

A World Without This Scientific Principle

SCIENCE



Overview

Students imagine and illustrate what the world would be like if a scientific principle didn't exist, deepening their understanding of science's role in daily life.

Steps for Teachers

1. Brainstorm scientific principles as a class (gravity, friction, photosynthesis, etc.)
2. Each student selects one principle to 'remove' from the world
3. Students research how this principle affects everyday life
4. Students write a script showing a day without this principle
5. Students create scenes in Puppet Pals showing the chaos or changes
6. Students record their 'what if' scenario with explanations
7. Discuss what these scenarios teach us about why science matters

Example

A student creates 'A World Without Friction.' A character tries to walk but keeps sliding. 'I can't stop!' Cars zoom past unable to brake. A cup slides off a table forever. 'Without friction, nothing would stay still! We couldn't walk, drive, or even hold things. Friction might seem annoying when you're trying to slide a heavy box, but it's actually what makes life possible!'

Grading Rubric

Criteria	Excellent	Proficient	Developing
Scientific Understanding	Demonstrates deep understanding of the principle's effects	Shows good understanding of main effects	Misunderstands how the principle works
Logical Consequences	Scenarios accurately show what would happen	Most scenarios are scientifically plausible	Scenarios don't logically follow from removing principle
Creativity	Imaginative and surprising scenarios	Shows some creative thinking	Obvious or limited scenarios
Educational Value	Viewers will better understand the principle after watching	Some educational value present	Doesn't effectively teach about the principle