



Dear Parents,

We are beginning our sixth unit in which we will learn about space. We will be focusing on the parts of our solar system and space exploration (past, present and future). We will learn about gravity and how it affects our solar system. In our Argument Driven Inquiry lab, we will be identifying how gravity is a force for planets' orbits. The following standards will be covered, and your child will be expected to:

- describe the physical properties, locations, and movements of the Sun, planets, moons, meteors, asteroids, and comets;
- understand that gravity is the force that governs the motion of our solar system; and
- describe the history and future of space exploration, including the types of equipment and transportation needed for space travel.

We encourage you to talk to your child about what they are learning in class. Here are some questions that you can ask your child throughout this unit.

- What is gravity?
- What is Newton's Law of Universal Gravitation?
- How does gravity affect our solar system?
- What is an orbit?
- What are the relative positions of the celestial bodies that make up the solar system?
- How do periods of rotation, periods of revolution, and the shape of orbital paths differ between the celestial bodies of our solar system?
- What are the physical properties of each of the following: the Sun, planets, moons, asteroids, meteors, and comets?
- What historical discoveries furthered mankind's progress in the exploration of space?
- How have specific exploration projects such as the Hubble telescope, the Apollo Moon landing, and the variety of satellite probes contributed to scientists' understanding of space?
- What is the International Space Station and how is it significant in the advancement of space exploration?
- What future projects are projected for continued space exploration and space travel in the coming decades of the 21st century?

If your child struggles with any material taught during this unit, we would urge you to make sure your child attends tutoring for assistance to gain a better understanding and demonstrate mastery. If you have any questions or concerns, please don't hesitate to contact your child's teacher.

Sincerely,

The 6th Grade PreAP Science Team