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| ***IMPORTANT CONCEPTS YOUR STUDENT SHOULD KNOW AND ACTIVITIES TO DO AT HOME*** |
|  **Force and Motion Unit** |
|  **Important Concepts Addressed in this Unit** |
| * How can forces be used to make objects move, change direction, or stop?
* How is the motion of an object related to the size of the object and the amount of force that is applied to the object?
* What is gravity and how does it affect things on the earth?
* How do simple machines make work easier for people?
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| **Key Words To Know** | **How You Can Help Your Student** |
| ForceWorkBalanced forcesUnbalanced forcesGravityMotionFrictionAir ResistanceInertiaLeverPulleyWedgeInclined PlaneWheel and AxleScrew | * Your child will have access to many links, educational videos, and games pushed out to them through Google Classroom. Your child may access his/her Google Classroom from home.
* Talking to your child about what they are learning is a great way to help your child. Here are a few questions you may ask:
* Reviewing vocabulary each night is a great way to help your student. Making vocabulary study index cards is a quick way to review. You can quickly review words this way.
* Ask your child to find examples of simple machines in the world around them (Wedge = zipper, door stop; pulley = flagpole, etc).
* Find items around the house to ask your student if the forces acting upon the object are balanced or unbalanced (book lying on a shelf = balanced; car moving = unbalanced)
* Ask your child about gravity and have them demonstrate to you the impact gravity has on objects.
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| **Sample Problems** |
| Your child will be asked to:1. Communicate information about the relationship between balanced and unbalanced forces.
2. Plan and carry out an investigation on the effects of balanced and unbalanced forces on an object and communicate the results.
3. Construct an argument to support the claim that gravitational force affects the motion of an object.
4. Ask questions to identify and explain the uses of simple machines (lever, pulley, wedge, inclined plane, wheel and axle, and screw) and how forces are changed when simple machines are used to complete tasks.
5. Draw and label a picture of force and motion acting upon an object.
6. Read a non-fiction text about a famous inventor and answer questions that go along with the reading.

***These questions may be assessed through projects, models, and/or assessments.***  |