5-PS2 Motion and Stability: Forces and Interactions

Students who demonstrate understanding can:

**5-PS2-1. Support an argument that the gravitational force exerted by Earth on objects is directed down.**  
[Clarification Statement: “Down” is a local description of the direction that points toward the center of the spherical Earth.] [Assessment Boundary: Assessment does not include mathematical representation of gravitational force.]

The performance expectations above were developed using the following elements from the NRC document *A Framework for K–12 Science Education*:

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<tr>
<th>Science and Engineering Practices</th>
<th>Disciplinary Core Ideas</th>
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| Engaging in Argument from Evidence | **PS2.B: Types of Interactions**  
Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).  
* Support an argument with evidence, data, or a model. (5-PS2-1) | **Cause and Effect**  
* Cause and effect relationships are routinely identified and used to explain change. (5-PS2-1) |

*The performance expectations marked with an asterisk integrate traditional science content with engineering through a Practice or Disciplinary Core Idea.  