# **Core Skills Analysis**

## Science

- Harry explored fundamental principles of physics, such as motion and force, through interactive exhibits that demonstrated how different objects move.
- He learned about the structure of ecosystems by observing habitats and the creatures living in them, enhancing his understanding of biodiversity.
- While examining the display on energy, Harry discovered the different forms of energy—kinetic, potential, and thermal—illustrated through hands-on experiments.
- The visit sparked his curiosity about the scientific method as he engaged with experiments that encouraged him to hypothesize and observe outcomes.

## Technology

- Harry gained insights into how technology impacts our daily lives through exhibits on robotics and coding, broadening his awareness of automation.
- He interacted with simulations that illustrated the principles of technology in transportation, which helped him appreciate the advancements in mobility.
- During the visit, he learned about renewable energy technologies, such as solar panels, which highlighted the importance of sustainability.
- Harry's understanding of data collection improved as he engaged with technology that allowed him to input information and see instant results.

## Mathematics

- Through various interactive displays, Harry practiced counting and measurement by engaging with activities that required him to quantify items.
- He encountered geometric shapes in different formats, helping him understand basic shapes and their properties through real-world applications.
- The exploration of energy metrics allowed him to grasp concepts of addition and subtraction as he calculated energy outputs from different sources.
- Furthermore, Harry observed data representation in graphs and charts, enhancing his ability to interpret and analyze numerical information.

#### **Environmental Studies**

- Harry learned about conservation efforts and their importance in maintaining healthy ecosystems, fostering a sense of responsibility toward the environment.
- He observed the water cycle in an exhibit, which solidified his understanding of its stages and significance in sustaining life on Earth.
- Harry discovered different types of habitats and their inhabitants, which deepened his knowledge of environmental diversity and interconnectedness.
- He engaged with platforms that discussed climate change, encouraging him to think critically about human impacts on the planet.

#### Tips

To further enhance Harry's learning experience related to Minecraft and these subjects, I suggest encouraging him to create projects that reflect what he learned at Scitech. For example, he could design a sustainable city in Minecraft, paying attention to aspects like renewable energy sources and diverse ecosystems. Additionally, setting up a home experiment to observe physical forces or energy transformations would reinforce his scientific learning. It could be beneficial to integrate technology by introducing coding challenges that relate to real-world applications, incorporating math through measurement activities, and fostering discussions about environmental conservation at home.

## **Book Recommendations**

- <u>The Fantastic Fossil Fiasco</u> by Samantha Scott: A fun, interactive story that takes children on a journey through time, exploring dinosaurs and the science of fossils.
- <u>Ada Twist, Scientist</u> by Andrea Beaty: A delightful picture book about a young girl's curiosity and creativity, inspiring young readers to explore the science around them.
- <u>My First Book of Technology</u> by Megan Kelsey: An engaging introduction to the world of technology, showcasing various inventions and how they shape our lives.