

Dear Parent or Guardian,

Your child is now beginning TEKS 4.7 “Forces.” Read more to find out what your child is exploring!



## What We’re Doing

How does the athlete get the weighted sled to move? What could the athlete do to make the sled easier to move? What are the different forces that can act on matter?

**By the end, your child will be able to**

- describe how the forces of gravity and friction act on objects
- Identify the patterns of magnetic forces acting on objects

## At-Home Activity

**To prepare your child for TEKS 4.7, try this short activity:**

- Have your child drop a coin from waist level. Then have your child toss the coin up gently into the air.
- Discuss what your child observed about the coin’s direction each time.

**Engage your child by asking these questions:**

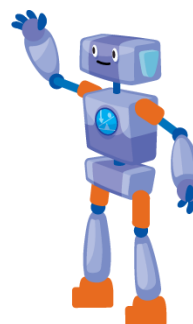
- How long did the coin take to fall when it was dropped?
- How long did the coin take to fall when it was thrown up in the air?
- Why are the times different?

## Helpful Resources



Log on to *Ed* to

- download lesson PDFs
- interact with the digital lesson
- Explore the FUNomenal Reader *Let’s Explore Forces Acting Together*



## Science Summary

**Vocabulary** for this topic includes *magnet*, *friction*, and *gravity*.

- Gravity is a force that pulls objects toward Earth. Friction is the force that acts between two touching objects and depends on the surfaces in contact.
- Magnetic force acts at a distance. Magnets attract some metal objects and other magnets. On one side, two magnets will attract one another. On the other side, two magnets will repel each other.

## Misconception Alert!

If your child has one of these misconceptions, here's how you can help.

- **Misconception 1: Objects that are not moving do not have forces acting on them.**

To address this, ask your child what would happen if an object was moved from a table and released. They should note that the object would fall to the floor and stop. Point out that although the object was not moving, there was a force from the table pushing up on it while the force of gravity was pulling down on it.

- **Misconception 2: Magnets attract all metals.**

To address this, collect some metal items, making sure to include aluminum in the group. Have your child test each item with a magnet. Explain that magnets are only attracted to some metals, especially ones with high iron content.