

ACTIVITY: Finding Simple Machines in Intrepid's Fo'c's'le

Directions:

On *Intrepid* the fo'c's'le was located in the front of the ship and held equipment which was used to keep *Intrepid* in one place while moored in a harbor or attached to a pier. Several simple machines were used in this area to make mooring easier.

Use what you learned about simple machines to find them in the fo'c's'le of *Intrepid*! Look at the photos below and determine which simple machines are being represented. Remember, an object might have more than one simple machine that makes up its whole, so if you see more than one simple machine for a photo, list all that you see!

Watertight Door:



What simple machine do you see here? Are there more than just one? List them all!

“Wild Cat”:



What simple machine do you see here? Are there more than just one? List them all!

Rope Reel:



What simple machine do you see here? Are there more than just one? List them all!

Stairs:



What simple machine do you see here? Are there more than just one? List them all!

Chain Stoppers:



What Simple machine do you see here? Are there more than just one? List them all!

Vocabulary list:

Simple Machine: Simple machines are basic mechanical devices used to apply force, making work easier for humans. Typically, simple machines have only a few parts and have few or no moving parts. Complicated machines are made up of two or more simple machines.

The Wedge: A wedge is a simple machine that helps to separate two objects from each other. The front of a ship can act as a wedge. As it moves, it slices through the water.

The Lever: A lever is a simple machine consisting of a rigid bar that moves around a fixed point. One end of it can be pushed or pulled to control the other end which can move a heavy object. A balancing scale is an example of a lever.

The Pulley: A pulley is a simple machine that is made up of a wheel with a grooved rim through which cord passes through. It is used to change the direction of a force. Sailboats use pulleys to help lift, lower and tighten ist sails.

The Screw: A screw is a thin, rod-shaped simple machine that has a spiral groove that is designed to pierce a material by rotating it, often using a screwdriver to do so. It can also hold two pieces of material together. A nut and bolt is an example of a screw

The Incline Plane: An inclined plane is a simple machine in which a surface is sloped so that one end is higher than the other. It runs at an angle to a horizontal surface. Ramps and stairs are both considered inclined planes.

The Wheel and Axle: A wheel and axle is a simple machine in which a wheel rotates on a stationary rod or axle. The wheels on a bicycle or a ferris wheel are examples of a wheel and axle.