



Switched-On

SCHOOLHOUSE® 2012 EDITION

Supply List

Science 500

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Please have a pencil, paper and access to a printer available for all projects by default.

UNIT 1: CELLS

Assignment # and Title	Project Summary	Video Demo	Materials Needed
4. Experiment: Skin Cells	In this experiment you will study the structure of skin cells.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> Microscope slide slide cover small eye dropper or toothpick knife diluted iodine solution
8. Experiment: Onion Cells	In this experiment you will examine cells from different parts of an onion plant.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> onion bulb with leaves and roots knife tweezers slide cover microscope microscope slide iodine stain toothpick
9. Experiment: Pond Water Examination	In this experiment you will use a microscope to see protozoa in pond water.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> microscope slide slide cover dropper pond water
10. Experiment: Cheek Cells	In this experiment you will examine cheek cells using a microscope and compare cheek and skin cells.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> microscope slide iodine stain toothpick slide cover
11. Experiment: Blood Cells	In this experiment you will use a microscope to take a closer look at the cells in your blood.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> microscope 2 slides rubbing alcohol cotton ball dropper needle ink stain (methylene blue stain)
17. Special Project	Special Project assignments are used by teachers to create their own projects if needed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A

UNIT 2: PLANTS: LIFE CYCLES

Assignment # and Title	Project Summary	Video Demo	Materials Needed
6. Experiment: Flower Dissection	In this experiment you will identify the main reproductive parts of seed-bearing and spore-bearing organism.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> 2 flowers Microscope 2 microscope slides 2 slide covers magnifying glass straight pins paper dropper sharp knife
8. Experiment: Seed Dissection	In this experiment you will identify the main reproductive parts of seed-bearing and spore-bearing organism.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> lima bean seed knife corn seed baby food jar half full of water tweezers
10. Project: Examining Cones	In this project you will identify the main reproductive parts of seed-bearing and spore-bearing organism.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> male and female pine cones
11. Project: Seed Hunt	In this project you will identify the main reproductive parts of seed-bearing and spore-bearing organisms.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> a location where you will hunt for seeds
15. Report: Walking Fern	In this report you will be able to explain differences between the main categories of plants, fungi, and protists.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> reference materials
17. Experiment: Mold	When you have completed this lesson, you should be able to: describe the life cycles of plants, fungi, and some protists	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> slice of bread large jar with lid magnifying glass
21. Special Project	Special Project assignments are used by teachers to create their own projects if needed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A

UNIT 3: ANIMALS: LIFE CYCLES

Assignment # and Title	Project Summary	Video Demo	Materials Needed
3. Report: Protozoa	In this report you will find out about the structure and the means of reproduction of the protozoan that you choose.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
5. Experiment: Mealworm	You will observe the development of a small larva called a mealworm into an adult grain beetle over several weeks.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> baby-food jar with lid bran flakes or oatmeal potato magnifying glass mealworm knife
6. Report: The Spider	Spiders are invertebrate animals in the arachnid group. In this report you will learn more about these animals.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
7. Report: Insect Study	In this report you will learn more about one type of insect.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
14. Experiment: Chicken Egg	In this experiment you will take a closer look at the structure of a bird egg.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> chicken egg dropper small dish tissue paper magnifying glass food coloring
16. Report: Mammals	In this report you will learn more about a mammal species.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material drawing paper
17. Essay: God and Animals	In this essay you will think and write about a Bible passage on animals.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> bible
19. Special Project	Special Project assignments are used by teachers to create their own projects if needed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A

UNIT 4: BALANCE IN NATURE

Assignment # and Title	Project Summary	Video Demo	Materials Needed
2. Project: Cycles	You have learned that the water cycle, carbon cycle, and chemical cycle are very important in nature. In this project you will review these cycles.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A
4. Project: Terrarium Project	In this experiment, you will build a terrarium if conditions permit.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> large container (glass or clear plastic)—at least 2 liter capacity gravel container cover or lid potting soil several cans or small jars sand small sprinkling can bottle cap something to punch holes in lid water
7. Project: Prairie Land	In this project you will find out where prairies are located in North America.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
9. Report: Prairie Birds	In this report you will learn more about one species of prairie bird.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
11. Project: Prairie Food Chain	In this project you will think about other possible prairie food chains.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
12. Project: Special Environments	In this project you will think and learn about another type of environment.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
17. Special Project	Special Project assignments are used by teachers to create their own projects if needed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A

UNIT 5: TRANSFORMATION OF ENERGY

Assignment # and Title	Project Summary	Video Demo	Materials Needed
5. Experiment: Heat From the Sun	You will use a thermometer to observe the effect of direct and indirect sunlight on the heat energy of matter. NOTE: This experiment should be conducted on a sunny day.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> yellow construction paper a thermometer
7. Experiment: Heat from Bending	In this experiment you will examine the effect of movement on heat energy.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> 2 paper clips
8. Experiment: Heat Energy from a Chemical Reaction	In this experiment you will examine the effect of chemical reactions on temperature.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> 3 liquid ounces of vinegar 1 glass jar 1 tablespoon of baking soda 1 thermometer
13. Experiment: Solar Energy for Heat	In this experiment you will investigate how light energy and water temperature are related.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> a baby-food jar filled with water a thermometer
15. Special Project	Special Project assignments are used by teachers to create their own projects if needed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A

UNIT 6: RECORDS IN THE ROCK: THE FLOOD

Assignment # and Title	Project Summary	Video Demo	Materials Needed
5. Project: Interview with Noah	In this project you will write a news article about an interview with Noah.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
7. Report: Ancient Flood Stories	In this report you will learn more about these cultural accounts.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
12. Special Project	Special Project assignments are used by teachers to create their own projects if needed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A


UNIT 7: RECORDS IN THE ROCK: FOSSILS

Assignment # and Title	Project Summary	Video Demo	Materials Needed
2. Project: Mold Fossil Copy	In this project you will create a copy of a fossil mold.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> a small plastic container (about 10 centimeters across) modeling clay a seashell or bone
3. Project: Cast Fossil Copy	In this project you will learn how a cast fossil is made.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> the mold fossil copy from the earlier activity molding plaster a tin can and stick a jar of water
9. Project: Plant and Animal Fossils	In this project you will learn about some extinct organisms.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material drawing paper
11. Project: Fossil Clues	In this project you will look for fossil clues like a scientist.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A
13. Project: Label the Skeleton	In this project you will make inferences and draw conclusions about an animal from its skeleton.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> printer colored pencils
14. Project: Be Creative	In this project you will show how reconstructions can give incorrect information about an animal.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> drawing paper
16. Special Project	Special Project assignments are used by teachers to create their own projects if needed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A

UNIT 8: RECORDS IN ROCK: GEOLOGY

Assignment # and Title	Project Summary	Video Demo	Materials Needed
2. Project: Compare an Orange and the Earth	In this project you will use a model to "view" the earth up close and from a distance.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> orange magnifying glass
5. Project: Examine a Mineral	In this project you will take a closer look at the geometric shape of salt.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> small amount of table salt magnifying glass colored paper
7. Report: Rocks	In this project you will learn more about a rock or mineral from one of these groups.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
8. Project: Rock Hunt	In this project you will hunt for and learn about rocks near your home.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> a natural rock deposit near your home
11. Experiment: Erosion	In this experiment you will observe the powerful force of running water.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> plastic tub or metal pan short board mixture of soil, sand, large and small pebbles glass of water
14. Project: Volcano Summary	In this project you will learn about famous volcanoes.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
17. Special Project	Special Project assignments are used by teachers to create their own projects if needed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A

UNIT 9: CYCLES IN NATURE

Assignment # and Title	Project Summary	Video Demo	Materials Needed
3. Experiment: Volume	In this experiment you will use water displacement to find the volume of a sphere.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> tall, thin jar (Alka-Seltzer bottle) small marble large marble masking tape ruler
5. Experiment: Water Container	In this experiment you will examine the ability of water to change shape.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> 4 differently shaped clear containers 
6. Experiment: Types of Changes	In this experiment you will change the physical and chemical structure of matter.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> candle in candle holder large glass plate or pan matches
8. Experiment: Conservation of Matter	In this experiment you will make a prediction. Your prediction will be based on the section you have finished reading, conservation of matter	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> 2 baby-food jars with equal mass 2 baby-food jar lids with equal mass ice cube dropper equal-arm balance
13. Project: Globe	In this project you will use a globe to observe how the earth's tilt causes seasons.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> globe with a tilted axis
15. Report: Famous Comets	In this report you will learn about a famous comet.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> reference material
17. Experiment: Water Evaporation	In this experiment you will compare the evaporation of cold and hot water.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<ul style="list-style-type: none"> liquid measure two identical pans funnel
21. Special Project	Special Project assignments are used by teachers to create their own projects if needed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A

UNIT 10: LOOK AHEAD

Assignment # and Title	Project Summary	Video Demo	Materials Needed
13. Special Project	Special Project assignments are used by teachers to create their own projects if needed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A