

# Choo-Choo Locomotive

**Applicable Age Group** 4-5 year-old toddlers

- Activity Objectives**
- ☑ Accumulate life experience, learn the function and structure of a locomotive;
  - ☑ Through observation and hands-on activity, use various shapes to design a locomotive.

**Activity Description** Learn about locomotives with the children, such as how the locomotive controls the speed and direction of the entire train, and how the train driver observes the surroundings from the locomotive. Through observation and comparison, guide children to discover whether the structure of the locomotive is square or round/curved, and how this differently affects the air friction generated during travel.

## STEAM Literacy Development Indicators

Method Indicator	Game-based introduction: Understand the function of a train locomotive	Design a model using building blocks of various shapes	Observe the locomotive shape and analyze resistance levels	Organize games to further understand the function of the locomotive
Curiosity and Imagination		●		
Flexibility and Adaptability	●			
Verbal and Written Communication Skills				
Cross-boundary Cooperation and Exemplary Leadership				
Critical Thinking and Problem-solving Skills			●	
Proactive and Pioneering Spirit				●
Ability to Evaluate and Analyze Information				



### Interactive Tips

- When building after learning about the locomotive's structure, encourage experimentation and designing based on their imagination, but ensure basic structures are included, such as the driver's cab, train wheels, etc.
- Locomotive shapes can be round or square. Observe the child's ideas during design; square shapes are relatively easier, while for round shapes, encourage the child to select bricks with curves.

**Find These Building Blocks**



**Build the locomotive using various shaped bricks combined with your own imagination.**

