## STEM Lesson Kits

## Ball Drop

## Lesson: Forces and Motion

## Materials Needed:

- Rulers or Yard stick
- Pencils
- Balls that bounce
- Graph paper



## Steps:

- Have students get into groups of 3-4
- Distribute one ball to each group
- Students predict how high their ball will bounce from each of three heights-12", 24 " and $36^{\prime \prime}$.
- Groups bounce their ball and measure the height of its bounce from different heights-12", 24" and 36"; Students may bounce and measure twice to ensure accuracy.
- Students graph their data using a line graph to show the changes when their ball was bounced at different starting heights.
- Students also predict which type of ball will bounce the highest and why

| Drop Height | Predicted Bounce <br> Height | Actual Bounce Height |
| :--- | :--- | :---: |
| 12 Inches | $\ldots \ldots$ inches | $\ldots \ldots$ ____inches |
| 24 Inches |  |  |
| 36 Inches |  |  |

