

Worksheet: Machine Vocabulary

(Frameworks Code)

Determine whether the italicized term makes each statement true or false. If the statement is true, write the word "true" in the blank. If the statement is false, write in the blank the term that makes the statement true.

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| <u>True</u> | 1. A device that makes work easier or more effective is called a <i>machine</i> . |
| <u>Six</u> | 2. There are <i>four</i> basic kinds of simple machines. |
| <u>Mechanical Advantage^{MA}</u> | 3. The number of times a machine multiplies the force exerted on the machine is the <i>output force</i> of the machine. |
| <u>lever</u> | 4. A bar that is free to move about a fixed point is a <i>fulcrum</i> . |
| <u>true</u> | 5. A grooved wheel with a rope or chain running through the groove is a <i>pulley</i> . |
| <u>gears (system of)</u> | 6. A system of wheels with teeth is called an <i>axle</i> . |
| <u>Inclined Plane</u> | 7. A sloping surface used to raise objects is a <i>wedge</i> . |
| <u>true</u> | 8. A screw is an <i>inclined plane</i> wrapped in a spiral around a cylinder. |
| <u>true</u> | 9. A wheel and axle is a simple machine consisting of <i>two wheels</i> of different diameters that rotate together about a common axis. |
| <u>Wedge</u> | 10. An inclined plane with two sloping sides is a <i>screw</i> . |
| <u>one</u> | 11. The mechanical advantage of a fixed pulley is always <i>two</i> . |
| <u>true</u> | 12. The mechanical advantage of a block and tackle is equal to the <i>number of sections</i> of the rope that support the object. |
| <u>Compound</u> | 13. A machine made up of two or more simple machines is an <i>ideal</i> machine. |
| <u>less</u> | 14. Usually the efficiency of a real machine is always <i>greater</i> than 100%. |
| <u>true</u> | 15. To do <i>work</i> , a force must be applied in the direction of the object's motion. |
| <u>Joule</u> | 16. The unit for measuring work is a <i>newton</i> . |
| <u>true</u> | 17. The force exerted by the machine is the <i>output force</i> . |
| <u>efficiency</u> | 18. <i>Mechanical advantage</i> compares the work output to the work input. |
| <u>Output Arm</u> | 19. The <i>input arm</i> is the distance between the fulcrum and the object being moved. |
| <u>true</u> | 20. The type of mechanical advantage that does not account for friction is <i>ideal</i> mechanical advantage. |
| <u>Input</u> | 21. The distance that the person using a machine must move the machine is the <i>output distance</i> . |
| <u>true</u> | 22. A <i>first class</i> lever has the fulcrum in the center. |
| <u>movable</u> | 23. A <i>fixed</i> pulley is attached to the object being moved. |