

Exhibit Alignment with NC Science Standards – 7th Grade

Competency Goal 1: The learner will design and conduct investigations to demonstrate an understanding of scientific inquiry

- 1.01 Identify and create questions and hypotheses that can be answered through scientific investigations
 - o WonderWorks Applicable Exhibits: Are you a risk taker?, What are the odds?, One In a Million, Coin Orbiter
- 1.02 Develop appropriate experimental procedures for: given questions, student generated questions
 - WonderWorks Applicable Exhibits: Are you a risk taker?, What are the odds?, One In a Million, Coin Orbiter
- 1.03 Apply safety procedures in the laboratory and in field studies
 - WonderWorks Applicable Exhibits: Pulley Power, Hurricane Wind Shack, Virtual Sports, Xtreme 360, Bed of Nails, WonderCoaster, Ropes Challenge Course, Safe Crackers
- 1.04 Analyze variables in scientific investigations: indentify dependent and independent, use of a control, manipulate, describe relationships between, define operationally
 - WonderWorks Applicable Exhibits: Are you a risk taker?, What are the odds?, One In a Million, Coin
 Orbiter, Cosmic Discovery
- 1.05 Analyze evidence to: explain observations, make inferences and predictions, develop the relationship between evidence and explanation
 - WonderWorks Applicable Exhibits: Are you a risk taker?, What are the odds?, One In a Million, Coin
 Orbiter, Cosmic Discovery, Space Weight



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- 1.06 Use mathematics to gather, organize, and present quantitative data resulting from scientific investigations
 - WonderWorks Applicable Exhibits: Are you a risk taker?, What are the odds?, One In a Million, Coin
 Orbiter, Cosmic Discovery, Space Weight
- 1.08 Use oral and written language to: communicate findings, defend conclusions of scientific investigations
 - WonderWorks Applicable Exhibits: Are you a risk taker?, What are the odds?, One In a Million, Coin Orbiter
- 1.09 Use technologies and information systems to: research, gather and analyze data, visualize data, disseminate findings to others
 - WonderWorks Applicable Exhibits: Are you a risk taker?, What are the odds?, One In a Million, Coin
 Orbiter, Natural Disasters, Space Update, Cosmic Discovery, Space Info center Earth Tic-Tac-Toe
- 1.10 Analyze and evaluate information from a scientifically literate viewpoint by reading, hearing, and/or viewing
 - WonderWorks Applicable Exhibits: Are you a risk taker?, What are the odds?, One In a Million, Coin
 Orbiter, Natural Disasters, Space Update, Cosmic Discovery, Space Info Center, Earth Tic-Tac-Toe

Competency Goal 2: The learner will demonstrate an understanding of technological design

- 2.01 Explore evidence that "technology" has many definitions.
 - WonderWorks Applicable Exhibits: All exhibits use some form of technology



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- 2.02 Use information systems to: identify scientific needs, human needs, or problems that are subject to technological solution
 - WonderWorks Applicable Exhibits: Safe Crackers, Hurricane Wind Shack, Natural Disasters, How Cold is it?,
 Tesla Coil, Fighter Jets, Space Shuttle Simulators, Robotic Arms, Earth Tic-Tac-Toe, World Clock
- 2.03 Evaluate technological designs
 - WonderWorks Applicable Exhibits: Time Machine, Google Earth, Safe Crackers, Hurricane Wind Shack,
 Natural Disasters, How Cold is it?, Tesla Coil, Fighter Jets, Space Shuttle Simulators, Robotic Arms, Earth Tic-Tac-Toe, Are you a risk taker?, What are the odds?, One In a Million, Coin Orbiter, Space Info Center,
 Cosmic Discovery, Earth Tic-Tac-Toe,
- 2.04 Apply tenets of technological design to make informed consumer decisions
 - WonderWorks Applicable Exhibits: Are you a risk taker?, Pulley Power, What are the odds?, Safe Crackers,
 One In a Million

Competency Goal 3: The learner will conduct investigations and utilize appropriate technologies and information systems to build an understanding of the atmosphere

- 3.01 Examine the composition, properties and structure of the atmosphere
 - o <u>WonderWorks Applicable Exhibits:</u> Earth Tic-Tac-Toe
- 3.02 Describe properties that can be observed and measured to predict air quality
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe



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- 3.03 Conclude that the good health of environments and organisms requires:
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe
- 3.04 Evaluate how humans impact air quality
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe
- 3.05 Examine evidence that atmospheric properties can be studied to predict atmospheric conditions and weather hazards
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters, Hurricane Wind Shack, How Cold is It?, Tesla Coil
- 3.06 Assess the use of technology in studying atmospheric phenomena and weather hazards
 - WonderWorks Applicable Exhibits: Earth Tic-Tac-Toe, Natural Disasters, Hurricane Wind Shack, Tesla Coil

Competency Goal 6: The learner will conduct investigations, use models, simulations, and appropriate technologies and information systems to build an understanding of motion and forces

- 6.01 Demonstrate ways that simple machines can change force
 - o WonderWorks Applicable Exhibits: Pulley Power, Coin Orbiter
- 6.02 Analyze simple machines for mechanical advantage and efficiency
 - o WonderWorks Applicable Exhibits: Pulley Power, Coin Orbiter



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6.03 – Evaluate motion in terms of Newton's Laws

O WonderWorks Applicable Exhibits: Pulley Power, Coin Orbiter, Xtreme 360, Inversion Tunnel, One In a Million, Anti-Gravity Chamber, Hurricane Wind Shack, Kidz Pace Bike, Virtual Sports, Swim with the Sharks, Kidz Pace Snow Jam, How high can you jump?, Fighter Jets, Space Shuttle Simulators, Robotic Arms, Virtual Hockey, Alien Stomp Dome, Strike a Pose, Recollections, True Grip Challenge

6.04 – Analyze that an object's motion is always judged relative to some other object or point

<u>WonderWorks Applicable Exhibits:</u> Pulley Power, Coin Orbiter, Xtreme 360, Inversion Tunnel, One In a Million, Anti-Gravity Chamber, Hurricane Wind Shack, Kidz Pace Bike, Virtual Sports, Swim with the Sharks, Kidz Pace Snow Jam, How high can you jump?, Fighter Jets, Space Shuttle Simulators, Robotic Arms, Virtual Hockey, Alien Stomp Dome, Recollections, True Grip Challenge

6.05 – Describe and measure quantities that characterize moving objects and their interactions within a system

O WonderWorks Applicable Exhibits: Pulley Power, Coin Orbiter, Xtreme 360, Inversion Tunnel, One In a Million, Anti-Gravity Chamber, Hurricane Wind Shack, Kidz Pace Bike, Wonder Park, Swim with the Sharks, Kidz Pace Snow Jam, How high can you jump?, Fighter Jets, Space Shuttle Simulators, Robotic Arms, Virtual Hockey, Alien Stomp Dome, Recollections

6.06 - Investigate and analyze the real world interactions of balanced and unbalanced forces

WonderWorks Applicable Exhibits: Coin Orbiter, Inversion Tunnel, Xtreme 360, One In a Million, Anti-Gravity Chamber, Hurricane Wind Shack, Kidz Pace Bike, Virtual Sports, Swim with the Sharks, Kidz Pace Snow Jam, How high can you jump?, Fighter Jets, Space Shuttle Simulators, Robotic Arms, Virtual Hockey, Alien Stomp Dome, Strike a Pose, Recollections