

## Core Skills Analysis

### STEM (Science, Technology, Engineering, Mathematics)

- The child demonstrated an understanding of basic physics by observing how the magnetic tiles stick and how cars can crash into one another, leading to discussions about force and motion.
- Through manipulating the magnetic tiles to build various structures for the cars to drive on, the student practiced spatial awareness and engineering skills.
- The act of crashing the cars encouraged experimentation with cause and effect, as the child could see how different structures held up to impact.
- Engaging with the magnetic tiles introduced basic geometry concepts, as the child explored shapes and their attributes when constructing different configurations.

### Social-Emotional Development

- During pretend play, the child learned to express emotions and ideas while narrating scenarios involving the cars and tiles, fostering creativity and imagination.
- The collaborative aspect of playing with others strengthened the child's ability to share, take turns, and resolve conflicts, enhancing social skills.
- The child practiced empathy and role-playing by pretending to be different characters involved in the car crashes, which aids in understanding different perspectives.
- The activity promoted self-regulation as the child navigated the excitement of crashing while managing emotions related to success and failure in their pretend play.

### Language Development

- The activity facilitated language use through storytelling, where the child narrated events of the crashing and built scenarios that required verbal expression.
- As the child described their actions with the tiles and cars, vocabulary related to movement, shapes, and emotions was naturally integrated into their speech.
- Interactions during play provided opportunities to ask and answer questions, promoting conversational skills and turn-taking in dialogue.
- The child practiced following directions by constructing their configurations based on peer or adult guidance, enhancing comprehension and listening skills.

### Tips

To enhance the learning experience, I recommend introducing additional elements such as rulers or measuring tapes for the child to create precise structures, which would further their understanding of measurement in a playful context. Incorporating storybooks that feature cars or magnetic play themes can enrich language development, prompting discussions based on the stories that connect back to their play. Additionally, setting up challenges, such as building a car ramp or obstacle courses with the tiles, can deepen their STEM learning while keeping the activity exciting.

### Book Recommendations

- [The Little Blue Truck](#) by Alice Schertle: A charming story about a friendly truck on a journey with animal friends, perfect for kids learning about vehicles.
- [Goodnight, Goodnight, Construction Site](#) by Sherri Duskey Rinker: A delightful bedtime story featuring construction vehicles winding down for the night, great for combining play with learning about machinery.
- [The Wheels on the Bus](#) by Paul O. Zelinsky: An engaging picture book that incorporates music and

movement related to everyday vehicles, suitable for enhancing language and rhythm.

### **Learning Standards**

- CCSS.ELA-LITERACY.RF.K.1 - Demonstrate understanding of the organization and basic features of print.
- CCSS.ELA-LITERACY.SL.K.1 - Participate in collaborative conversations with diverse partners about kindergarten topics and texts.
- CCSS.MATH.CONTENT.K.G.A.1 - Describe objects in the environment using names of shapes, and describe the relative positions of these objects.
- NGSS K-PS2-2 - Analyze and interpret data to determine if a design solution works as intended to change the speed or direction of an object.