

Warren County History Center Tour

EXPLORING PIONEER TECHNOLOGY: THE SIX SIMPLE MACHINES IN EARLY OHIO

Pre-Tour Lessons

GOAL: The goal of this tour is to examine the use and importance of “The Six Simple Machines” in pioneer Warren County. In the case of all of “the six simple machines”, the force that comes out of the machine, after it is used, is greater than the force used upon the machine by an individual. This gives the user of the machine a “mechanical advantage” and makes his or her work easier. The six simple machines can be used alone or together. All six of these simple machines have been used for thousands of years and were extremely useful to the first inhabitants and early settlers of Ohio.

PRE-VISIT DISCUSSION TOPICS: Before visiting the Warren County History Center discuss the following topics with your classes:

- 1- **What is a “machine”?**
- 2- **Why to people use machines?**
- 3- **Does a machine have to be a complex or complicated device?**
- 4- **Make a list of the “machines” and tools you can see in your classroom.**
- 5- **Do any of them have parts that are one or more of “The Six Simple Machines”?**

PRE-VISIT TERMS TO KNOW: Students should be familiar with the following terms before visiting the Warren County History Center:

- 1- **PULLEY-** a simple machine that uses grooved wheels and a rope to raise, lower or move a load.
- 2- **LEVER-** a stiff bar that rests on a support called a fulcrum which lifts or moves loads.
- 3- **WEDGE-** an object with at least one slanting side ending in a sharp edge, which cuts materials apart.
- 4- **WHEEL-** a circular device attached to a rod called an axle through its center that, when rotated, moves loads; a type of rotating lever around a center fulcrum.
- 5- **INCLINED PLANE-** a slanting surface connecting a lower level surface to a higher level surface.
- 6- **SCREW-** an inclined plane wrapped around a pole which holds things together or lifts materials when rotated.