Exhibit Alignment with SC Science Standards – 4th Grade

Scientific Inquiry

Standard 4-1: The student will demonstrate an understanding of scientific inquiry, including the processes, skills, and mathematical thinking necessary to conduct a simple scientific investigation

4 – 1.1 – Classify observations as either quantitative or qualitative

- WonderWorks Applicable Exhibits: Are you a risk taker?, What are the odds?, How Cold is it?, Virtual Sports, Xtreme 360, How high can you jump?, Coin Orbiter, Space Weight

4 – 1.3 – Summarize the characteristics of a simple scientific investigation that represent a fair test (including a question that identifies the problem, a prediction that indicates a possible outcome, a process that tests one manipulated variable at a time, and results that are communicated and explained)

- WonderWorks Applicable Exhibits: Are you a risk taker?, What are the odds?, How cold is it?, MindBall, Virtual Sports, How high can you jump?, Coin Orbiter, Space Weight

4 – 1.4 – Distinguish among observations, predictions, and inferences

- WonderWorks Applicable Exhibits: Are you a risk taker?, What are the odds?, How cold is it?, MindBall, Xtreme 360, Virtual Sports, How high can you jump?, Coin Orbiter, Space Weight

4 – 1.6 – Construct and interpret diagrams, tables, and graphs made from recorded measurements and observations

- WonderWorks Applicable Exhibits: Are you a risk taker?, Scan Me, Virtual Sports, How high can you jump?, Coin Orbiter, Space Weight, Memory Sequencer, MindBall

4 - 1.7 – Use appropriate safety procedures when conducting investigations

- WonderWorks Applicable Exhibits: Hurricane Wind Shack, Tesla Coil, Virtual Sports, Bed of Nails, Xtreme 360, Ropes Challenge Course

Exhibit Alignment with SC Science Standards – 4th Grade

Organisms and Their Environments

Standard 4-2: The student will demonstrate an understanding of the characteristics and patterns of behavior that allow organisms to survive in their own distinct environments (Life Science)

4 – 2.2– Explain how the characteristics of distinct environments (including swamps, rivers and streams, tropical rain forests, deserts, and the polar regions) influence the variety of organisms in each

- WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe

4 – 2.3 – Explain how humans and other animals use their senses and sensory organs to detect signals from the environment and how their behaviors are influenced by these signals

- WonderWorks Applicable Exhibits: Roaring Lion

4 – 2.5 – Explain how an organism's pattern of behavior are related to its environment (including the kinds and the number of other organisms present, the availability of food and other resources, and the physical characteristics of the environment)

- WonderWorks Applicable Exhibits: Roaring Lion

Astronomy

Standard 4-3: The student will demonstrate an understanding of the properties, movements, and locations of objects in the solar system (Earth Science)

4 – 3.1 – Recall that Earth is one of many planets in the solar system that orbit the Sun

- WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Space Update, Space Info Center, Space Weight, Cosmic Discovery

Exhibit Alignment with SC Science Standards – 4th Grade

4 – 3.2 – Compare the properties (including the type of surface and atmosphere) and the location of Earth to the Sun, which is a star, and the Moon

- WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Space Update, Space Weight, Cosmic Discovery, Space Info Center

4 – 3.3 – Explain how the Sun affects Earth

- WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Space Update, Space Info Center

4 – 3.4 – Explain how the tilt of Earth's axis and the revolution around the Sun results in the seasons of the year

- WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters, Space Update, Space Info Center

4 – 3.5 – Explain how the rotation of Earth results in day and night

- WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Space Update, Space Info Center

4 – 3.6 – Illustrate the phases of the Moon and the Moon's effect on ocean tides

- WonderWorks Applicable Exhibits: Space Update, Space Info Center

4 – 3.7 – Interpret the change in the length of shadows during the day in relation to the position of the Sun in the sky

- WonderWorks Applicable Exhibits: Natural Disasters, Space Info Center, Space Update

4 – 3.8 – Recognize the purpose of telescopes

- WonderWorks Applicable Exhibits: Space Update, Cosmic Discovery

Exhibit Alignment with SC Science Standards – 4th Grade

Weather

Standard 4-4: The student will demonstrate an understanding of weather patterns and phenomena (Earth Science)

4 – 4.3 – Compare daily and seasonal changes in weather conditions (including wind speed and direction, precipitation, and temperature) and patterns

- WonderWorks Applicable Exhibits: Natural Disasters, Hurricane Wind Shack, Tesla Coil, How cold is it?, Earth Tic-Tac-Toe

4 – 4.4 – Summarize the conditions and effects of severe weather phenomena (including thunderstorms, hurricanes, and tornadoes) and related safety concerns

- WonderWorks Applicable Exhibits: Natural Disasters, Hurricane Wind Shack, Tesla Coil, How cold is it?, Earth Tic-Tac-Toe

4 – 4.6 – Predict weather from data collected through observation and measurements

- WonderWorks Applicable Exhibits: Natural Disasters, Hurricane Wind Shack, Tesla Coil, How cold is it?, Earth Tic-Tac-Toe

Properties of Light and Electricity

Standard 4-5: The student will demonstrate an understanding of the properties of light and electricity (Physical Science)

4 – 5.1 – Summarize the basic properties of light (including brightness and colors)

- WonderWorks Applicable Exhibits: Strike a Pose, Memory Sequencer, Recollections

Exhibit Alignment with SC Science Standards – 4th Grade

4 – 5.2 – Illustrate the fact that light, as a form of energy, is made up of many different colors

- WonderWorks Applicable Exhibits: Strike a Pose, Recollections

4 – 5.3 – Summarize how light travels and explain what happens when it strikes an object (including reflection, refraction, and absorption)

- WonderWorks Applicable Exhibits: Strike a Pose, Recollections

4 – 5.4 – Compare how light behaves when it strikes transparent, translucent, and opaque materials

- WonderWorks Applicable Exhibits: Strike a Pose, Recollections

4– 5.5 – Explain how electricity, as a form of energy, can be transformed into other forms of energy (including light, heat, and sound)

- WonderWorks Applicable Exhibits: Tesla Coil, Hoop Fever, Swim with the Sharks, Floor Piano, Alien Stomp Dome, Strike a Pose