

## Core Skills Analysis

### Physical Science

- Learned about the properties of materials (e.g., how different pipes fit together).
- Gained understanding of cause and effect (e.g., what happens when water is not contained).
- Developed skills in hand-eye coordination and spatial awareness through assembling fittings.
- Explored concepts of pressure and flow by observing how water moves through pipes.

### Mathematics

- Practiced counting and measuring as they fit pipes and fittings together.
- Learned about shapes and patterns by identifying different types of fittings.
- Applied concepts of basic geometry by visualizing how pipes connect in a space.
- Engaged in problem-solving when determining how to arrange materials efficiently.

### Engineering

- Gained practical experience in building and constructing with real-life applications.
- Understood basics of systems thinking by following how water flows through plumbing.
- Learned about design and construction as they created a simple plumbing system.
- Explored the importance of durability and safety in building structures.

### Tips

Encourage further exploration by integrating play-based learning with resources like Minecraft. Consider setting up a Minecraft session where the child can design and build virtual plumbing systems, reinforcing their understanding of spatial reasoning and engineering concepts. Use additional activities, such as measuring materials and creating simple blueprints for a pretend plumbing project, to deepen their engagement with math and science principles. Allow them to explore role-playing as a plumber to stimulate imagination and discussion around the subject.

### Book Recommendations

- [The Little Green Frogs Go Plumbing](#) by Samantha Young: A fun, colorful story that introduces young readers to the basics of plumbing through the adventures of little green frogs.
- [Pete the Pipe and the Giant Fittings](#) by Mark Taylor: A whimsical tale about a brave pipe who learns the importance of teamwork while connecting a plumbing system.
- [My First Guide to Home Repairs](#) by Emma Lee: An engaging book that teaches children about simple home repairs, including plumbing, with fun illustrations and easy instructions.