# **Core Skills Analysis**

## **STEM and Creative Thinking**

- Developed spatial awareness by manipulating and assembling Lego pieces into various shapes and structures.
- Enhanced fine motor skills through precise handling and connecting of small Lego components.
- Practiced problem-solving as they experimented with different ways to build stable or visually appealing models.
- Encouraged creativity and design skills by imagining and executing unique constructions.

## **Tips**

Engage the child further by introducing challenges such as replicating objects from real life or following a blueprint, which reinforces observation and technical drawing skills. Explore basic engineering concepts by testing the strength of different Lego builds, discussing how shape and balance affect stability. Incorporate storytelling by encouraging the child to create scenes or characters with Lego, boosting narrative skills and imaginative play. Finally, use timed building exercises or collaborative projects to teach perseverance, teamwork, and time management in a fun, interactive way.

#### **Book Recommendations**

- <u>Girls Who Build Robots</u> by Tara Chklovski: An inspiring true story about a young girl who uses creativity and STEM skills to invent and build robots, encouraging kids to embrace engineering and coding.
- <u>Lego Play Book</u> by Dan Henson: Offers step-by-step instructions and ideas for creative Lego builds, perfect for children to enhance their design and construction abilities.
- <u>The LEGO Ideas Book</u> by Daniel Lipkowitz: A comprehensive guide filled with innovative building techniques and themes to spark creativity and problem-solving with Lego.

## **Learning Standards**

- ACELY1697 Use comprehension strategies to build literal and inferred meaning to expand content knowledge, applicable in interpreting building instructions or storytelling through Lego creations.
- ACMMG019 Describe position and movement of objects resulting from a combination of translations, reflections and rotations, relevant when manipulating and assembling Lego models.
- ACTDEK010 Explore and test materials, components and technologies, making adjustments to achieve improvements in design and function.
- ACELY1682 Use interaction skills to communicate and collaborate when sharing ideas and participating in group construction tasks.

## **Try This Next**

- Design a Lego blueprint: Draw a plan and then build the model to match it.
- Conduct a stability test: Build bridges or towers and test how much weight they can hold.