

Name _____

The Forces Around Us

Short Answer Key

1. A contact force, such as tension, occurs when two objects are in direct physical contact. When you pull on a rope, the tension force is transmitted through the rope to keep it taut.
2. An example of the electromagnetic force is the attraction between magnets. When magnets come together, they can either attract (pull together) or repel (push apart) each other due to this force.
3. When forces acting on an object are balanced, there is no net force, and the object remains at rest or continues at a constant velocity. Unbalanced forces cause acceleration or changes in motion.
4. The weak nuclear force is weaker than the other fundamental forces and mainly affects certain types of radioactive decay. It acts on subatomic particles and is responsible for transforming one type of particle into another.
5. The strong nuclear force is the force that holds protons and neutrons together in the nucleus of an atom. It overcomes the electromagnetic force, which would otherwise cause positively charged protons to repel each other.

