Name: DUE DATE – TEST DATE:

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| --- | --- | --- | --- | --- | --- |
| **Applied Physics**  Work, Power, and Machines | | | | | evidence and practice  ASSIGNMENT NUMBERS FROM PORTFOLIO EVIDENCE & PRACTICE LOG |
| Status of Standard | | | | |
| Vocabulary is in bold! | | **Not Yet**  *I have no idea what to do.* | **Proficient**  *I can do it with some help and few mistakes.* | **Advanced**  *I can do it correctly and with confidence.* |
| I can… | |
| 1 | Determine when a force does **work.** |  |  |  |  |
| 2 | Determine how work and **power** are related |  |  |  |  |
| 3 | Define **horsepower** |  |  |  |  |
| 4 | Define a **joule** |  |  |  |  |
| 5 | Define a **watt** |  |  |  |  |
| 6 | Conclude how **machines** make work easier |  |  |  |  |
| 7 | Recognize how **work input** and **work output** are related for a machine |  |  |  |  |
| 8 | Define **input distance** |  |  |  |  |
| 9 | Define **output force** |  |  |  |  |
| 10 | Define **input force** |  |  |  |  |
| 11 | Define **output distance** |  |  |  |  |
| 12 | Describe how the **Actual Mechanical Advantage** of a machine compares to the **Ideal Mechanical Advantage** |  |  |  |  |
| 13 | Explain why the **Efficiency** of a machine is always less than 100% |  |  |  |  |
| 14 | Define **Mechanical Advantage** |  |  |  |  |
| 15 | Identify the six types of simple machines |  |  |  |  |
| 16 | Identify what determines the mechanical advantage of the six types of simple machines |  |  |  |  |
| 17 | Define a **Lever** |  |  |  |  |
| 18 | Define a **Fulcrum** |  |  |  |  |
| 19 | Define an **Input Arm** |  |  |  |  |
| 20 | Define an **Output Arm** |  |  |  |  |
| 21 | Define a **Wheel and Axle** |  |  |  |  |
| 22 | Define an **Inclined Plane** |  |  |  |  |
| 23 | Define a **Wedge** |  |  |  |  |
| 24 | Define a **Screw** |  |  |  |  |
| 25 | Define a **Pulley** |  |  |  |  |
| 26 | Define a **Compound Machine** |  |  |  |  |
| 27 | Write the equation for **Actual Mechanical Advantage** |  |  |  |  |
| 28 | Write the equation for **Ideal Mechanical Advantage** |  |  |  |  |
| 29 | Write the Equation for **Efficiency** |  |  |  |  |
|  |  |  |  |  |  |
|  | **END GOAL** |  |  |  |  |
| 30 | Use all the concepts in this unit to describe, analyze, and persist in solving problems |  |  |  |  |