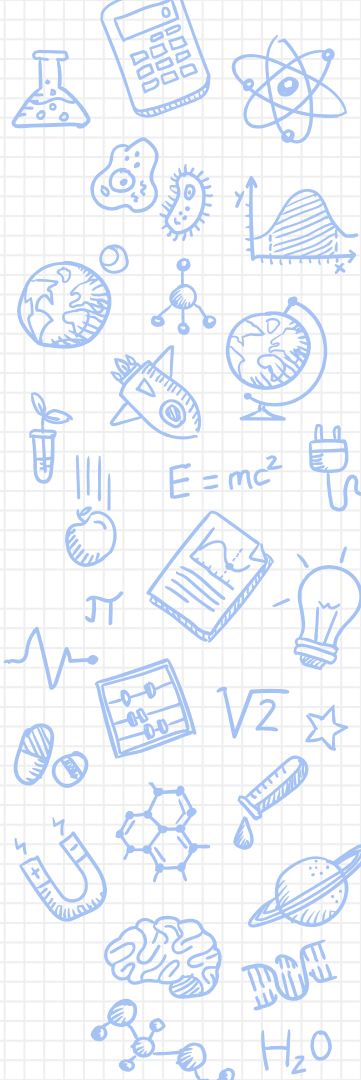
Welcome to Science!

Curriculum Night Schedule

- 1st - 6:00 - 6:12
- 2nd - 6:15 - 6:25
- 3rd - 6:28 - 6:38
- 4th - 6:41 - 6:51
- 5th - 6:54 - 7:04
- 6th - 7:07 - 7:17
- 7th - 7:20 - 7:30

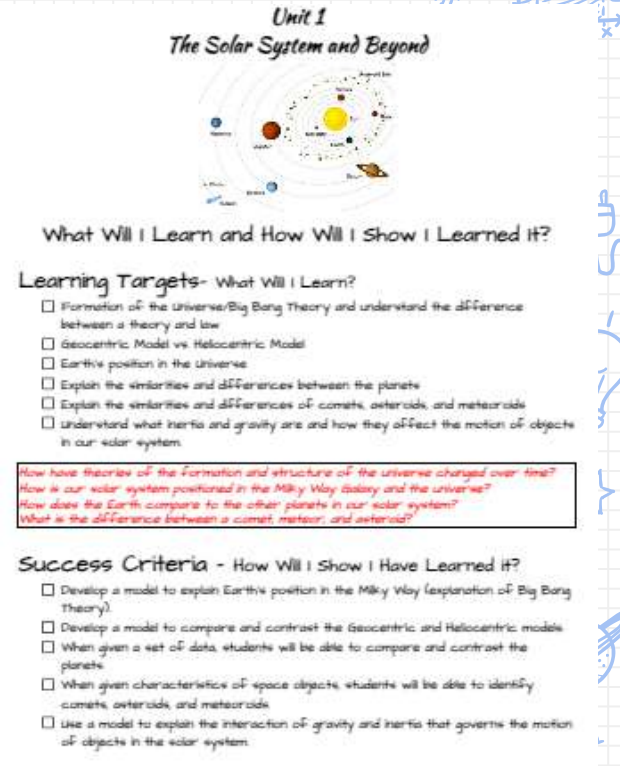
"Knowing how to think empowers you far beyond those who know what to think"

-Neil deGrasse Tyson



6th Grade Earth Science Curriculum

- Unit 1 - Solar System and Beyond
- Unit 2 - Earth-Moon-Sun
- Unit 3 - Earth's Changing Landscape
- Unit 4 - Water in Earth's Processes
- Unit 5 - Climate and Weather



Unit 1

The Solar System and Beyond

What Will I Learn and How Will I Show I Learned It?

Learning Targets- What Will I Learn?

- ☐ Formation of the Universe/Big Bang Theory and understand the difference between a theory and law
- ☐ Geocentric Model vs. Heliocentric Model
- ☐ Earth's position in the Universe
- ☐ Explain the similarities and differences between the planets
- ☐ Explain the similarities and differences of comets, asteroids, and meteoroids
- ☐ Understand what inertia and gravity are and how they affect the motion of objects in our solar system

How have theories of the formation and structure of the universe changed over time?
How is our solar system positioned in the Milky Way Galaxy and the universe?
How does the Earth compare to the other planets in our solar system?
What is the difference between a comet, meteor, and asteroid?

Success Criteria - How Will I Show I Have Learned It?

- ☐ Develop a model to explain Earth's position in the Milky Way (explanation of Big Bang Theory).
- ☐ Develop a model to compare and contrast the Geocentric and Heliocentric models
- ☐ When given a set of data, students will be able to compare and contrast the planets
- ☐ When given characteristics of space objects, students will be able to identify comets, asteroids, and meteoroids
- ☐ Use a model to explain the interaction of gravity and inertia that governs the motion of objects in the solar system

How is Science Education Changing?

Traditional	21st Century
Start with Chapter One	Start with a Phenomenon
Teacher Asks Questions	Students Ask Questions
Cookie Cutter Labs	Student-Designed Labs
Lectures	Gathering Evidence
Memorizing Facts	Applying knowledge
Scientific Method	Science Practices/ Design Process
Unit Tests	Problem-Based Assessments

3 Dimensional Learning (3D)

Science and Engineering Practices

What students will be doing.

- Asking Questions and Defining Problems
- Developing and Using Models
- Planning and Carrying Out Investigations
- Analyzing and Interpreting Data
- Using Mathematics and Computational Thinking
- Constructing Explanations and Designing Solutions
- Engaging in Argument from Evidence

Disciplinary Core Ideas

This is the content only.

For example...

Structure and Properties of Matter:

- Substances are made from different types of atoms, which combine with one another in various ways.
- Atoms form molecules that range in size from two to thousands of atoms.

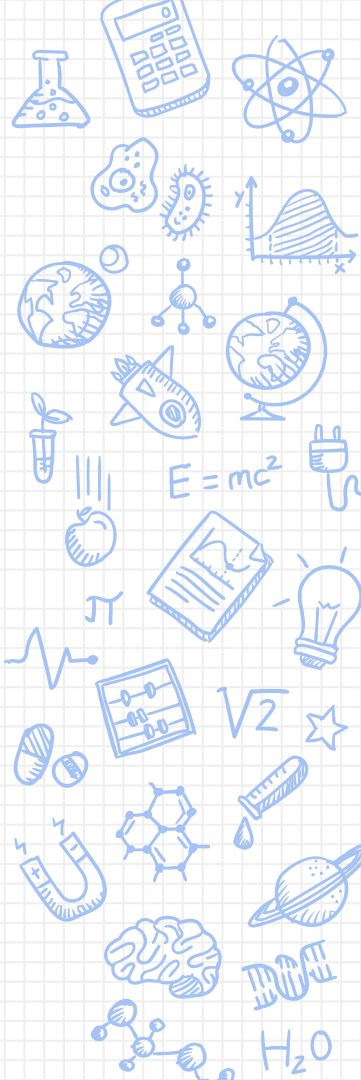
Crosscutting Concepts

Intertwined themes

- Patterns
- Cause & Effect
- Energy & Matter
- Scale, Proportion, and Quantity
- Systems and System Models
- Structure and Function
- Stability & Change

Student Expectations

1. Be Prepared for Class.
2. Be Respectful.
3. Participate.
4. Reach out for help.
5. Do Your Best Work!

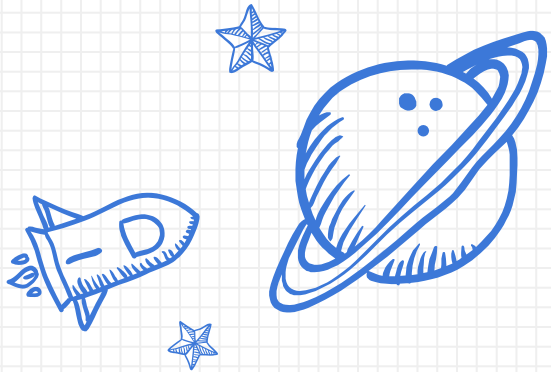


itslearning

- Weekly Slideshows
- Classwork and homework assignments
- Test dates
- Project information and due dates
- Resources and links

Parent Portal

- Check here for grades, missing assignments, etc.
- If you don't have one, check with Mrs. Menichino in the front office.



Thank you for visiting tonight!