Physical Science Guided Reading

NAME DATE PERIOD

Section 5.3 – Simple Machines, pp. 138 – 146

1. Compare and contrast simple and compound machines.
2. Classify the three types of levers based on the locations of their fulcrums, effort forces and resistance forces (loads).
3. Explain how the third-class lever increases resistance distance instead of resistance force. What is true about the mechanical advantage of a third-class lever?
4. What are the main differences between fixed pulleys and moveable pulleys?
5. What is the primary function of an inclined plane?
6. Which property of screws determines their mechanical advantage? What force increases as the threads increase contact with each other or the substance being pulled onto the threads?
7. Explain how a sharpened knife has increased mechanical advantage.