

Mining Technology: Simple Machines

Welcome to the mining machine lab. Today, we're going to learn about some of the machines we use in mining, who uses them, what they do, and how they work!

Start by choosing a machine. Circle the one you want to learn more about:

- I. Drills
- II. Excavators
- III. Front-End Loaders
- IV. Haul Trucks
- V. Rock Trucks

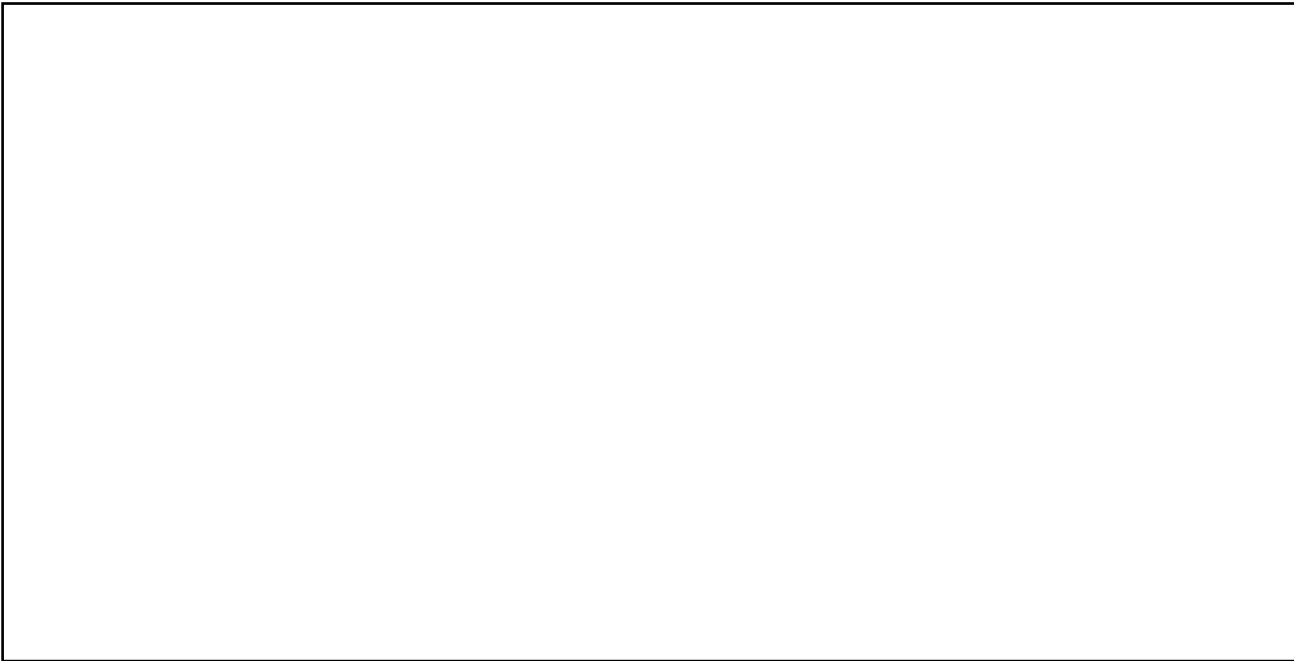
Read over the one-pager about your machine.

1. Machinery is a type of system. What is the input in the machine you chose?

2. What is the output?

3. Can you name some simple machines used in that system? The options are screw, wheel and axle, inclined plane, wedge, pulley, and lever.

4. Draw a picture of your machine and label the simple machines in it.



5. Potential energy is energy stored in an object which has the potential, based on its properties, to become kinetic energy. For example, the ball of a wrecking machine has potential energy. How does your machine use or generate potential energy?

6. Kinetic energy is energy used in motion. How does your machine use or generate kinetic energy?

7. Mechanical advantage is the term used to describe how a machine manipulates or changes a force to make a task take less effort. How does your machine generate mechanical advantage?
