

7th Grade Science, March 30 - April 17

Resource Used: HMH Science Dimensions K: Forces, Motions, and Fields **Pages:** 1-92

Topic: Forces and Motion

What Your Student is Learning:

The motion of an object is determined by the sum of the forces acting on it; if the total force on the object is not zero, its motion will change. The greater the mass of the object, the greater the force needed to achieve the same change in motion. For any given object, a larger force causes a larger change in motion.

Background and Context:

This packet should be completed in about fourteen 45-minute sessions. Students can continue to work in the “Forces and Motion” packet by reading the text, discussing the ideas, and answering the questions. [Click here to access the Forces and Motion Learning Packet.](#)

In 7th grade, students should engage in science each day for 45 minutes. Below is a suggestion for how you might want to break up the work.

- Week of March 16th: Lesson 1, Introduction to Forces
- Week of March 23rd: Lesson 2, Gravity and Friction
- **Week of March 30th: Lesson 3, Newton’s Laws of Motion**
- **Week of April 13th: Lesson 4, Collisions Between Objects**

Ways to Support Your Student:

Studying science involves asking questions and being curious! You can help your child by reading along with them and by encouraging them to look closely at the images provided. The charts, pictures, and activities will give them information about the topics reviewed.

Additional Resource for Parents:

[Tips for Busy Parents](#) who want to support their childrens’ science learning.

Answer keys for the Lesson Checks on student pages 21-23, 41-43, 65-67, and 83-85 as well as the Unit Review on pages 87-90 are [available here](#).

Online Resources for Students:

[Forces and Motion](#)

[Khan Academy](#) has a unit on [Forces and Newton’s Laws of Motion](#), which includes some great informational videos and readings.

Additionally, you can try some of the simulations below:

- [Forces and Motion Basics](#)
- [Forces and Motion](#)
- [Forces in One Dimension](#)

Check out the PBS website at: <https://why.pbslearningmedia.org/> and try some of these cool activities:

- [Balanced and Unbalanced Forces](#)
- [Contact Forces](#)
- <https://why.pbslearningmedia.org/subjects/science/physical-science/forces-and-motion/newtons-laws-of-motion/>
- [Gravitational Force](#)