

A steel ball falls faster through water than a similar-sized glass marble. For the first two product goals you will need to create force diagrams for the two objects falling through water. You need to use these diagrams to explain **why** the marble falls more slowly. Then you will need to explain their motion in terms of **inertia**.

For the last two goals you will use various materials to **show** how gravitational and electromagnetic fields are alike and how they are different.

Assessment categories:

Content:

1. Create force diagrams for the steel ball and marble falling through water and explain their different speeds.
2. Relate their motion to the Law of inertia during your interview.
3. Use materials to demonstrate one way gravitational and electromagnetic fields are **similar**.
4. Use materials to demonstrate one way gravitational and electromagnetic fields are **different**.

Habits for Success:

1. Product quality reflects proper thought and time spent. [3 point scale]
2. Focus on product work, proper handling of materials, appropriate use of technology, following directions on activities... [2 points per day]