

Fifth Grade Science Course Overview	
Course Description	
Credits	Prerequisites
NA	NA
Board Approved	Revised
Pending Board Approval 5/24/21	NA
Required Assessments	
District-wide, standards-based assessments identified	
Textbooks/Resources	
https://mysteryscience.com/lessons/seasonal/spring	
AASD Science Goals for K-12 Students	As a result of successfully completing this course, students will be able to...
<p>AASD Science Goals</p> <ul style="list-style-type: none"> • <i>Students will demonstrate an understanding of key science concepts and apply them to their world.</i> • <i>Students will demonstrate knowledge and understanding that scientific knowledge is continually undergoing revision and refinement based on new experiments and data.</i> • <i>Students will demonstrate knowledge and understanding that the process of science is based on questioning and providing empirical evidence to support claims.</i> • <i>Students will apply scientific concepts and processes to evaluate consequences and make informed, responsible choices (regarding self, others, environment).</i> • <i>Students will demonstrate an understanding that science and technology are critical in order to provide and evaluate alternative solutions to problems in our world.</i> • <i>Students will engage in STEM experiences as both scientists and engineers in order to prepare for postsecondary and career readiness.</i> <p>AASD Science Mission Statement</p> <p>AASD Science Guiding Principles</p>	<ul style="list-style-type: none"> • Use science and engineering practices, crosscutting concepts, and an understanding of <i>Web of Life</i> to make sense of phenomena and solve problems. • Use science and engineering practices, crosscutting concepts, and an understanding of <i>Watery Planet</i> to make sense of phenomena and solve problems. • Use science and engineering practices, crosscutting concepts, and an understanding of <i>Spaceship Earth</i> to make sense of phenomena and solve problems. • Use science and engineering practices, crosscutting concepts, and an understanding of <i>Chemical Magic</i> to make sense of phenomena and solve problems.
Essential Questions	
<p><i>What thought-provoking questions will foster inquiry, meaning-making, and transfer?</i></p> <p>Unit 1</p> <ul style="list-style-type: none"> • Why would a hawk move to New York City? (5-LS2-1) • What do plants eat? (5-LS1-1, 5-LS2-1) • Where do fallen leaves go? (5-LS2-1) • Do worms really eat dirt? (5-LS2-1) • Why do you have to clean a fish tank but not a pond? (5-LS2-1) • Why did the dinosaurs go extinct? (5-PS3-1) <p>Unit 2</p> <ul style="list-style-type: none"> • How much water is in the world? (5-ESS2-2) • When you turn on the faucet, where does the water come from? (5-ESS2-2) • Can we make it rain? (5-ESS2-1) • How can you save a town from a hurricane? (5-ESS2, 5-ESS3-1, 3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3) <p>Unit 3</p> <ul style="list-style-type: none"> • How fast does the Earth spin? (5-ESS1-2) • Who set the first clock? (5-ESS1-2) • How can the Sun tell you the season? (5-ESS1-2) • Why do the stars change with the seasons? (5-ESS1-2) • Why does the Moon change shape? (5-ESS1-2) • What are the wandering stars? (5-ESS1-2) • Why is gravity different on other planets? (5-PS2-1) • Could there be life on other planets? (5-ESS1-1) 	

Unit 4

- Are magic potions real? (5-PS1-1, 5-PS1-2)
- Could you transform something worthless into gold? (5-PS1-1, 5-PS1-2)
- What would happen if you drank a glass of acid? (5-PS1-3)
- What do fireworks, rubber, and silly putty have in common? (5-PS1-4)
- Why do some things explode? (5-PS1-1)

Unit Overview**Unit #1 - Web of Life**

The food materials and energy that our bodies use for growth ultimately come from plants. Plants in turn derive their materials from air, water, and soil and their energy from the sun. Thus in a very real way, our bodies come from the earth and sun. And when we die, decomposers return our materials and energy to the earth, to be used again by future organisms. The whole of nature forms a great system—the ecosystem.

Instructional Standards: 5-LS1-1, 5-LS2-1, 5-PS3-1

Assessed Standards:

Unit #2 - Watery Planet

This unit helps students develop the idea that water is a profoundly important natural resource, but one which requires surprising ingenuity to find and maintain.

Instructional Standards: 5-ESS2-1, 5-ESS2-2, 5-ESS3-1, 3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3

Assessed Standards:

Unit #3 - Spaceship Earth

This astronomy unit helps students develop a new perspective on the world they're standing on. They will be given evidence that the Earth beneath our feet is actually moving through space, both spinning on its axis, and traveling in a great orbit around the Sun. They will see how these movements account for the patterns we see in our sky (the paths of our Sun across the sky, the changing seasons, and the changing constellations). Accompanying us on this journey are the Moon and planets, which the students will observe have their own patterns of movement in the sky.

Instructional Standards: 5-ESS1-2, 5-PS2-1

Assessed Standards:

Unit #4 - Chemical Magic

This unit helps students develop the concepts of “substances” and “chemical reactions”. Students see that chemical reactions enable us to make new materials by transforming the ones we have. The results of these reactions are interesting and sometimes profoundly useful.

Instructional Standards: 5-PS1-1, 5-PS1-2, 5-PS1-3, 5-PS1-4

Assessed Standards: