## **Core Skills Analysis**

## STEM/Engineering

- Developed spatial awareness by stacking and balancing Jenga blocks to create stable structures.
- Applied principles of physics such as gravity, force, and balance during the construction and play process.
- Enhanced fine motor skills through precise hand control needed to place and remove blocks without collapsing the tower.
- Experimented with cause-and-effect by observing what happens when blocks are removed or repositioned, fostering early engineering thinking.

# **Creative Play & Imagination**

- Used constructive play to transform simple blocks into imaginative structures, encouraging creativity.
- Practiced storytelling and scenario building through pretend play involving the built structures.
- Explored problem-solving by modifying designs to better fit imagined purposes or to prevent the tower from toppling.
- Fostered cognitive flexibility by envisioning multiple uses and configurations of the blocks.

### **Tips**

Encourage your child to explore more complex structures by introducing challenges such as building bridges or multi-level towers. Incorporate storytelling by asking your child to describe what their structure represents or invent a story around it. Use the blocks for group play to enhance collaborative skills and sharing ideas. Additionally, compare different building strategies through trials and discussions about what works best and why, fostering analytical thinking.

#### **Book Recommendations**

- <u>Iggy Peck, Architect</u> by Andrea Beaty: A fun story about a young boy who loves building and designing, inspiring creativity and problem-solving in construction.
- <u>Rosie Revere, Engineer</u> by Andrea Beaty: Encourages innovative thinking and perseverance through the adventures of a young aspiring engineer creating imaginative inventions.
- <u>The Most Magnificent Thing</u> by Ashley Spires: Focuses on creativity, perseverance, and learning from failure while designing and building something special.

### **Learning Standards**

- CCSS.MATH.CONTENT.2.G.A.1 Recognize and draw shapes having specified attributes, relating to blocks forming structures.
- CCSS.ELA-LITERACY.SL.2.4 Describe familiar people, places, things, and events with relevant details, connected to storytelling during imaginative play.
- CCSS.MATH.PRACTICE.MP4 Model with mathematics by creating physical structures and exploring their stability.

### **Try This Next**

- Create a worksheet for the child to sketch and label different types of structures they build with blocks.
- Design a storytelling prompt where the child describes an adventure taking place in or around their block creations.

Boosting STEM Skills and Creativity Through Jenga Block Building and Imaginative Play / Subject Explorer / LearningCorner.co

# **Growth Beyond Academics**

This activity likely supported development in patience and concentration, as the child needed steady hands and focus to build without knocking the tower down. The imaginative aspect fosters confidence in creativity and independent thinking while offering a safe space to experiment and solve problems.