



SUPER FAB LAB INVESTIGATION:

Another Way to Slide

Episode: Another way to slide

Cycle: Simple Machines

Purpose (What We're Going to Explore and Learn)

- In this investigation, we find a new way to use a playground favorite.
- Slides are examples of a simple machine called an inclined plane. Like other machines, they make work easier.
- We're going to solve a problem using the slide. How can we get a heavy basket to the top of the slide?

Materials (The Stuff We Need)

- Large basket, preferably with a handle or handles
- Books or something heavy to put into the basket
- Sliding board
- Rope to tie to the handle of the basket

Procedure (What to Do)

1. Fill the basket with books. Pose a problem for children. How will we get that basket to the top of the slide? They might suggest trying to lift it, using the rope to lift it straight to the top, pushing it up the slide, pulling it up the slide, or something else.
2. Ask them to predict which ways they think will work best.
3. Try the ideas (if they are safe). Make sure to include methods that involve pushing or pulling the basket up the slide.
4. Describe which ways work well and which do not. Did using the slide make it easier to move the heavy basket to the top of the slide?

Other Stuff You Might Want to Know or Do

- "Work" has a specific meaning in physics involving the transfer of energy to an object and making it move. We don't expect preschoolers to know this. When we say that "simple machines make work easier," we are using an accurate, but preschool-friendly, description of what simple machines do and how they help people.
- Why do some buildings have ramps up to the door? Why do sidewalks have ramps at the corner? Find some examples, and ask your child to think about why those ramps are there. When might someone need to use a ramp instead of the steps? This discussion should bring up another one of those super simple machines - the wheel. People in wheelchairs, kids pulling wagons, and delivery people with dollies are all happy those ramps are there!