

Discussion Points and Questions

The Gravity of Émilie du Châtelet

The following are potential questions to discuss with students to gauge what they know about gravity and how it works. It will be a question-and-answer style lecture.

1. [teacher holds up a classroom object, such as a toy or eraser] What do you think will happen if I let go of this? Why?
2. Can anyone tell me what gravity is?
3. What is mass? Does something with more mass have more or less gravity?
4. Which of the following objects have more mass? [the teacher may also use classroom objects as comparison examples]
 - a. A beachball or a beagle
 - b. The earth or the moon
 - c. A book or a feather
 - d. A frying pan or a pillow
 - e. A paper cup or a coffee mug
5. Do bigger objects have more gravity than smaller objects?

The following are the key takeaways that students should learn from the discussion.

- Gravity from the Earth pulls objects down.
- Mass can be understood as the measure of how much stuff something has or is made of.
- Objects can be the same size but have different masses.
- If an object has more mass, it has more gravity.
- Heavier (more massive) objects are pulled down more than lighter (less massive) objects.