

Grade 4 Understanding Structures and Mechanisms –
Pullevs and Gears

TWIST AND TURN!

The Six Simple Machines

Simple machines are devices that change the direction or magnitude of a force.



Inclined Plane

a flat surface tilted at an angle e.g. ramps, slides



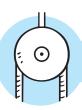
Wedge

has a slanting side and a sharp edge e.g. door stoppers, nails, knives



Wheel and Axle

a wheel that rotates along with the axle; gears being a type of wheel and axle e.g. doorknobs, car wheels



Pulley

has a grooved wheel and a rope that runs over the wheel e.g. construction cranes, elevators



Lever

a straight beam that moves around a fixed point e.g. see-saws, crowbars



Screw

a cylindrical shaft with angled ridges wrapped around it e.g. drills, twist caps