Exhibit Alignment with Science Standards – 7th Grade

- S1.1a&b – Define a problem from the seventh 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

- S1.2.2 – Differentiate replication (by others) from repetition (multiple trials)

    - WonderWorks Applicable Exhibits: Pull Yourself Up, Natural Disasters, Velocity Ball, How High Can You Jump, Coin Orbiter, Cosmic Discovery, Fighter Jets, Shuttle Landers, Robotic Arms, MindBall, Astronaut Trainer

- S1.2.2b Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation

    - 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, Talking Faces, MindBall, Astronaut Trainer, Lightning Coil, Air Cannon, Jacob's Ladder, 4D Theater

- S1.2,2d – Identify test variables (independent variables)and outcome variables (dependent variables) in an experiment

    - WonderWorks Applicable Exhibits: Pull Yourself Up, Natural Disasters, Velocity Ball, How High Can You Jump, Coin Orbiter, Cosmic Discovery, MindBall, Astronaut Trainer, Air Cannon

- S1.1– Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics

Exhibit Alignment with Science Standards – 7th Grade

- 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, 4D Theater

- S1.3.1 – Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based

  - WonderWorks Applicable Exhibits: Inversion Tunnel, Upside Down World, Anti-Gravity Chamber, Hurricane Shack, 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, Virtual Hockey, Alien Stomper, Strike A Pose, WonderWall, Earth Tic-Tac-Toe, Swirling Vortex, WonderCoaster, Bed of Nails, MindBall

- S1.2.2b – Identify the benefits and limitations of the use of scientific models

  - WonderWorks Applicable Exhibits: Inversion Tunnel, Anti-Gravity Chamber, Pull Yourself Up, Hurricane Shack, Velocity Ball, Cosmic Discovery, How High Can You Jump, Astronaut Trainer, Air Cannon, Lightning Coil, Jacob's ladder

- PS2.1d – Describe the layers of the solid Earth, including the lithosphere, the hot convecting mantle, and the dense metallic liquid and solid cores

  - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe

- PS2.2h – Identify the patterns within the rock cycle and relate them to surface events (weathering and erosion) and sub-surface events (plate tectonics and mountain building)

  - WonderWorks Applicable Exhibits: Natural Disasters, Hurricane Shack, Earth Tic-Tac-Toe

- PS2.1 – Identify current methods for measuring the age of the Earth and its parts, including the law of superposition and radioactive dating

  - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe

- PS2.1 – Explain and give examples of how physical evidence supports scientific theories that Earth has evolved over geologic time due to natural processes

  - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Google Earth

Exhibit Alignment with Science Standards – 7th Grade

- PS2.2e – Explore the scientific theory of plate tectonics by describing how the movement of Earth's crustal plates causes both slow and rapid changes in Earth's surface, including volcanic eruptions, earthquakes, and mountain building
    - WonderWorks Applicable Exhibits: Natural Disasters, Earth Tic-Tac-Toe, Google Earth
- PS7.2 – Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water
    - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Google Earth
- PS2.2a – Recognize that heat flow and movement of material within Earth causes earthquakes and volcanic eruptions, and creates mountains and ocean basins
    - WonderWorks Applicable Exhibits: Natural Disasters, Earth Tic-Tac-Toe, Google Earth
- PS4.4 – Observe and explain that light can be reflected, refracted, and/or absorbed
    - WonderWorks Applicable Exhibits: Inversion Tunnel, Anti-Gravity Chamber, Strike A Pose
- PS4.4c – Recognize that light waves, sound waves, and other waves move at different speeds in different materials
    - WonderWorks Applicable Exhibits: Inversion Tunnel, Anti-Gravity Chamber, Strike A Pose, MindBall, Jacob's Ladder, Lightning Coil
- PS4.2 – Recognize that adding heat to or removing heat from a system may result in a temperature change and possibly a change of state
    - WonderWorks Applicable Exhibits: Natural Disasters
- PS4.1 – Investigate and describe the transformation of energy from one form to another
    - WonderWorks Applicable Exhibits: Pull Yourself Up, Anti-Gravity Chamber, Hurricane Shack, Kidz Pace Bike, Velocity Ball, How High Can You Jump, Coin Orbiter, Fighter Jets, Shuttle Landers, Robotic Arms, Virtual Hockey, Strike A Pose, Memory Sequencer , Giant Piano, WonderCoaster, Bed of Nails, MindBall, Mission to Mars, Astronaut Trainer, Lightning Coil, Air Cannon, Jacob's Ladder, 4D Theater
- PS4.5a – Cite evidence to explain that energy cannot be created nor destroyed, only changed from one form to another

Exhibit Alignment with Science Standards – 7th Grade

- WonderWorks Applicable Exhibits: Pull Yourself Up, Anti-Gravity Chamber, Hurricane Shack, Kidz Pace Bike, Velocity Ball, How High Can You Jump, Coin Orbiter, Fighter Jets, Shuttle Landers, Robotic Arms, Virtual Hockey, Strike A Pose, Memory Sequencer , Giant Piano, WonderCoaster, Bed of Nails, Astronaut Trainer, Air Cannon, 4D Theater

- PS4.2a – Observe and describe that heat flows in predictable ways, moving from warmer objects to cooler ones until they reach the same temperature
  - WonderWorks Applicable Exhibits: Natural Disasters

- PS7.1b – Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites
  - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Google Earth