



2017-2018 Science Supply List

Science 400

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UNIT 1: PLANTS

Assignment	Summary	Video Demo	Supplies
*Project: Things Made of Wood	In this project, you will think about other objects that are made of wood.	No	<ul style="list-style-type: none"> things made of wood
*Report: Read and Write	In this report, you will learn about a fruit from another country.	No	<ul style="list-style-type: none"> research resources
Report: Flowers as State Symbols	In this report, you will learn about state flowers.	No	<ul style="list-style-type: none"> research resources
*Report: Flower Paragraph	In this report, you will learn more about state flowers.	No	<ul style="list-style-type: none"> research resources
Experiment: Celery	In this experiment, you will learn why these strings are important.	Yes	<ul style="list-style-type: none"> fresh celery stalk (stem) with leaves on top a glass of water
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 2: ANIMALS

Assignment	Summary	Video Demo	Supplies
Report: Types of Whales	In this report, you will learn more about three types of whales.	No	<ul style="list-style-type: none"> research resources
*Report: Writing about Fish	In this report, you will learn more about fish characteristics and behavior.	No	<ul style="list-style-type: none"> research resources
*Project: Observing Fish	In this project, you will learn more about how fish swim.	No	<ul style="list-style-type: none"> fish in an aquarium
Report: Honeybee Habits	In this report, you will learn more about the work and behavior of bees.	No	<ul style="list-style-type: none"> research resources
*Project: Animal Scrapbook	In this project, you will practice sorting animals into different groups.	No	<ul style="list-style-type: none"> pictures of animals construction pape2 glue
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 3: MAN AND HIS ENVIRONMENT

Assignment	Summary	Video Demo	Supplies
*Project: Your Environment	In this project, you will take a closer look at your environment.	No	<ul style="list-style-type: none"> drawing paper
*Project: Populations	In this project, you will take a closer look at the populations in your environment.	No	<ul style="list-style-type: none"> paper
*Project: Make a Pyramid	In this project, you will create a population pyramid.	No	<ul style="list-style-type: none"> access to a printer paper
*Report: Rabbits in Australia	In this report, you will create a population pyramid.	No	<ul style="list-style-type: none"> research resources
*Experiment: Still Water Life	In this experiment, you will create a population pyramid.	Yes	<ul style="list-style-type: none"> one or more kitchen strainers at least 5 wide-mouthed jars
Project: Human Communities	Write about the needs and structure of your community	No	N/A
*Report: Read and Write	In this report you will learn about the role of a honeybee in a community.	No	<ul style="list-style-type: none"> research resources
*Project: Terrarium or Diorama	In this project, you will make your own desert community.	No	<ul style="list-style-type: none"> a clean, empty two-liter plastic bottle (with the top cut off) one cup of gravel one-half cup of broken pieces charcoal two cups of sand
*Report: Forest Community	In this report, you will learn more about forest communities around the world.	No	<ul style="list-style-type: none"> research resources
*Project: Ask an Expert	In this project, you will learn more about forest communities around the world.	No	<ul style="list-style-type: none"> contact with the agricultural agent in your county
*Report: Endangered Species	In this report, you will learn about one endangered animal.	No	<ul style="list-style-type: none"> research resources
*Report: How To Save Energy	In this report, you will learn more about renewable energy and ways to conserve it.	No	<ul style="list-style-type: none"> research resources
*Report: Special Treasures	In this report, you will learn more about a United States National park.	No	<ul style="list-style-type: none"> research resources
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 4: MACHINES

Assignment	Summary	Video Demo	Supplies
*Report: Galileo	In this report, you will learn more about this important man.	No	<ul style="list-style-type: none"> research resources
*Experiment: Gravity	In this experiment, you are going to examine how air friction affects gravity	No	<ul style="list-style-type: none"> two or three pieces of newspaper a marble
Experiment: Hammer and Nail	In this experiment, you are going to compare work with and without use of a simple machine	Yes	<ul style="list-style-type: none"> a large nail a hammer
*Experiment: Seesaw	In this experiment, you are going to examine how fulcrum location affects amount of work needed for a lever	No	<ul style="list-style-type: none"> a seesaw
*Experiment: Inclined Plane	In this experiment, you are going to compare work with and without use of a simple machine	Yes	<ul style="list-style-type: none"> four textbooks (3 inches thick) a toy truck or car a spring scale
*Experiment: Screw and Nail	In this experiment, you are going to compare the strength of a nail and a screw	Yes	<ul style="list-style-type: none"> two thin pieces of wood (less than 1 cm thick) a hammer
*Experiment: Pulleys	In this experiment, you are going to compare the mechanical advantage of two pulley types	Yes	<ul style="list-style-type: none"> two pulleys a light rope about two meters long
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 5: ELECTRICITY AND MAGNETISM

Assignment	Summary	Video Demo	Supplies
Report: Thomas Edison	In this report, you will learn more about Thomas Edison.	No	<ul style="list-style-type: none"> research resources
Experiment: Static Electricity	In this experiment, you will "charge" objects and create static electricity.	No	<ul style="list-style-type: none"> string two balloons piece of woolen cloth

Project: Conductors	In this project, you will classify items as conductors or nonconductors	No	<ul style="list-style-type: none"> metal spoon screwdriver handle screwdriver blade chalkboard eraser glass dish tin can rubber ball paper paper clip wood
*Experiment: Wet Cell	In this experiment, you will make your own electric cell.	Yes	<ul style="list-style-type: none"> three strips each of copper and zinc (15 x 3 cm) four lengths of covered copper wire, each about 50 cm long.
*Project: Electric Objects	In this project you will take a closer look at the electrical objects in your home.	No	<ul style="list-style-type: none"> various object around your house
Project: Fuses In Use	In this project, you will study and write about car fuses.	No	<ul style="list-style-type: none"> access to a car
Experiment: Use a Magnet	In this experiment you will test different objects to see which ones are attracted to a magnet and which ones are not.	No	<ul style="list-style-type: none"> one magnet one small piece of paper two paper clips one penny two rubber bands one nickel
Experiment: Make A Magnet	In this experiment you will turn a nail into a magnet.	Yes	<ul style="list-style-type: none"> some iron filings a large iron nail
*Experiment: Magnet Poles	In this experiment you will use iron filings to "see" the magnetic field around the poles.	Yes	<ul style="list-style-type: none"> bar magnet iron filings
*Experiment: Testing A Magnet	In this experiment you will use a compass to find the north pole of a magnet.	Yes	<ul style="list-style-type: none"> a compass about 40 cm of heavy string a bar magnet
*Experiment: Generate Electricity	In this experiment you will use a magnet to make an electrical current.	Yes	<ul style="list-style-type: none"> a galvanometer a mailing tube or the cardboard tube from a roll of paper towels a bar magnet

*Experiment: Electromagnet	In this experiment you will use electricity to turn a nail into an electromagnet.	Yes	<ul style="list-style-type: none"> • a large iron nail • a knife switch • some bell wire
*Report: Explorers	In this report you will learn about the people who discovered these areas.	No	<ul style="list-style-type: none"> • research resources
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 6: WATER AND MATTER

Assignment	Summary	Video Demo	Supplies
Experiment: Ice	In this experiment you will test what you know about this property of ice.	Yes	<ul style="list-style-type: none"> • a plastic bowl large enough to hold 3 or 4 cups of water • 2 or 3 ice cubes (these must be cubes or chunks of ice for floating)
*Experiment: Ice Volume	In this experiment you will test what you know about the volume of ice.	Yes	<ul style="list-style-type: none"> • 1 small paper cup • enough crushed ice to fill the cup
*Experiment: Potato	In this experiment you will measure the water in a potato.	Yes	<ul style="list-style-type: none"> • 1 raw potato • 1 scale (to weigh ounces or grams) • 1 heavy-duty plastic knife • a paper towel
*Experiment: Forming Dew	In this experiment you will see water change state.	Yes	<ul style="list-style-type: none"> • 1 small tin can, fruit juice type (be sure there are no sharp edges) • enough ice to fill the can
Experiment: Solubility	In this experiment you will test the solubility of salt, sugar, sand, and oil.	Yes	<ul style="list-style-type: none"> • 4 plastic glasses (1 for each test material) • 1 teaspoon of salt • 1 teaspoon of sugar • 1 teaspoon of sand • 1 teaspoon of salad or cooking oil • a plastic spoon or wooden stick for stirring

*Experiment: Molecules	In this experiment you will smell different odors.	No	<ul style="list-style-type: none"> • 1 bottle of strong-smelling perfume • 1 bottle of household ammonia (only a small amount is needed) • A room about 12 x 12 in dimensions. • An adult to help perform experiment. • A clock with a second hand. • A couple of sheets of paper.
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 7: WEATHER

Assignment	Summary	Video Demo	Supplies
*Experiment: Air and Space	In this experiment you will answer this question.	Yes	<ul style="list-style-type: none"> • a water glass
Experiment: Temperature	In this experiment you will test the heat absorption of different materials.	No	<ul style="list-style-type: none"> • sheet of black paper • window
Experiment: Pressure	In this experiment you will see the strength of air pressure.	Yes	<ul style="list-style-type: none"> • drinking glass full of water • piece of cardboard large enough to cover the glass
*Report: Hurricanes	In this report you will learn more about these dangerous storms.	No	<ul style="list-style-type: none"> • research resources
*Project: Thermometers	In this project you will learn more about the two most common thermometers.	No	<ul style="list-style-type: none"> • research resources
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 8: OUR SOLAR SYSTEM AND THE UNIVERSE

Assignment	Summary	Video Demo	Supplies
Report: Astronomy Instruments	In this report you will learn more about one type of instrument.	No	<ul style="list-style-type: none"> • research resources
*Essay: Astronomy	In this report you will think about an astronomer's most important instrument... their mind.	No	N/A

*Essay: Ancient People	In this essay you will write about ancient beliefs.	No	N/A
*Report: Isaac Newton	In this report you will learn more about this famous English scientist.	No	<ul style="list-style-type: none"> research resources
Experiment: Moon Phases	In this experiment you will use a model to show the moon's phase changes.	No	<ul style="list-style-type: none"> 8 Oreo cookies paper plate
*Essay: Astrology	In this essay you will explain why astrology should not be studied.	No	N/A
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 9: THE PLANET EARTH

Assignment	Summary	Video Demo	Supplies
Experiment: Condensation	In this experiment you will watch water vapor change state.	Yes	<ul style="list-style-type: none"> a drinking glass some ice cubes
*Essay: Psalm 147	In this essay you will read a Psalm and discuss its meaning.	No	N/A
*Experiment: Currents	In this experiment you will use differences in water temperature to create a current.	Yes	<ul style="list-style-type: none"> a glass 2 ice cubes
Experiment: Shadows	In this experiment you will see how shadows helped scientists and explorers discover that the earth was not flat.	Yes	<ul style="list-style-type: none"> a ball (3 to 5 inches) a light source
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 10: UNDERSTANDING GOD'S WONDERFUL CREATION

Assignment	Summary	Video Demo	Supplies
Project: Weather Scrapbook	In this project you will review what you know about the forces of weather.	No	<ul style="list-style-type: none"> magazines newspaper
*Project: Thomas Alva Edison	In this project you will review important facts about Edison.	No	<ul style="list-style-type: none"> the news story you wrote in unit 5

*Report: Passenger Pigeon	In this report you will learn about an extinct animal called the Passenger Pigeon.	No	• research resources
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

* indicates an alternative assignment