

Simple Machines

Draw a picture of each simple machine and circle the correct answers.

<p style="text-align: center;">GEARS</p> <p>Torque is the tendency of a force to rotate an object around an axis. When you spin the red knob on the first gear, how does the torque on the first gear compare to the torque on the third gear?</p> <p style="text-align: center;">equal more less</p>	<p style="text-align: center;">INCLINED PLANE</p> <p>When you make the inclined plane become steeper, what happens to the effort force it takes to pull the car up the plane?</p> <p style="text-align: center;">The effort force is more.</p> <p style="text-align: center;">The effort force is less.</p>
<p style="text-align: center;">WHEEL AND AXLE</p> <p>A wheel and axle consist of a wheel attached to a smaller axle so a force is transferred from one to another. When you turn the red knob to the left, what direction does the red block move?</p> <p style="text-align: center;">up down</p>	<p style="text-align: center;">LEVER</p> <p>The effort force is the highest when the lever is in which position?</p> <p style="text-align: center;">1 2 3</p>

PULLEY

A pulley is a wheel on an axle that is designed to change the direction of the applied force. If you pull down on the red block on the left, what direction does the block on the right move? **down up right left**

SCREW

A screw is an inclined plane wrapped around a central core into a spiral shape. Screws convert a turning force into a force that goes _____ and _____.

up and down

left and right