

A Force to be Reckoned [Activity]

This is an introduction to electrostatic force. It shows students evidence of a force but demands they eliminate gravitational force and magnetic force before giving it a new name. Pith ball electroscopes may be used; or just hang a pith ball on a thread from a convenient support.

Answers to Procedure Questions

2. The brick has no effect on the pith ball; the force between the plastic and the pith ball is not gravitational.
3. Gravitational force is always attractive (as far as we know). Objects don't repel each other gravitationally.
4. The magnet has no effect on the pith ball; the force between the plastic and the pith ball is not magnetic.

Answers to Summing Up Questions

1. Negative (like charges repel).
2. The force is stronger when the objects are closer together.