## **Core Skills Analysis**

### History

- Learned about the origin of LEGO, including its creator and the historical context of its invention.
- Explored how a single idea or invention can influence culture and industry worldwide over time.
- Developed an understanding of the timeline of LEGO's development and its impact on toys and creativity.
- Gained insight into the entrepreneurial spirit and innovation in the early to mid-20th century.

#### Science

- Discovered the basic principles behind how LEGO bricks interlock, including concepts of design and engineering.
- Introduced to the idea of modular construction and how simple components can build complex structures.
- Learned about materials science in a basic way, understanding what kinds of plastics can be used for durable toys.
- Encouraged curiosity about mechanical stability and the physics of connected pieces in toy construction.

#### **Tips**

Tips: To deepen understanding of LEGO's history and science, encourage your child to research more about Ole Kirk Christiansen, the LEGO founder, and the period when LEGO was invented. You can explore the evolution of toys over the last century to see how innovation impacts play. Experiment with building different LEGO structures to explore engineering concepts like balance, stability, and design. Taking field trips to toy museums or LEGO exhibitions can also make history and science tangible and engaging. Finally, challenge your child to invent their own simple toy concept combining creativity with basic engineering principles.

#### **Book Recommendations**

- <u>Building a Family Legacy: The Story of LEGO</u> by Gareth Moore: A kid-friendly biography about LEGO's creator and how the company grew from a small workshop to a global brand.
- <u>The Science Behind LEGO</u> by Clare Hibbert: Explores the materials and engineering behind LEGO bricks and how they click together.
- <u>The Ultimate LEGO Book</u> by Lesley Price: A colorful guide to LEGO's history, famous sets, and creative building projects.

# **Learning Standards**

- CCSS.ELA-LITERACY.RI.3.3 Describe the relationship between a series of historical events.
- CCSS.ELA-LITERACY.RI.4.7 Interpret information presented visually to understand scientific principles.
- NGSS 3-5-ETS1-1 Define a simple design problem reflecting a need or a want.
- NGSS 3-5-ETS1-2 Generate and compare multiple possible solutions to a problem.

#### **Try This Next**

- Create a timeline worksheet tracing LEGO's invention and major milestones in its development.
- Design a hands-on experiment to test the stability of different LEGO structures and record results.