



## **Exhibit Alignment with Science Standards – 6th Grade**

- **S1.1a & b** – Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions
  - **WonderWorks Applicable Exhibits:** Pull Yourself Up, Anti-Gravity Chamber, Natural Disasters, Hurricane Shack, Space Trivia, Fighter Jets, Shuttle Landers, Robotic Arms, Earth Tic-Tac-Toe, Bed of Nails, MindBall, Astronaut Trainer
- **S1.1** – Explain why scientific investigations should be replicable
  - **WonderWorks Applicable Exhibits:** Pull Yourself Up, Natural Disasters, Velocity Ball, How High Can You Jump, Coin Orbiter, Cosmic Discovery, MindBall, Air Cannon, Lightning Coil, Jacob's Ladder
- **S1.3.2** - Explain the difference between an experiment and other types of scientific investigation, and explain benefits and limitations of each
  - **WonderWorks Applicable Exhibits:** Pull Yourself Up, Velocity Ball, How High Can You Jump, Coin Orbiter, Cosmic Discovery, Robotic Arms, Strike A Pose, Earth Tic-Tac-Toe, Swirling Vortex, Memory Sequencer, Bed of Nails, MindBall, Lightning Coil, Jacob's Ladder, Astronaut Trainer, 4D Theater, Air Cannon
- **S1.2.2** – Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation
  - **WonderWorks Applicable Exhibits:** Pull Yourself Up, Natural Disasters, Coin Orbiter, Cosmic Discovery, MindBall, Velocity Ball, How High Can You Jump, Air Cannon, Jacob's Ladder, Lightning Coil, Astronaut Trainer
- **S1.1** – Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence

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- WonderWorks Applicable Exhibits: Inversion Tunnel, Anti-Gravity Chamber, How Tall Are You, Pull Yourself Up, Hurricane Shack, Velocity Ball, Kidz Pace Bike, Velocity Ball, Mirrorly a Window, Kidz Pace Snow Jam, How High Can You Jump, Space Trivia, Astronaut Suit, Coin Orbiter, Space Weight, Fighter Jets, Shuttle Landers, Mercury Capsule, Cosmic Discovery, Robotic Arms, Virtual Hockey, Alien Stomper, Strike A Pose, WonderWall, Earth Tic-Tac-Toe, Swirling Vortex, Memory Sequencer, WonderCoaster, Bed of Nails, MindBall, Giant Piano, Air Cannon, Jacob's Ladder, Astronaut Trainer, Lightning Coil, 4D Theater
- S1.1 – Distinguish science from other activities involving thought
  - WonderWorks Applicable Exhibits: Pull Yourself Up, Natural Disasters, Hurricane Shack, Velocity Ball, Space Trivia, Coin Orbiter, Space Weight, Cosmic Discovery, Strike A Pose, Earth Tic-Tac-Toe, Bed of Nails, MindBall, Astronaut Trainer, Lightning Coil, Air Cannon, Jacob's Ladder, Google Earth
- S1.3.1 – Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered
  - WonderWorks Applicable Exhibits: Pull Yourself Up, Natural Disasters, Hurricane Shack, Velocity Ball, Space Trivia, Coin Orbiter, Space Weight, Cosmic Discovery, Strike A Pose, Earth Tic-Tac-Toe, Bed of Nails
- S1.1 – Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory in science is very different than how it is used in everyday life
  - WonderWorks Applicable Exhibits: How Tall Are You, Upside Down World, Anti-Gravity Chamber, Hurricane Shack, How High Can You Jump, Space Weight, Mercury Capsule, Virtual Hockey, Swirling Vortex, MindBall, Astronaut Trainer, Lightning Coil, Air Cannon, Jacob's Ladder
- S1.1 – Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws
  - WonderWorks Applicable Exhibits: Pull Yourself Up, Anti-Gravity Chamber, Natural Disasters, Hurricane Shack, Velocity Ball, Space Trivia, Space Weight, Cosmic Discovery, Bed of Nails, Astronaut Trainer, Lightning Coil, Air Cannon, Jacob's Ladder
- S1.3.2 – Give several examples of scientific laws

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- WonderWorks Applicable Exhibits: Inversion Tunnel, Anti-Gravity Chamber, Pull Yourself Up, Hurricane Shack, Velocity Ball, Cosmic Discovery, How High Can You Jump, Astronaut Trainer, Lightning Coil, Jacob's Ladder
- PS2.1 – Describe and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition
  - WonderWorks Applicable Exhibits: -Earth Tic-Tac-Toe, Google Earth
- PS2.1 – Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to New York
  - WonderWorks Applicable Exhibits: Shuttle Landers, Earth Tic-Tac-Toe, Google Earth
- PS2.1 – Investigate and apply how the cycling of water between the atmosphere and hydrosphere has an effect on weather patterns and climate
  - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters
- PS2.2 – Describe how global patterns such as the jet stream and ocean currents influence local weather in measurable terms such as temperature, air pressure, wind direction and speed, and humidity and precipitation
  - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Google Earth
- PS2.1 – Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere
  - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe
- PS2.2 – Explain how energy provided by the sun influences global patterns of atmospheric movement and the temperature differences between air, water, and land
  - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters, Hurricane Shack
- PS2.2 – Differentiate between weather and climate
  - WonderWorks Applicable Exhibits: - Natural Disasters, Earth Tic-Tac-Toe
- PS2.2 – Investigate how natural disasters have affected human life in New York

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- WonderWorks Applicable Exhibits: Natural Disasters, Hurricane Shack, Google Earth
- LE7.1e – Describe ways human beings protect themselves from hazardous weather and sun exposure
  - WonderWorks Applicable Exhibits: Natural Disasters, Google Earth
- PS2.1a – Describe how the composition and structure of the atmosphere protects life and insulates the planet
  - WonderWorks Applicable Exhibits: Natural Disasters, Earth Tic-Tac-Toe
- PS3.2e– Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa
  - WonderWorks Applicable Exhibits: Pull Yourself Up, Anti-Gravity Chamber, Hurricane Shack, Velocity Ball, WonderCoaster, Astronaut Trainer, 4D Theater
- PS4.1–5 – Measure and graph distance versus time for an object moving at a constant speed. Interpret this relationship
  - WonderWorks Applicable Exhibits: Inversion Tunnel, Anti-Gravity Chamber, Velocity Ball, Coin Orbiter, Astronaut Trainer, Air Cannon
- PS4.1-5 – Investigate and describe types of forces including contact forces and forces acting at a distance, such as electrical, magnetic, and gravitational
  - WonderWorks Applicable Exhibits: Pull Yourself Up, Anti-Gravity Chamber, Velocity Ball, Coin Orbiter, Fighter Jets, Shuttle Landers, Virtual Hockey, Alien Stomper, Astronaut Trainer, Lightning Coil, Air Cannon, Jacob’s Ladder
- PS4.1-5 – Explore the Law of Gravity by recognizing that every object exerts gravitational force on every other object and that the force depends on how much mass the objects have and how far apart they are
  - WonderWorks Applicable Exhibits: Inversion Tunnel, Pull Yourself Up, Anti-Gravity Chamber, How High Can You Jump?, Mercury Capsule, Astronaut Trainer
- PS4.1-5 – Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both

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- WonderWorks Applicable Exhibits: Pull Yourself Up, Anti-Gravity Chamber, Velocity Ball, Coin Orbiter, Fighter Jets, Shuttle Landers, Virtual Hockey, Astronaut Trainer, Air Cannon