

Lesson Plan: Friction Fun!

Area: Physics

Age Group: 2nd-3rd Grade

Supplies Needed:

- Pennies (enough for each student)
- 5-8 identical inclines each with a different type of surface (wood, metal, carpet, paper, fabric, etc.)

Introduction:

- Introduce the concept of friction
- Fill in the blank: Because of friction, I can _____.
- Examples of friction: rubbing our hands together, walking
- How to reduce friction: ice, oil, wheels

Demonstration:

- Rubbing hand demonstration
- Put on roller skates and roll around: reduction of friction

Directions:

- Give each student a penny
- Have the students go to each station consisting of an incline with a different type of surface to test the friction of it
- At each student, place the penny face down at the top of the incline
- Each student will write down what happens to their penny

Follow-up:

- Class discussion: what happened to the pennies at each surface?
- Which surface caused the penny to slide the fastest? The slowest? Not at all?
- Why do the surfaces act differently?
- Show cartoons of each surface, depicting friction