

## Core Skills Analysis

### Math

- Basia learned about basic counting and numbers through assembling different cogs in the Lego set.
- She understood the concept of size and length by comparing and arranging various cog sizes while building the set.
- Basia grasped the idea of patterns and sequences by following the instructions to assemble the cogs in a specific order.
- She developed her problem-solving skills by troubleshooting and adjusting the cogs to make them fit properly.

### Science

- Basia explored the idea of cause and effect as she observed how turning one cog affected the movement of the others.
- She gained an understanding of simple machines and how cogs work together to create motion.
- Basia learned about friction and how it impacts the movement of the cogs when they are not assembled correctly.
- She developed her fine motor skills and hand-eye coordination through precise manipulation of the cogs during the building process.

### Tips

To encourage Basia's continued development after the Lego workshop, consider providing her with opportunities to explore more hands-on construction activities that involve gears and cogs. Introducing simple experiments that demonstrate the principles of motion and mechanics can further enhance her understanding of these concepts. Additionally, engaging Basia in discussions about real-life applications of cogs, such as in bicycles or clocks, can help her make connections between the workshop activity and everyday objects.

### Book Recommendations

- [Rosie Revere, Engineer](#) by Andrea Beaty: Follow the story of Rosie, a young engineer who learns the power of perseverance and creativity in problem-solving.
- [Iggy Peck, Architect](#) by Andrea Beaty: Join Iggy, an imaginative architect, as he embraces his passion for building and design.
- [Rosie's Walk](#) by Pat Hutchins: Explore a delightful tale of Rosie the hen as she takes a walk, encountering various obstacles and objects along the way.