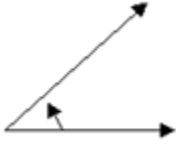
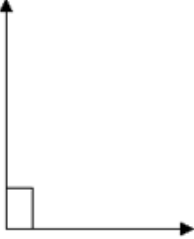


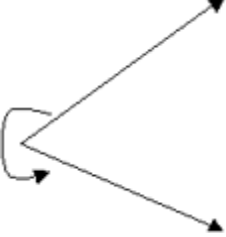


Math On A Stick Angles & Simple Machine

Angle: An angle measures the amount of turn. As the angle increases, the name changes.

Angle sizes range from greater than 0° to 360° .	Diagram	Properties
Acute		less than 90°
Right		90°
Obtuse		between 90° and 180°
Straight		180°
Reflex		between 180° and 360°

Math On A Stick Angles & Simple Machine

Simple Machines: A simple machine is a mechanical device that changes the direction or magnitude of a force. In general, they can be defined as the simplest mechanisms that use mechanical leverage to multiply force. There are 6 basic simple machines; the lever, the wheel and axle, the inclined plane, the wedge, the pulley, and the screw. Several of these simple machines are related to each other. But, each has a specific purpose in the world of doing work.

Wedge - Instead of using the smooth side of the inclined plane to make work easier, you can also use the pointed edges to do other kinds of work. When you use the edge to push things apart, this movable inclined plane is called a wedge. An ax blade is one example of a wedge.

Inclined Plane - A flat surface (or plane) that is slanted, or inclined, so it can help move objects across distances. A common inclined plane is a ramp.

Screw - When you wrap an inclined plane around a cylinder, its sharp edge becomes another simple tool: a screw. If you put a metal screw beside a ramp, it may be hard to see similarities, but a screw is actually just another kind of inclined plane. One example of how a screw helps you do work is that it can be easily turned to move itself through a solid space like a block of wood.

Pulley - Instead of an axle, a wheel could also rotate a rope, cord, or belt. This variation of the wheel and axle is the pulley. In a pulley, a cord wraps around a wheel. As the wheel rotates, the cord moves in either direction. Attach a hook to the cord, and now you can use the wheel's rotation to raise and lower objects, making work easier. On a flagpole, for example, a rope is attached to a pulley to raise and lower the flag more easily.

Wheel & Axle - Makes work easier by moving objects across distances. The wheel (or round end) turns with the axle (or cylindrical post) causing movement. On a wagon, for example, a container rests on top of the axle.

Lever - Any tool that pries something loose is a lever. Levers can also lift objects. A lever is an arm that "pivots" (or turns) against a fulcrum (the point or support on which a lever pivots). Think of the claw end of a hammer that you use to pry nails loose; it's a lever. A see-saw is also a lever.