

2017-2018 General Science II

General Science II

Table of Contents

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

UNIT 1: SCIENCE AND SOCIETY

Assignment	Summary	Video Demo		Supplies
Essay: Mendel	In this essay, you will write an essay about Gregor Mendel	No	•	research resources
*Essay: Leonardo Da Vinci	In this essay, you will write an essay about Leonardo daVinci's inventions.	No	•	research resources
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A		N/A

UNIT 2: STRUCTURE OF MATTER (PART 1)

Assignment	Summary	Video Demo	Supplies
Experiment:	In this experiment, you will attempt	No	a metric ruler
Determining Volume	to determine the volume of two objects, using two different methods.		 an object with linear sides or a common geometric shape
			• string
			• water
			• small rock
			graduated cylinder
*Experiment: Metric	In this experiment, you will utilize a	Yes	a balance
Measurement	balance to find mass, calculate volume from measurements,		a metric ruler
	calculate density from data on mass		a small, rectangular wooden block
	and volume, and read a Celsius thermometer.		a Celsius (centigrade) thermometer
			• ice cubes
			• water
			• three beakers
			• labels
			a heating source
Experiment: Mixtures	In this investigation we will attempt	Yes	• salt
	to separate sand from salt water, and salt from water.		• water
			• sand
			a measuring cup
			a balance
			filter paper

*Special Project	Use this Special Project template to create your own assignment for this	N/A	N/A
	unit.		

UNIT 3: STRUCTURE OF MATTER (PART 2)

Assignment	Summary	Video Demo	Supplies
Experiment: Phase Changes	In this experiment you will observe phase changes in water.	No No	 crushed ice string burner or alcohol lamp beaker ceramic pad 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	sugarbeaker or dishwaterstirring rod or teaspoon
Experiment: Cabbage	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	 red cabbage 6 small test tubes knife crayons a pot a stove or other heat source a small jar a spoon baking soda in water lemon juice vinegar water ammonia milk
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 4: HEALTH AND NUTRITION

Assignment	Summary	Video Demo	Supplies
Experiment: 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	access to a printerpencil
Essay: Nutrition	In this essay, you will write about nutrition.	No	research resources
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 5: ENERGY (PART 1)

Assignment	Summary	Video Demo		Supplies
*Essay: Entropy And God's Plan	In this essay, you will write a report on the implications of entropy to a Christian	No	٠	a Christian friend to discuss the implications of entropy
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A		N/A

UNIT 6: ENERGY (PART 2)

Assignment	Summary	Video Demo	Supplies
Experiment: Magnetism	In this experiment, you will diagram the magnetic fields around the magnets.	Yes	 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	 hot dog long segment of metal coat hanger aluminum foil scissors cardboard glue

*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A	

UNIT 7: MACHINES (PART 1)

Assignment	Summary	Video Demo	Supplies
Essay: Scientists	In this essay, you will write a report on one of the Christian scientists listed in the lesson.	No	research resources
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 8: MACHINES (PART 2)

Assignment	Summary	Video Demo	Supplies
Experiment: Friction Investigation	In this investigation, you will determine the coefficient of friction for the same mass under two different conditions.	No	 small match box pebbles coins (pennies are best) string (about 24 inches long) small plastic bag 8 or 10 round sticks (pencils, Tinker Toys, dowels) small scale or balance
*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	 wall mounted pencil sharpener book 2 meters of string metric ruler electronic balance or bathroom scale
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 9: BALANCE IN NATURE

Assignment	Summary	Video Demo	Supplies
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

UNIT 10: SCIENCE AND TECHNOLOGY

Assignment	Summary	Video Demo	Supplies	
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A	

^{*} indicates an alternative assignment