Mechanical Systems Topic 2 - Wheel and Axle Practice Quiz

1. A device that consists of a small cylinder, with a handle or a crank, is called a ... radius

winch

fulcrum

pinion

Gears are used in combination, with the teeth of the gears interlocking, so when one moves the other moves as well. Effort can be applied to the first gear (24 teeth), with the resulting effect on the second gear (12 teeth) being a ... speed advantage of 0.5

speed advantage of 2

force advantage of 2

force advantage of 0.5

3. When gears are used in a gear train, the resulting effect is that each gear travels ... slower than the one next to it

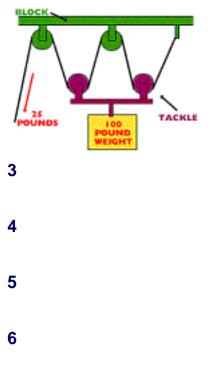
faster than the one next to it

in an opposite direction than the one it is nearest to

always in the same direction as the one next to it

Light and Optical Systems - Topic 1 Practice Quiz

4. The mechanical advantage of the block and tackle (complex combination of fixed and moveable pulleys) pictured here is ...



5. The pedals on a bicycle are attached to sprocket gears which are linked together by a chain. The type of energy that describes the motion created when you apply force to the pedal is ... gravitational

frictional

potential

kinetic

<u>Answers</u>

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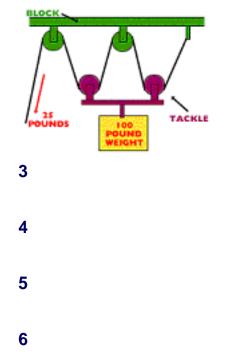
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