Grade 5 Science Week of March 1 – March 5

Simple Machines

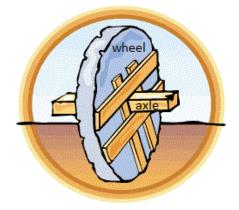
Simple machines were first invented to make work easier for humans. They allow us to complete more work, quicker and using less energy. Take a look at the following video for a quick introduction into different kinds of simple machines. Make sure you follow along in your Learning Guide!



Learn About Simple Machines: <u>https://youtu.be/aoXnhyY5RTk</u>

Wheel and Axles

One of the earliest and most basic of simple machines is the wheel and axle. This simple machine uses a rod attached in the middle as an axle to help it to lift or move loads



So how do wheels help us?

Imagine you have to move a heavy box. You could simply slide it along the floor with great effort, or you could put the box in a wagon and move it along easily.

Why is it easier to use the wagon? Wheels help you move an object across the ground because they cut down on the amount of friction between what you're trying to move and the surface you're pulling it against.



vs.



Take a look at the following video, and make sure you follow along in your learning guide!



Let's Get Rolling! <u>https://youtu.be/YIV9IUHqW3A</u>

Fill in the blanks: Simple machines were first invented to make work
for humans. They allow us to complete
work, quicker and using less _____.

2. Watch the following video to answer the following questions. **Video:** Learn About Simple Machines

1. The wheel and axel make work easier by:

2. A slide is an example of an: ______

3. What type of simple machine do rock climbers use?

Wheel and Axle

3. In the space below, draw a diagram of a **Wheel and Axle**. Make sure to label all important parts.

4. Why do wheels make moving things easier?

5. Watch the following video to answer the following questions. **Video:** Let's Get Rolling!

1. Fill in the blanks: In order for a wheel to work, it has to ______ and a wheel spins on an ______.

2. Did it take **more force** or **less force** for Squeaks to use the wagon to move the rocks?