Core Skills Analysis

Science

- Learnt the concept of flooding by constructing a physical model demonstrating water flow and accumulation using Legos.
- Explored cause and effect by observing how altering the layout of the Lego structures influences where water collects and causes floods.
- Gained early understanding of terrain and water interaction, including how built environments can affect natural water movement.
- Developed observational skills by noticing how water behaves around obstacles and changes in elevation within the Lego setup.

Engineering

- Practiced problem-solving by designing and modifying Lego constructions to manage or simulate flood events.
- Engaged in hands-on building that fosters spatial reasoning and an understanding of structural stability in relation to water flow.
- Experienced the iterative design process through trial and error in creating effective models that demonstrate flooding.

Tips

To deepen the learning experience, encourage your child to experiment with building different landscapes with the Legos such as hills, valleys, or riverbanks to see how these affect flooding. Introduce simple scientific principles like absorption, drainage, or barriers by using additional materials like paper towel pieces, small containers, or clay in combination with Legos. For a multidisciplinary approach, connect art and storytelling by having your child create a story or a comic strip about a Lego town experiencing and overcoming a flood. Additionally, foster critical thinking by asking questions about human impact on flooding and ways communities can prepare and protect themselves.

Book Recommendations

- Flood by Alvaro F. Villa: A visually engaging picture book that explores the effects of flooding through storytelling and vivid illustrations.
- The Magic School Bus Wet All Over: A Book About the Water Cycle by Pat Relf: A fun and educational story that introduces children to water cycle concepts, helping to understand how floods happen.
- Water Is Water: A Book About the Water Cycle by Miranda Paul: A poetic and simple introduction to the water cycle, perfect for young learners exploring water's journey through nature.

Learning Standards

- CCSS.ELA-LITERACY.RI.K.3: With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.
- NGSS K-ESS2-2: Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.
- NGSS K-ESS3-3: Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

Try This Next

- Create a drawing worksheet for your child to design different flood-proof Lego structures and

label parts controlling water flow.
- Set up a quiz with questions like 'What happens to water when it meets a hill?' or 'How can we stop a flood in our Lego town?' to reinforce concepts.