



Switched-On
SCHOOLHOUSE

2015 Science Supply List

Science 300

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UNIT 1: YOU GROW AND CHANGE

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Breathing Patterns	In this experiment, you will measure breathing patterns and learn why the body needs oxygen.	No	<ul style="list-style-type: none"> a clock with a second hand
*Experiment: Your Lungs	In this experiment, you will feel how lungs move during breathing	No	<ul style="list-style-type: none"> a sponge
Experiment: Taste Test	In this experiment, you will compare how foods pass through a paper towel	No	<ul style="list-style-type: none"> cocoa salt teaspoon a small drinking glass cone shaped coffee filter or paper towel a large drinking glass.
Experiment: Taking Your Pulse	In this experiment, you will practice taking a pulse and understand that a pulse tells how fast the heart is beating.	No	<ul style="list-style-type: none"> a timer, a stopwatch or a clock with a second hand.
*Project: Bone Numbers	In this project you will compare the bones in your body to the bones in a friend's body.	No	<ul style="list-style-type: none"> a friend who will let you count the bones in their foot.
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

*indicates alternate project/experiments

UNIT 2: PLANTS

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Root Hairs	In this experiment, you will study root hairs on a plant.	No	<ul style="list-style-type: none"> a small plant a magnifying glass
*Experiment: Study a Stem	In this experiment, you will study the stem of a plant	No	<ul style="list-style-type: none"> a small jar with water food coloring a celery stem magnifying glass
Experiment: Grow Some Plants	In this experiment, you will test how light affects plant growth	No	<ul style="list-style-type: none"> two small potted plants or bean seedlings a box A sunny window
Experiment: Watch Bean Seeds Grow	In this experiment, you will understand that plants come from seeds and list the things seeds need to grow.	No	<ul style="list-style-type: none"> a jar with water five paper cups about fifteen (15) lima beans potting soil wet paper towel
*Experiment: Plant a Piece of Potato	In this experiment, you will study the growth of a potato plant.	No	<ul style="list-style-type: none"> a white potato (one with eyes on it) a pot of soil a knife some water
*Experiment: Bean Plant	In this experiment, you will study the growth of a bean plant and understand that some parts of a plant grow faster than other parts.	No	<ul style="list-style-type: none"> a glass jar wet paper towel felt marker three lima beans a centimeter ruler
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

*indicates alternate project/experiments

UNIT 3: ANIMALS: GROWTH AND CHANGE

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Hourly Temperature Changes	In this experiment, you will study how temperature changes with time.	No	<ul style="list-style-type: none"> • a clock • a thermometer
*Experiment: Heat Energy Comparison	In this experiment, you will compare the energy needed to heat water and soil.	No	<ul style="list-style-type: none"> • two pint glass jars or bowls • ruler • two thermometers • soil • water
*Project: Desert Locations	In this project you will identify deserts around the world.	No	<ul style="list-style-type: none"> • encyclopedia
Project: Vertebrate Chart	In this project you will practice grouping vertebrates into different groups.	No	<ul style="list-style-type: none"> • paper • pencil
*Project: Sort Birds By Type Of Food They Eat	In this experiment, you will practice grouping birds by what they like to eat.	No	<ul style="list-style-type: none"> • pictures of birds
Project: Sow Bug Environment	In this experiment, you will study the behavior of sow bugs.	No	<ul style="list-style-type: none"> • a gallon jar • moist soil • a lid with some small holes in it that will fit the gallon jar • potato • three or four sow bugs
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

*indicates alternate project/experiments

UNIT 4: YOU ARE WHAT YOU EAT

Assignment Title	Project Summary	Video Demo	Materials Needed
Project: Breakfast Chart	In this project you will keep track of the foods you eat for breakfast.	No	• paper • pencil
*Project: Lunch Chart	In this project you will keep track of the foods you eat for lunch.	No	• paper • pencil
*Project: Dinner Chart	In this project you will keep track of the foods you eat for dinner.	No	• paper • pencil
*Project: Chart Totals	In this project you will look at the types of food you eat during an entire day.	No	• paper • pencil
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

*indicates alternate project/experiments

UNIT 5: PROPERTIES OF MATTER

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Be A Chemist	In this experiment, you will experiment with matter.	No	<ul style="list-style-type: none"> a pan of water a cup of sand a stick
Experiment: Volume	In this experiment, you will find the volume of different objects.	No	<ul style="list-style-type: none"> two different sizes of books metric ruler (with millimeter markings) calculator pencil and paper
*Experiment: Think About Mass	In this experiment, you will understand that objects can have different weights and masses.	No	<ul style="list-style-type: none"> book brick
*Experiment: Is Air Matter?	In this experiment, you will test the mass of air.	No	<ul style="list-style-type: none"> two balloons of the same size, the larger the better wire coat hanger door
*Project: Matter List	You have learned that matter has different properties. Not all matter is the same. In this project you think about different kinds of matter.	No	<ul style="list-style-type: none"> paper pencil
*Experiment: Is Water Matter?	In this experiment, you will test the mass of water.	No	<ul style="list-style-type: none"> small diet scale cup water
Experiment: Mass Measurement	In this experiment, you will test compare the mass of matter in different states.	No	<ul style="list-style-type: none"> food scale that reads in grams baby-food jar ice cube
*Experiment: Melting Ice Cubes	In this experiment, you will study how temperature affects ice cubes.	No	<ul style="list-style-type: none"> 5 paper cups 5 ice cubes refrigerator cool water hot water clock or watch
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

*indicates alternate project/experiments

UNIT 6: SOUNDS AND YOU

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Vibrations	In this experiment, you will experiment with sound vibrations from a drum.	No	<ul style="list-style-type: none"> • drum • pencil • dry cereal
Experiment: Sound Patterns	In this experiment, you will experiment with sound vibrations from a drum.	No	<ul style="list-style-type: none"> • a partner • ruler • water in large glass • stones
Report: Read and Write About Sound	You have learned how sounds are made and how they travel. In this report you will use books to learn more	No	<ul style="list-style-type: none"> • a book about sound.
Experiment: High And Low Sounds	In this experiment, you will study how vibration speed affects sound.	No	<ul style="list-style-type: none"> • strong box, open on one side • rubber bands of different sizes
*Experiment: Loud or Soft?	In this experiment, you will experiment with sound vibrations from a coffee can.	No	<ul style="list-style-type: none"> • coffee can with plastic lid • dry cereal
Experiment: Think About Hearing	In this experiment, you will compare how well sounds are heard.	No	<ul style="list-style-type: none"> • a clock that ticks • yardstick • a large sheet of paper
*Report: How Animals Hear	In this report you will learn how animal ears hear sound.	No	<ul style="list-style-type: none"> • research materials
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

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UNIT 7: TIME AND SEASONS

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: The Earth	In this experiment, you will understand that it cannot be light all over the earth at once.	No	<ul style="list-style-type: none"> • bright flashlight • paper towel tube • globe • tape
Experiment: Night	In this experiment, you will understand that when one side of the earth is light the other side is dark.	No	<ul style="list-style-type: none"> • lamp
*Experiment: The Earth's Rotation	In this experiment you will use a model to learn more about the earth's axis.	No	<ul style="list-style-type: none"> • clay • pencil • two pins
Experiment: Different Times	In this experiment, you will understand that it is day during different times around the world	No	<ul style="list-style-type: none"> • flashlight • globe • chalk
*Report: Months	In this report you will learn more about months of the year.	No	<ul style="list-style-type: none"> • research materials
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

*indicates alternate project/experiments

UNIT 8: ROCKS AND THEIR CHANGE

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Bubbling Grains of Rock	In this experiment, you will watch how vinegar reacts with limestone	No	<ul style="list-style-type: none"> • a piece of limestone • a pocket knife • some vinegar • an eye dropper
Report: Mount Rushmore	In this report you will learn about the rocks of Mount Rushmore.	No	<ul style="list-style-type: none"> • research materials
*Special Project	Special Project assignments are used by teachers to create their own projects if needed	No	N/A

*indicates alternate project/experiments

UNIT 9: HEAT ENERGY

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Feeling Friction	In this experiment, you will use friction to create heat.	No	<ul style="list-style-type: none"> • Wood • Sandpaper • a nail • a hammer
Experiment: Oxygen and Fire	In this experiment, you will understand that fire needs oxygen to burn.	No	<ul style="list-style-type: none"> • 3 candles in holders • 1 quart jar • 1 pint jar • matches • clock or timer
*Experiment: Static Electricity	In this experiment, you will create static electricity.	No	<ul style="list-style-type: none"> • a small flat box • plastic food wrap • small bits of paper (tissue) or small bits of lint
Experiment: Water Molecules	In this experiment, you will understand that water molecules move faster in hot water.	No	<ul style="list-style-type: none"> • two clear glasses • food coloring • hot water • dropper • cold water • clock t or timer
Experiment: Changing Liquid to Gas	In this experiment, you will understand that heat can change liquid into gas.	No	<ul style="list-style-type: none"> • an adult to help you use the stove • a one cup measure • water • a pan or kettle • clock or timer • pot holder
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

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UNIT 10: REVIEW

Assignment Title	Project Summary	Video Demo	Materials Needed
Project: Rock Collection	In this project, you will write about rocks.	No	<ul style="list-style-type: none"> • 5 different rocks
Experiment: How Sound Travels	In this experiment, you will understand that sound can travel through objects.	No	<ul style="list-style-type: none"> • string • chair • coat hanger
Experiment: Temperature Comparisons	In this experiment, you will study how color affects temperature.	No	<ul style="list-style-type: none"> • 2 small cardboard boxes (same size) • black paper • white paper • 2 thermometers • glue
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

*indicates alternate project/experiments