LEGO education

MOVING MATERIALS

The Problem

How can different materials be transported?

The motorized forklift truck is used to lift and move heavy materials over short distances. It was developed in the early 20th century, but its use became widespread after World War II. Forklifts have become a vital part of warehouse and manufacturing operations. What kinds of materials do you think forklifts can move?

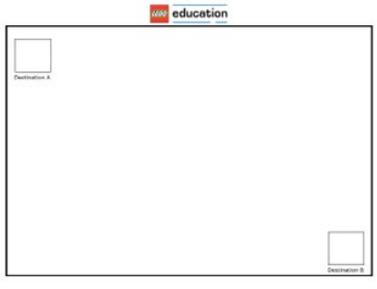
How are forklifts able to move materials without humans directly touching them?

Think

How can I build a vehicle or device for lifting and moving an object?

Activity

Using LEGO® bricks or any other adult-approved materials, **create your own vehicle or device** to move a 2x2 LEGO® brick (or any other small object) from Destination A to Destination B on the activity mat.



Design Constraints:

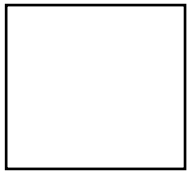
- You may not directly touch the brick with your hands (except to initially place the brick on the activity mat).
- You cannot use force (e.g., strike/hit) the brick to move it from Destination A to Destination B.

Extend Your Thinking

How would the shape of the object you are moving change the design of your vehicle/device you created?

How does your vehicle/device ensure the safety of the human operating it?

Would you be able to stack or carry multiple items with your vehicle/device? Try to iterate on your design to carry multiple items...



Destination A

Destination B