

**Odysseyware®**

2019-2

# **Curriculum Catalog**

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## **Science Additional Resources**



## Table of Contents

SCIENCE 700 .....	1
EARTH SCIENCE .....	1
INTEGRATED PHYSICS AND CHEMISTRY .....	2
BIOLOGY .....	2

## Science 700

Assignment	Description	Objectives
Stimuli	In this lesson, student will learn to describe and relate responses in organisms that may result from internal or external stimuli, such as fight or flight, phototropism, wilting in plants, or fever or vomiting in animals that allow them to maintain balance.	<ul style="list-style-type: none"> <li>Describe how an organism responds to external stimuli found in the environment.</li> <li>Describe and relate responses in organisms that may result from internal stimuli.</li> </ul>
Earth Movement	In this lesson, students will understand the apparent motions of the Sun, Moon, planets, and stars across the sky, as well as the reasons for the seasons, due to the Earth's rotation and revolution, and tilt of its axis. They will also understand how the Earth's rotation causes the length of the day, how the Sun and Moon rise and set, and how the Earth's revolution around the Sun defines the length of the year.	<ul style="list-style-type: none"> <li>Understand the early models of the solar system</li> <li>Identify the cause for the movement of objects across the sky and the length of a day.</li> <li>Describe how the Earth's revolution around the sun defines the length of a year</li> <li>Determine the reasons for Earth's seasons.</li> </ul>
Project: Earth Movement	In this project, students will be able to demonstrate how the tilt of the Earth's axis of rotation and revolution around the Sun cause seasons and length of day depending on latitude.	<ul style="list-style-type: none"> <li>Create presentation on the reasons for the seasons</li> </ul>

## Earth Science

Assignment	Description	Objectives
Project: Before, During and After a Mass Extinction	In this project, students will explore the concept of mass extinctions.	<ul style="list-style-type: none"> <li>Analyze the earth's structure and living organisms during a mass extinction</li> <li>Assess the extent to which reasoning and evidence supporting the author's claim(s) for the cause of mass extinction.</li> </ul>
Project: Terra	In this project, students will explore the NASA project Terra Satellite.	<ul style="list-style-type: none"> <li>Analyze the implementation of the Terra Satellite</li> <li>Discuss the ramifications and advantages of a weather satellite.</li> </ul>

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## Integrated Physics and Chemistry

Assignment	Description	Objectives
Project: Radio Astronomy	In this project, students will research radio waves and how astronomers use them to study and solve the mysteries of the Cosmos.	<ul style="list-style-type: none"><li>Describe the discovery of radio waves.</li><li>Research and write a report about radio astronomy</li></ul>
Project: Energy Sources	In this project, students will research a variety of energy sources and will discuss the advantages and disadvantages of those energy sources.	<ul style="list-style-type: none"><li>Describe two energy sources and how they are obtained and used.</li><li>Research and write an essay comparing and contrasting the effects on the environment of two energy sources</li></ul>

## Biology

Assignment	Description	Objectives
Project: Stem Cells	In this project, students will research discovery, types, uses, and ethics of stem cells.	<ul style="list-style-type: none"><li>Research the history of stem cell research.</li><li>Research the uses and ethic issues pertaining to stem cells research.</li></ul>
Project: Genetic Testing	In this project, students will research the psychological, ethical, and legal issues concerning genetic testing.	<ul style="list-style-type: none"><li>Defines genetic testing; its reasons and types.</li><li>Research the limitations, risks, and benefits of genetic testing.</li></ul>