



Switched-On
SCHOOLHOUSE

2015 Science Supply List

General Science II

Table of Contents

UNIT 1: SCIENCE AND SOCIETY1
UNIT 2: STRUCTURE OF MATTER (PART 1)1
UNIT 3: STRUCTURE OF MATTER (PART 2)2
UNIT 4: HEALTH AND NUTRITION.....2
UNIT 5: ENERGY (PART 1).....3
UNIT 6: ENERGY (PART 2).....3
UNIT 7: MACHINES (PART 1)3
UNIT 8: MACHINES (PART 2)4
UNIT 9: BALANCE IN NATURE4
UNIT 10: SCIENCE AND TECHNOLOGY4

UNIT 1: SCIENCE AND SOCIETY

Assignment Title	Project Summary	Video Demo	Materials Needed
Essay: Gregor Mendel	In this essay, you will write an essay about Gregor Mendel.	No	<ul style="list-style-type: none"> research resources
*Essay: Leonardo Da Vinci	In this essay, you will Write an essay about Leonardo daVinci's inventions.	No	<ul style="list-style-type: none"> research resources
*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: STRUCTURE OF MATTER (PART 1)

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Determining Volume	In this experiment, you will attempt to determine the volume of two objects, using two different methods.	No	<ul style="list-style-type: none"> a metric ruler an object with linear sides or a common geometric shape string water small rock graduated cylinder
*Experiment: Metric Measurement	In this experiment, you will utilize a balance to find mass, calculate volume from measurements, calculate density from data on mass and volume, and read a Celsius thermometer.	Yes	<ul style="list-style-type: none"> a balance a metric ruler a small, rectangular wooden block
Experiment: Separating A Mixture	In this experiment, you will utilize a filter to separate a mixture of sand and water and summarize your findings.	Yes	<ul style="list-style-type: none"> salt water sand a measuring cup a balance filter paper
*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: STRUCTURE OF MATTER (PART 2)

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Phase Changes	In this experiment you will observe phase changes in water.	No	<ul style="list-style-type: none"> • crushed ice • string • burner or alcohol lamp • beaker • ceramic pad <ul style="list-style-type: none"> • thermometer • ring stand or alcohol stand • ethyl alcohol for use with alcohol lamp • time piece with a second hand
Experiment: Forms Of Change	In this investigation, you will be conducting a simple experiment. You will classify the result as a physical or chemical change.	No	<ul style="list-style-type: none"> • sugar • beaker <ul style="list-style-type: none"> • water • stirring rod or teaspoon
Experiment: The Cabbage Indicator	In this experiment, you will use indicator for each substance to determine if substance is an acid or a base and summarize results and the experimental method	Yes	<ul style="list-style-type: none"> • red cabbage • 6 small test tubes • knife • crayons • a pot • a stove or other heat source <ul style="list-style-type: none"> • a small jar • a spoon • baking soda in water • lemon juice • vinegar • water • ammonia • milk
*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: HEALTH AND NUTRITION

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Weekly Food Record	In this experiment, you will record your diet for a week utilizing the chart and write a description of the foods eaten in each category	No	<ul style="list-style-type: none"> • access to a printer
Essay: Nutrition	In this essay, you will write about nutrition.	No	<ul style="list-style-type: none"> • research resources
*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: ENERGY (PART 1)

Assignment Title	Project Summary	Video Demo	Materials Needed
*Essay: Entropy And God's Plan	In this essay, you will write a report on the implications of entropy to a Christian	No	<ul style="list-style-type: none"> a Christian friend
*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: ENERGY (PART 2)

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Magnetism	In this experiment, you will diagram the magnetic fields around the magnets.	Yes	<ul style="list-style-type: none"> two bar magnets one horseshoe magnet iron filings sheet of glass or plastic several sheets of paper
*Experiment: Hot Dog Cooker	In this investigation you will harness the sun's power to make your lunch!	No	<ul style="list-style-type: none"> hot dog long segment of metal coat hanger aluminum foil scissors cardboard glue
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

*indicates alternate project/experiments

UNIT 7: MACHINES (PART 1)

Assignment Title	Project Summary	Video Demo	Materials Needed
Essay: Scientists	In this essay, you will write a report on one of the Christian scientists listed in the lesson.	No	<ul style="list-style-type: none"> research resources
*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: MACHINES (PART 2)

Assignment Title	Project Summary	Video Demo	Materials Needed
Experiment: Friction Investigation	In this investigation, you will determine the coefficient of friction for the same mass under two different conditions.	No	<ul style="list-style-type: none"> • small match box • pebbles • coins (pennies are best) • string (about 24 inches long)
*Experiment: Pencil Sharpener	In this investigation you will use a wall-mounted pencil sharpener as a wheel, axle, and lever, observing how it decreases the effort force.	No	<ul style="list-style-type: none"> • wall mounted pencil sharpener • book • 2 meters of string
*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: BALANCE IN NATURE

Assignment Title	Project Summary	Video Demo	Materials Needed
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

*indicates alternate project/experiments

UNIT 10: SCIENCE AND TECHNOLOGY

Assignment Title	Project Summary	Video Demo	Materials Needed
*Special Project	Special Project assignments are used by teachers to create their own projects if needed.	No	N/A

*indicates alternate project/experiments