)	1
#2 - Muskrat jaw	1
#3 - Fossil fern impression	1
#4 - Fossil sand dollar (or related echinoid)	1
#5 - Modern clam shell	1
#6 - Gypsum (chunk or "rose" form)	1
#7 - Fossil ghost shrimp burrow	1
#8 - Coprolite (8a, 8b, 8c, or 8d)	1
#9 - Coyote leg bone	1
#10 - Petrified wood	1
#11 - Iron concretion / Moqui ball	1
#12 - Fossil dinosaur tooth (12a or 12b)	1
#13 - Pottery sherd	1
#14 - Trilobite fossil	1
#15 - Fossil tooth (15a, 15b, or 15c)	1
#16 - Fossil vertebra (16a or 16b)	1
#17 - Coal	1
#18 - Fish fossil	1
#19 - Stromatolite	1
#20 - Wooly mammoth hair (between plexiglass plates)	1
#21 - Horsetail rush	1
#22 - Dinosaur egg shell fossil	1
Plastic deli cup labeled "Exercise 3c: Half-life Experiment" containing:	<u>1</u>
Light-colored poker chips (with a colored dot on one side of each)	32
Dark-colored poker chips	32
Round plastic container containing:	<u>1</u>
Modern shark jaw	1
Plastic bag labeled "Exercise 4: Fossil Lineages" containing:	1
Bag labeled "Exercise 4.1: Determining a Fossil Lineage" containing:	1
Cretolamna appendiculata tooth	1
Carcharocles auriculatus tooth	1
Carcharocles chubutensis (or C. angustidens) tooth	1
Carcharocles megalodon tooth	1
Otodus obliquus tooth	1
Bag labeled "Exercise 4.2: Comparing Lineages" containing:	1
Crow shark (Squalicorax pristodontus) tooth	1
Magnifying glass	1
Unit 1 Workbook (2012)	1
Office 1 Workbook (2012)	1
Biology in a Box Teacher Packet containing:	1
Biology in a Box Project Overview sheet	1
"PowerPoint 101" sheet	1
CD of all <i>Biology in a Box</i> units & activities	1
Laminated Materials List for Unit 1 (this sheet)	1

Materials List for Unit 2: Of Skulls & Teeth

ltem	Quantity
Sealed plastic container labeled "Tooth Types", containing the following:	1
Canine Tooth (fox or coyote)	1
Herbivore Incisor (beaver or deer)	1
Herbivore Molar (beaver or deer)	1
Various numbered plastic containers with animal skulls as listed below:	<u>11</u>
#1 - Armadillo	1
#2 - Prairie dog (2a) <u>or</u> Rabbit (2b) <u>or</u> Rat (2c)	1
#3 - Coyote	1
#4 - Mink	1
#5 - Deer	1
#6 - Beaver	1
#7 - Snapping turtle	1
#8 - Human (replica)	1
#9 - Bobcat	1
#10 - Skunk	1
#11 - Porcupine	1
Plastic deli cup labeled "BBs for determination of brain size" containing:	<u>1</u>
Approximately 250 mL of metal pellets (BBs)	1
Small plastic ramekin or cup for scooping pellets	1
Bag labeled "Measuring Equipment" containing the following:	<u>1</u>
Graduated cylinder (50 or 100 mL)	1
Funnel	1
Rulers (12")	6
Protractors	6
Vernier calipers	6
Plastic dishpan (to minimize BB spills)	1
Unit 2 Workbook (2012)	1
Biology in a Box Teacher Packet containing:	<u>1</u>
Biology in a Box Project Overview sheet	1
"PowerPoint 101" sheet	1
CD of all <i>Biology in a Box</i> units & activities	1
Laminated Materials List for Unit 2 (this sheet)	1

Materials List for Unit 3: Fur, Feathers, Scales: Insulation

Item	Quantity
Bag of body covering examples from various animals, containing the following:	1
#1 - Skunk	1
#2 - Pheasant	1
#3 - Rabbit	1
#4 - Buffalo	1
#5 - Rattlesnake	1
#6 - Bear	1
#7 - Coyote	1
#8 - Alligator	1
#9 - Parrot &/or Peacock	1
#10 - Sheep	1
#11 - Turkey	1
#12 - Bird foot (duck, goose, or turkey)	1
#13 - Mink	1
#14 - Deer	1
#15 - Opossum	1
#16 - Kangaroo	1
#17 - Goose	1
#18 - Goat	1
"Fur Density" exercise container, with samples of mammal fur in small containers:	1
#1 - Skunk	1
#3 - Rabbit	1
#4 - Buffalo	1
#6 - Bear	1
#7 - Coyote	1
#10 - Sheep	1
#13 - Mink	1
#14 - Deer	1
#15 - Opossum	1
#16 - Kangaroo	1
#18 - Goat	1
Bag of mitts for Exercise 2, containing the following:	<u>1</u>
Control	1
Aluminum	1
Bubble Wrap	1
Cotton	1
Fur	1
Leather	1
Sawdust	1
Wool/Felt	1

Item	Quantity
Bag for Exercise 2d, containing the following:	1
Fluffed fur	1
Compressed fur	1
Oiled fur	1
Blubber	1
Copper tube, capped on one end	1
Bag for Exercise 3, containing the following:	<u>1</u>
Polished rock	1
Glass	1
Metal	1
Plexiglas	1
Rubber mat	1
Fabric	1
Linoleum	1
Wood	1
Dry erase board	1
Ice cube tray (with depths of 1 cm marked in each well)	1
Pail	1
Stopwatch	1
Thermometer	1
Rulers (6")	6
Large (6" x 8") heavy-duty resealable plastic bags	12
Small (2" x 3") heavy-duty resealable plastic bag labeled "Ice	
Cube"	1
Unit 3 Workbook (2012)	1
Biology in a Box Teacher Packet containing:	<u>1</u>
Biology in a Box Project Overview sheet	1
"PowerPoint 101" sheet	1
CD of all <i>Biology in a Box</i> units & activities	1
Laminated Materials List for Unit 3 (this sheet)	1

Materials List for Unit 4: Simple Measures

Item	Quantity
Plastic container for Mass in Motion:	<u>1</u>
Cart	1
Tape measure	1
String	1
Pulley	1
Stopwatch	1
Board for mounting pulley	1
Box of calibration masses:	<u>1</u>
1 g	1
2 g	2
5 g	2
10 g	1
20 g	1
50 g	1
Rhinoceros beetle (embedded or in box)	1
Morpho butterfly (in plastic box)	1
Balance	1
Box of 40 plastic disk masses	1
Container of square plastic stacking masses:	<u>1</u>
1 g yellow mass	4
5 g orange mass	2
10 g purple mass	1
20 g pink mass	1
Volume relationship set:	<u>1</u>
Cube	1
Rectangular prism	1
Cone	1
Pyramid	1
Cylinder	1
Sphere	1

Item	Quantity
<u>Plastic box of miscellaneous items</u>	<u>1</u>
Hickory nuts	2-4
String	2-4
Acorns	2-4
Sweet gum fruit (spiny seed ball)	2-4
Stone	2-4
Cotton ball (or 1" pom-pom)	2-4
Feather	2-4
Paper clips	2-4
Noodles	2-4
Plastic cap	2-4
Felt pad	2-4
Metal washers	2-4
Jacks	2-4
Container for "Finding the volume of irregular objects"	<u>1</u>
Miscellaneous seashells	5
Funnel	1
Graduated cylinder (250 ml)	1
Beaker	1
Dishpan	1
Container of packing peanuts	1
Density block set	1
Unit 4 Workbook (2012)	1
Biology in a Box Teacher Packet containing:	1
Biology in a Box Project Overview sheet	1
"PowerPoint 101" sheet	1
CD of all <i>Biology in a Box</i> units & activities	1
Laminated Materials List for Unit 4 (this sheet)	1

Materials List for Unit 5: It's In Your Genes

Item	Quantity
Molecular model kit in zipper bag:	<u>1</u>
Carbon atoms (black)	19
Hydrogen atoms (white)	24
Nitrogen atoms (blue)	15
Oxygen atoms (red)	4
Single bond connectors (short, thick)	50
Double bond connectors (long, thin)	28
Zipper bag for Exercise 2 containing:	<u>1</u>
"F" container, containing:	1
Thin red poker chips	6
Thin white poker chips	6
"M" container, containing:	1
Thin red poker chips	6
Thin white poker chips	6
"IF" container, containing:	1
Thin red poker chips	3
Thin white poker chips	3
Thick red poker chips	3
Thick white poker chips	3
"IM" container, containing:	1
Thin red poker chips	3
Thin white poker chips	3
Thick red poker chips	3
Thick white poker chips	3
"GP" container, containing:	1
Red poker chips	6
White poker chips	6
Blue poker chips	6
Empty "C" container	1

Item	Quantity
Expandable DNA model	1
DNA puzzle	1
Blindfold	1
Ears of Corn for Exercises 2 & 3, in zipper bag:	<u>1</u>
Female parent ear (all kernels one color)	1
Male parent ear (all kernels one color, different from female parent)	1
F1 offspring ear (all kernels one color the same as one parent)	1
F2 offspring ear (with kernels of colors of both parents)	1
"Mystery Parents" ear (multiple kernel colors)	1
Unit 5 Workbook (2012)	1
Biology in a Box Teacher Packet containing:	<u>1</u>
Biology in a Box Project Overview sheet	1
"PowerPoint 101" sheet	1
CD of all <i>Biology in a Box</i> units & activities	1
Laminated Materials List for Unit 5 (this sheet)	1

Materials List for Unit 6: Animal Kingdom

NOTE: Older versions of this unit have fewer specimens, and the specimens have different numbers. Numbers in parentheses after a specimen ID below are the old numbers for those specimens, and specimens with no numbers in parentheses are new specimens that have been added to this unit. Please renumber your existing specimens to reflect their new numbers.

Item	Quantity
Zipper bag (or two containers) of animal specimens:	1(2)
#1 - Sponge (1)	1
#2 - Jellyfish (2A)	1
#3 - Liver fluke (3A)	1
#4 - Roundworm (4)	1
#5 - Clam (5A)	1
#6 - Bristleworm (6A)	1
#7 - Crustacean (7A)	1
#8 - Starfish (8A)	1
#9 - Lancelet (9A)	1
#10 - Insect (7B)	1
#11 - Octopus or squid	1
#12 - Hydra	1
Laminated magnified view of Hydra	1
#13 - Leech	1
#14 - Planaria	1
Laminated magnified view of planaria	1
#15 - Coral	1
#16 - Arachnid	1
#17 - Earthworm	1
#18 - Tapeworm	1
#19 - Fish	1
#20 - Sea urchin	1
#21 - Snail	1
#22 - Centipede or millipede	1
#23 - Sea squirt	1
Mystery animal	1
Phylogenetic tree poster	1
Game spinner	1

Item	Quantity
Magnifying glass	1
Straw	1
Larger diameter tubing (or length of garden hose)	1
Zipper bag for Exercise 9a/9b containing ten smaller bubble bags with:	1
Shells of Species 1	10
Shells of Species 2	10
Shells of Species 3	10
Shells of Species 4	10
Shells of Species 5	10
Shells of Species 6	10
Zipper bag containing "The Mathematical Mollusc: The Nautilus" exercise	1
Petri dishes containing half of a nautilus shell, with gridlines on the lids	6
Rulers (6")	6
Protractors	6
Package of rubber bands	1
Rubber bands	12
Unit 6 Workbook (2012)	1
Biology in a Boy Toochay Booket containing	1
Biology in a Box Teacher Packet containing: Biology in a Box Project Overview sheet	1 1
"PowerPoint 101" sheet	1
CD of all <i>Biology in a Box</i> units & activities	1
Laminated Materials List for Unit 6 (this sheet)	1

Biology in a BoxMaterials List for Unit 7: Backyard Naturalist

Item	Quantity
Exercise 1: Who Walked Here - bag of animal tracks (resin or clay)	1
A – White-tailed Deer	1
B – Red Fox	1
C – Mallard Duck	1
D – Snapping Turtle	1
E – Bullfrog	1
F – River Otter	1
G – Cougar	1
H – Great Blue Heron	1
I – Eastern Cottontail	1
J – American Crow	1
K – Raccoon	1
L – Opossum	1
M – Grey Squirrel	1
N – Canada Goose	1
O – Eastern Chipmunk	1
P – Muskrat	1
Q – Striped Skunk	1
R – Mink	1
Ruler (12")	6
Cloth bag	1
Stopwatch	1
Tape measure	1
Exercise 2: The Scoop on Poop - bag of animal scats (in individual containers):	<u>1</u>
A – White-tailed Deer	1
B – Elk	1
C – Wild Turkey	1
D– Little Brown Bat	1
E– Canada Goose	1
F– Coyote	1
G– Striped Skunk	1
H – Eastern Cottontail	1
Exercise 3: Getting to Know the Animals - bag of game card decks:	<u>1</u>
Decks of game cards with 41 cards (as follows) in each deck:	6
Habitat cards	4
Diet cards	4
Class cards	4
Order cards	12
Family cards	17
Exercise 4: Birdsongs & Things That Go Bump In the Night (Audio CD)	1
	1
Unit 7 Workbook (2012)	1
Distancia a Dec Techa Dedut contain'	 _
Biology in a Box Teacher Packet containing:	1 1
Biology in a Box Project Overview sheet	1
"PowerPoint 101" sheet	1
CD of all <i>Biology in a Box</i> units & activities Laminated Materials List for Unit 7 (this sheet)	1

Materials List for Unit 8: Everything Varies

Item	Quantity
Exercises 1 & 2, Container A:	1
Unique tree leaves	35
Omque tree reaves	33
Exercise 3	See below
Container B:	1
Species A leaves	30
Species B leaves	30
Exercise 3b.2, Small tin container with:	1
Cloth drawstring pouch containing:	1
Beads of one color	75
Beads of another color	25
Exercises 4, 5, & 6	See below
Container C (shells with red dot):	1
Unique shells, numbered 1-30	30
Container D (shells with blue dot):	1
Unique shells, numbered 1-30	30
Exercise 7, Container E with:	<u>1</u>
Mystery shell	1
Exercise 8, Zipper bag containing ten smaller bubble bags with:	<u>1</u>
Shells of Species 1	10
Shells of Species 2	10
Shells of Species 3	10
Shells of Species 4	10
Shells of Species 5	10
Shells of Species 6	10
Rulers (6")	6
Protractors	6
Unit 8 Workbook (2012)	1
Biology in a Box Teacher Packet containing:	<u>1</u>
Biology in a Box Project Overview sheet	1
"PowerPoint 101" sheet	1
CD of all <i>Biology in a Box</i> units & activities	1
Laminated Materials List for Unit 8 (this sheet)	1

Materials List for Unit 9: Forestry

tem	Quantity
Exercise 1: Dendrology, large zipper bag containing:	1
Exercise 1a: Tree Trunks envelope containing:	1
Tree poster	1
Trunk puzzle	1
Tape measure	1
Trunk diagram	1
Deck of Missing Parts cards:	<u>1</u>
Question cards	7
Picture cards	5
Zipper bag containing:	1
Tree cookie from Species A	1
Tree cookie from Species B	1
Clinometer	1
10 m retractable measuring tape	1
	
Exercise 1c: Leaves & Seed Cases	See below
Envelope of leaves (14):	1
A – Black Walnut	1
B – Yellow Buckeye	1
C – Eastern Hop Hornbeam	1
D – Flowering Dogwood	1
E – Eastern Red Cedar	1
F – Eastern Hemlock	1
G – Pignut Hickory	1
H – Eastern Redbud	1
I – Sugar Maple	1
J – Sweet Gum	1
K – Tulip Poplar	1
L – Virginia Pine	1
M – Red Oak	1
N – White Pine	1
Bag of seed cases (in individual plastic vials):	1
1 - Tulip Poplar	1
2 - Black Walnut	1
3 - Virginia Pine	1
4 - Yellow Buckeye	1
5 - Flowering Dogwood	1
6 - Sweet Gum	1
7 - Sugar Maple	1
8 - Eastern Hop Hornbeam	1
9 - Eastern Red Cedar	1
10 - White Pine	1
11 - Eastern Redbud	1
12 - Red Oak	1
13 - Eastern Hemlock	1
14 - Pignut Hickory	1

tem	Quantity
xercise 2: Wood Types in zipper bag:	1
Magnifying glass	1
Rulers (6")	6
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Exercise 2a: What's that Wood? in sealable plastic bag	1
Wood chips labeled with wood type	See below
Ash	1
Basswood	1
Birch	1
Cedar	1
Cherry	1
Mahogany	1
Maple	1
Oak	1
Pecan	1
Pine	1
Tulip Poplar	1
Walnut	1
Wood chips labeled A-L	See below
A	1
В	1
C	1
D	1
E	1
F	1
G	1
H	1
<u>l</u>	1
J	1
K	1
L	1
Francisco Obstanta al Deposito in contable planta have	
Exercise 2b: Wood Density in sealable plastic bag:	1 1
Balsa wood cube	1
Birch wood cube	1
Lignum vitae cube	1
Digital scale	1
Instruction manual for digital scale	1
Batteries for digital scale	2
100g calibration mass	1
Francisco Co. Wood Donothy b	+ -
Exercise 2c: Wood Porosity bag	1
Pine porosity sample (A)	1
Oak porosity sample (B)	1
	_
	1

Item	Quantity
Exercise 3: Wood Products container with:	1
Toothpick	1
Clothespin	1
"Latex" glove (allergy-free substitute)	1
Cork	1
"Aspirin" (candy replica in Rx bottle)	1
Cellophane	1
Plastic comb	1
Rayon fabric	1
Photographic film	1
Paper product (cardboard, paper, etc.)	1
Toothpaste	1
Chewing gum	1
Soap	1
Glue stick	1
Small container of maple syrup	1
Small container of oil	1
Crayon	1
Exercise 4: Who Lives Here? envelope containing:	1
Forest Scene poster	1
Critter cards	15
Habitat cards	15
Exercise 5: Forest Succession envelope containing:	1
External Forces cards	27
Succession game board	1
	<u>1</u>
Exercise 6: Forest Pests envelope containing:	
Monoculture game board (trees all the same color)	1
Mixed stand game board (trees of 2 colors)	1
Blank land game board	1
Sample of Southern Pine Beetle damage	1
Container of multicolored plastic paper clips	1
Unit 9 Workbook (2012)	1
Biology in a Box Teacher Packet containing:	<u>1</u>
Biology in a Box Project Overview sheet	1
"PowerPoint 101" sheet	1
CD of all <i>Biology in a Box</i> units & activities	1
Laminated Materials List for Unit 9 (this sheet)	1
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Materials List for Unit 10: Behavior

Item	Quantity
Exercise 1.1 in zipper bag:	<u>1</u>
Student tactile boxes (glued shut)	6
1 teacher tactile box (openable)	1
Exercise 1.3 in large zipper bag:	1
"White Box" tins, each containing:	6
Cork	1
Cotton ball	1
Crayon	1
Marble	1
Metal ball	1
Paper clip	1
Penny	1
Poker chip	1
Rubber ball	1
Rubber band	1
Toothpick	1
·	
"Black Box 1.3a" containers (openable), each containing 2 items	6
"Black Box 1.3c" containers (screwed shut)	6
Zipper bag with "Additional Materials":	1
Magnets	6
Empty plastic Solo cups	6
Spring scales or digital scales	6
Hair nets (for spring scales) or 100 g masses (for digital scales)	6
"Teacher Container" with:	1
Cork	6
Cotton ball	6
Crayon	6
Marble	6
Metal ball	6
Paper clip	6
Penny	6
Poker chip	6
Rubber ball	6
Rubber band	6
Toothpick	6
Replacement screws	12
Exercise 2: Chemical Olfaction box containing:	1
Olfaction jars with red dot	See below
R1	1
R2	1
R3	1
R4	1
R5	1
R6	1

Item	Quantity
Exercise 2: Chemical Olfaction box (continued):	See below
Olfaction jars with blue dot	See below
B1	1
B2	1
B3	1
B4	1
B5	1
B6	1
Olfaction jars with green dot	See below
Bee smell	1
Butterfly smell	1
Fly smell	1
Deely-bopper (headband with antennae)	1
Exercise 3: Vision box	1
Silk flower with tube attached	1
Silk flower with tube and funnel attached	1
Bag of small pom poms	1
Bag of coffee stirrer straws	1
Decks of 25 "Alarm" cards (in plastic cases)	6
Decks of 25 "Mimic 1" cards (in plastic cases)	3
Decks of 25 "Mimic 2" cards (in plastic cases)	3
Exercise 4: The Vibration Sense of Spiders container with:	1
Blindfold	1
Wood block ("spider") with attached monofilament line	1
Exercise 5:	See below
Biology in a Box Unit 10 CD (with audio and movie files)	1
Exercise 6:	See below
T-mazes	6
Exercise 7 in zipper bag:	See below
Container with cloth bag	1
Copies of the "Caching Game," each containing the following:	<u>6</u>
Blank chips of one color	40 (240 total)
Acorn chips of same color	6 (36 total)
Chips of different color	4 (24 total)
Game mat	1 (6 total)
Unit 10 Workbook (2013)	1
Biology in a Box Teacher Packet containing:	<u>1</u>
Biology in a Box Project Overview sheet	1
"PowerPoint 101" sheet	1
CD of all Biology in a Box units & activities	1
Laminated Materials List for Unit 10 (this sheet)	1

Biology in a Box Materials list for Unit 11: Biomechanics

Materials list for unit 11: Biomechanics	Onestite
Item	Quantity
Exercise 2:	1
K'Nex Middle School Math Kit Rat Skeleton	1
Digital Scale with calibration mass (100g)	1
Wood Block with Hook	1
Mini Pail with Chain	1
Plastic Beaker (100 ml)	1
Spring Scale (5N/500g)	1
12' Rulers	6
Protractors	6
Exercise 3:	
Demo Lever with attached accessories and BB 'coins'	1
Pliers with Bite Force Device	6
Lever Examples (Set)	1
Bird Food Examples (Set)	1
Fish Food Examples (Set)	1
Bird Cups	6
Food Bowls	2
Exercise 4:	
Balls	5
Stopwatch	1
10 m Tape	1
Straw Rocket Launcher with accessories	1
Exercise 5:	
Silver Maple Samaras (Set)	1
Sugar Maple Samaras (Set)	1
Box Elder Samaras (Set)	1
Elm Samara Models (Set)	1
Mass Sheet for Samaras	1
Stopwatch	1
Exercise 6:	
Instruments	4
Sound Meter with Batteries	1
Bone Conduction Transducer	1
Speaker Example	1
Boostaroo Signal	1
Speaker Diaphragms	4
Mini Amplifier Speaker and Cable	1
Slinky Spring	1
CD with Audio and Video	1
Biology in a Box Teacher Packet containing	
Biology in a Box Project Overview Sheet	1
PowerPoint 101 Sheet	1
CD of all Biology in a Box Units and Activities	1
Laminated Materials List for Unit 11 (this sheet)	1