



Dear Parents,

We would like to welcome you and your student to 7th grade Advanced Science. We have an exciting year ahead of us and look forward to working with you and your student. The organization of this class is a mixture of lecture, discussion, demonstration, group activities, and laboratory exercises. We will also be using Argument-Driven Inquiry (ADI) in several of our investigations this year. ADI models the scientific publication process and students will be designing their investigations to answer big idea science questions. Emphasis will be on critical reading, designing experiments, collecting data, analyzing data, evaluating arguments, providing peer feedback and writing conclusions. Scientific argumentation will become the foundation of all laboratory activities.

We will begin this year with reviewing laboratory safety and scientific investigations. We will then move quickly into studying organisms and their environment. Our investigations will include how plants respond to light, gravity, and turgor pressure. The following standards will be covered, and your student will be expected to do the following:

- Demonstrate and illustrate forces that affect motion in everyday life such as emergence of seedlings, turgor pressure, and geotropism
- Investigate how organisms respond to external stimuli found in the environment such as phototropism and fight or flight.
- Describe and relate responses in organisms that may result from internal stimuli such as wilting in plants and fever or vomiting in animals that allow them to maintain balance.
- Recognize that radiant energy from the Sun is transformed into chemical energy through the process of photosynthesis.

We encourage you to talk to your child about what he/she is learning in class. If your child struggles with any material taught during this unit, we offer 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. We look forward to your child's success in 7th grade Advanced Science this year.

Sincerely,

7th Grade Advanced Science Team

