



Dear Parents,

We are beginning our second unit during the 2<sup>nd</sup> six weeks; the students will learn about potential and kinetic energy as well as balanced and unbalanced forces. We will also be working with inclined planes. In our Argument Driven Inquiry lab, we will be investigating potential and kinetic energy, by asking how high we can make an action figure jump. The following standards will be covered, and your child will be expected to do the following:

- compare and contrast potential and kinetic energy;
- identify and describe the changes in position, direction, motion, and speed of an object when acted upon by unbalanced forces;
- calculate average speed using distance and time measurements;
- measure and graph changes in motion; and
- investigate how inclined planes can be used to change the amount of force to move an object.

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.

- How is potential energy converted into kinetic energy?
- What is force? What is motion?
- What is the difference between balanced and unbalanced forces?
- How can unbalanced forces change the motion of an object?
- How can the speed of an object be measured?
- What are some examples of inclined planes?

If your child struggles with any material taught during this unit then 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 do not hesitate to contact your child's teacher. We look forward to your child's continued success in Science this year.

Sincerely,

The 6<sup>th</sup> Grade Advanced Science Team