

# Sail Car

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

- Activity Objectives**
- ☑ Understand wind energy and its impact on the movement of sail cars.
  - ☑ Master the creative building method of small sail car structures.
  - ☑ Explore the relationship between wind force and the speed of sail cars.

**Activity Description** Design a fun sail car with children. The sail car is propelled by wind blowing against its sail, and the speed and distance it travels will change with the strength of the wind. In this process, explore the magnitude of wind force and wind energy, as well as the process of converting them into the kinetic energy of the car.

## STEAM Literacy Development Indicators

Method Indicator	Game-based introduction: Understand the strength of wind energy	Creatively build a small wind-powered car	Test the influence of wind strength on the car	Knowledge extension: Explore the influence of sail size on speed
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

- The design of the sail and car body structure of the sail car should be small and lightweight. Only then can the car be blown by the wind; otherwise, its own weight will be too heavy, causing the car to stand still.
- For wind turbine selection, use thin-plate blocks. Only then can the wind turbine function properly.

 Find These Blocks



 Creatively Design and Build a Sail Car According to Requirements

