# **Core Skills Analysis**

### Science

- Developed an understanding of paleontology by examining real and replica fossils, connecting them to Earth's prehistoric life.
- Explored fundamental concepts of electricity and magnetism through hands-on experiments with circuits and motors, learning about magnetic fields and energy flow.
- Gained practical insights into forces and motion, including gravity and friction, and applied Newton's laws through interactive activities.
- Investigated physical properties of light and sound by experimenting with lenses, mirrors, and sound wave principles, fostering inquiry into wave behavior.

## **Biology and Human Anatomy**

- Enhanced knowledge of human biology by engaging with interactive models illustrating anatomy and bodily functions.
- Learned connections between biological systems and health through hands-on activities demonstrating how the body works.

### Astronomy and Space Science

- Explored space concepts including planets, stars, and the universe through interactive exhibits and simulations, deepening curiosity about astronomy.
- Experienced immersive learning via the digital planetarium, visualizing solar system dynamics and cosmic phenomena in an engaging way.

### Tips

To deepen Logan's understanding of these scientific concepts, consider creating a personalized science journal where he can draw and write about each exhibit he explores, reinforcing learning through reflection. Organize simple home experiments related to electricity, magnetism, or motion using everyday materials to encourage hands-on exploration beyond the museum. Plan stargazing nights to observe constellations and planets, linking to his planetarium experience and sparking interest in real-world astronomy. Finally, visit natural history books or documentaries about dinosaurs and fossils to contextualize his paleontology exhibit discoveries and broaden his appreciation for Earth's history.

### **Book Recommendations**

- <u>National Geographic Little Kids First Big Book of Dinosaurs</u> by Catherine D. Hughes: A vibrant introduction to dinosaurs designed for young readers, providing facts and colorful images to complement fossil exploration.
- <u>Electricity and Magnetism (Science for Kids)</u> by Rebecca Olien: An engaging book that explains the basics of electricity and magnetism with easy-to-understand text and illustrations, perfect for hands-on learners.
- <u>Space: A Visual Encyclopedia</u> by DK: A beautifully illustrated guide to planets, stars, and space exploration that complements an interactive planetarium experience.

### **Learning Standards**

- STE-SCI-01: Identified and described characteristics of living things, materials, and movement through hands-on exhibits.
- ST1-PQU-01 & ST2-PQU-01: Posed questions and investigated cause and effect in experiments related to electricity, forces, and light.
- CA3-CWT-01: Encouraged creating written or drawn texts communicating understanding of

scientific ideas and experiences.

- PH2-MSP-01: Applied movement and observational skills in interactive physical demonstrations of forces and motion.
- EN2-OLC-01 & EN3-OLC-01: Communicated scientific ideas when interacting with exhibits and during live science shows, developing social learning skills.

### **Try This Next**

- Create a 'Fossil Fact Sheet' worksheet where Logan sketches his favorite fossil and writes three interesting facts about it.
- Design a simple circuit-building activity using batteries and bulbs to recreate what he learned about electricity and magnetism.

### **Growth Beyond Academics**

Logan's active engagement with diverse scientific exhibits suggests growing curiosity and confidence in exploring complex concepts through hands-on activities. His willingness to participate in interactive experiments reflects developing focus and independence, while the support during the visit likely fostered a sense of security and collaboration.