



# monarch

2018 - 2019 Curriculum Catalog

General Science I

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## UNIT 1: WHAT IS SCIENCE?

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 2: PERCEIVING THINGS

Assignment	Summary	Video Demo	Supplies
Experiment: Making Graphs	In this project, you will be designing three graphs based on information given to you in tables.	No	<ul style="list-style-type: none"> <li>• graph paper</li> <li>• pencil</li> <li>• Microsoft® Excel®</li> </ul>
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

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### UNIT 3: EARTH IN SPACE (PART 1)

Assignment	Summary	Video Demo	Supplies
Experiment: Constellations	In this experiment, you will study and emphasize the astronomical value and history of the Zodiac.	No	<ul style="list-style-type: none"> <li>• 2 pieces of thin cardboard</li> <li>• pens and markers</li> <li>• paper fastener</li> <li>• a downloaded or printed copy of the chart located in the question section</li> </ul>
*Experiment: Astrolabe	In this investigation, you will build your own astrolabe like early astronomers did.	No	<ul style="list-style-type: none"> <li>• 13 cm by 8 cm by 1½ cm block of wood</li> <li>• 20 cm by 20 cm by 3 cm block of wood</li> <li>• 20 cm by 3 cm by 3 cm block of wood</li> <li>• drinking straw</li> <li>• 15 cm piece of thread</li> <li>• small metal washer</li> <li>• 1½ by 8 cm piece of tin (cut from tin can and tapered to sharp point at end)</li> <li>• half-circle protractor</li> <li>• full-circle protractor</li> <li>• 5 cm nail</li> <li>• 4 cm nail</li> <li>• glue</li> </ul>
*Essay: Galileo	In this essay, you will use reference books to research the imprisonment of Galileo for his beliefs and write an 800-word report.	No	<ul style="list-style-type: none"> <li>• resource resources</li> </ul>
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

### UNIT 4: EARTH IN SPACE (PART 2)

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 5: THE ATMOSPHERE

Assignment	Summary	Video Demo	Supplies
Experiment: The Greenhouse	In this investigation, you will create your own "greenhouse" to demonstrate the greenhouse effect. Then you will summarize the data you collect in a report.	Yes	<ul style="list-style-type: none"> <li>• two shoe boxes</li> <li>• sheet of clear plastic or pane of glass</li> <li>• two thermometers</li> <li>• watch or stop watch</li> </ul>
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

## UNIT 6: WEATHER

Assignment	Summary	Video Demo	Supplies
Experiment: Dew Point	In this investigation, you will attempt to determine the dew point of the surrounding air.	Yes	<ul style="list-style-type: none"> <li>• shiny metal can</li> <li>• ice cubes</li> <li>• water</li> <li>• thermometer</li> <li>• stir rod or spoon</li> </ul>
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

## UNIT 7: CLIMATE

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 8: THE HUMAN ANATOMY (PART 1)

Assignment	Summary	Video Demo	Supplies
Experiment: Cheek Cells	This activity allows you to look at a few of your own cells.	Yes	<ul style="list-style-type: none"> <li>wooden splint</li> <li>iodine solution</li> <li>slide and cover slip</li> <li>microscope</li> <li>water</li> <li>tweezers</li> <li>eye dropper</li> </ul>
*Project: Human Brain	In this project, research some interesting aspect of the function of the brain and write a 500-word report on that feature.	No	<ul style="list-style-type: none"> <li>research resources</li> </ul>
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

## UNIT 9: THE HUMAN ANATOMY (PART 2)

Assignment	Summary	Video Demo	Supplies
Experiment: Heart Rate	In this experiment, you will take your own pulse using both methods and determine how accurate each method is.	No	<ul style="list-style-type: none"> <li>watch with a second hand</li> </ul>
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

## UNIT 10: WORKING IN SCIENCE

Assignment	Summary	Video Demo	Supplies
Experiment: Red Celery	In this experiment, you will investigate to see if plants have a special pipeline that carries water from the roots to every cell in the plant.	No	<ul style="list-style-type: none"> <li>stalk of celery</li> <li>red food coloring</li> <li>half a glass of water</li> <li>sharp knife</li> <li>teaspoon</li> </ul>
*Special Project	Use this Special Project template to create your own assignment for this unit.	N/A	N/A

\* indicates an alternative assignment