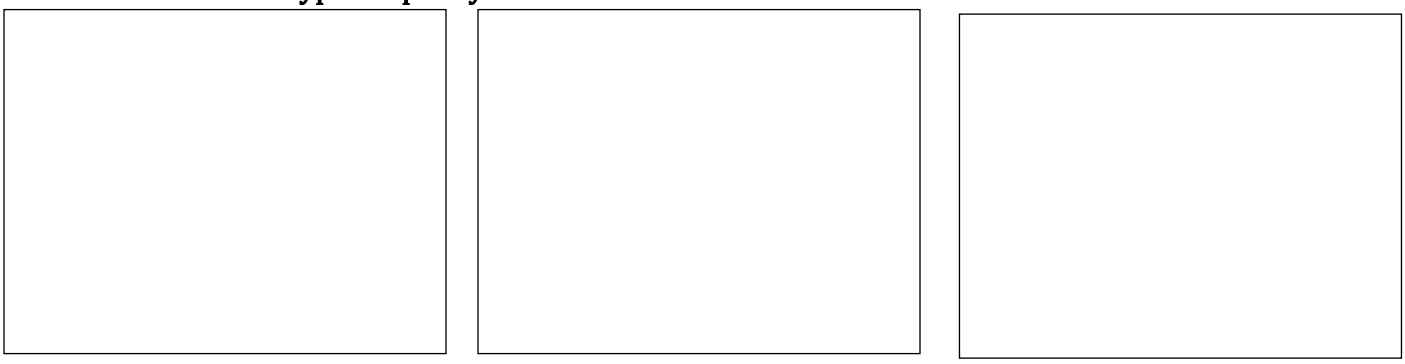
Simple, Compound & Complex Machines
Work, Force, Machine Efficiency

Scientist: _____
Block: _____ Date: _____

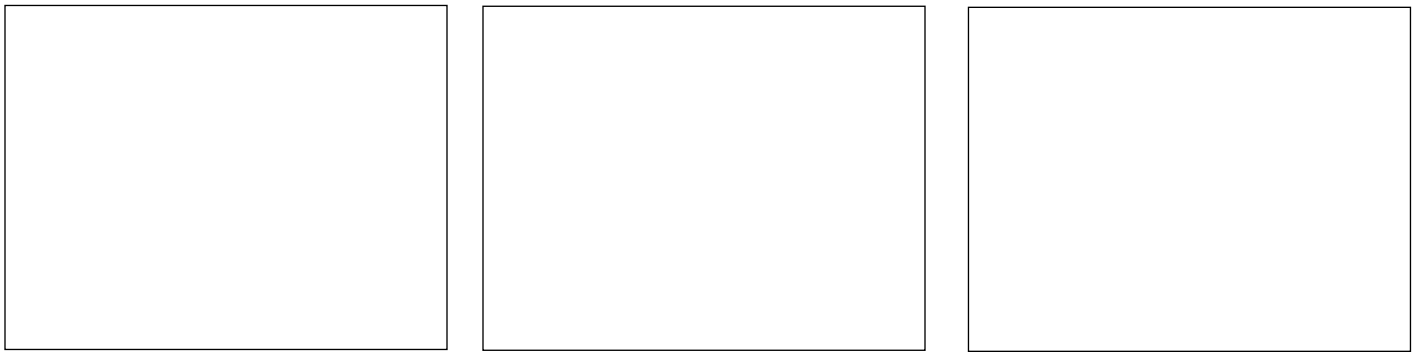
6.P.3B.1 Plan and conduct controlled scientific investigations to provide evidence for how the design of simple machines (including levers, pulleys, inclined planes) helps transfer mechanical energy by reducing the amount of force required to do work.
6.P.3B.2 Design and test solutions that improve the efficiency of a machine by reducing the input energy (effort) or the amount of energy transferred to the surrounding environment as it moves an object.

What are the 7 Simple Machines?

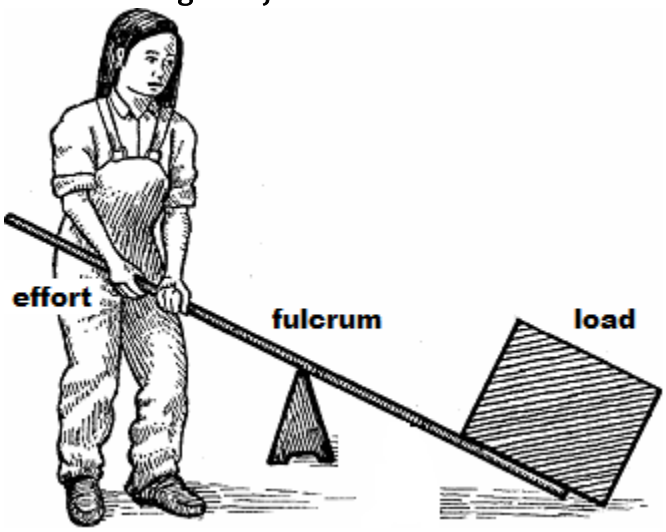
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. What do simple machines do? _____
9. What is the simple machines chant? A simple machine of course, of course, _____.
10. What type of pulley does NOT reduce effort force? _____
11. Label and draw the 3 types of pulleys.



12. Draw three different types of levers.



13. How can the girl adjust her lever to make the load easier to lift? _____

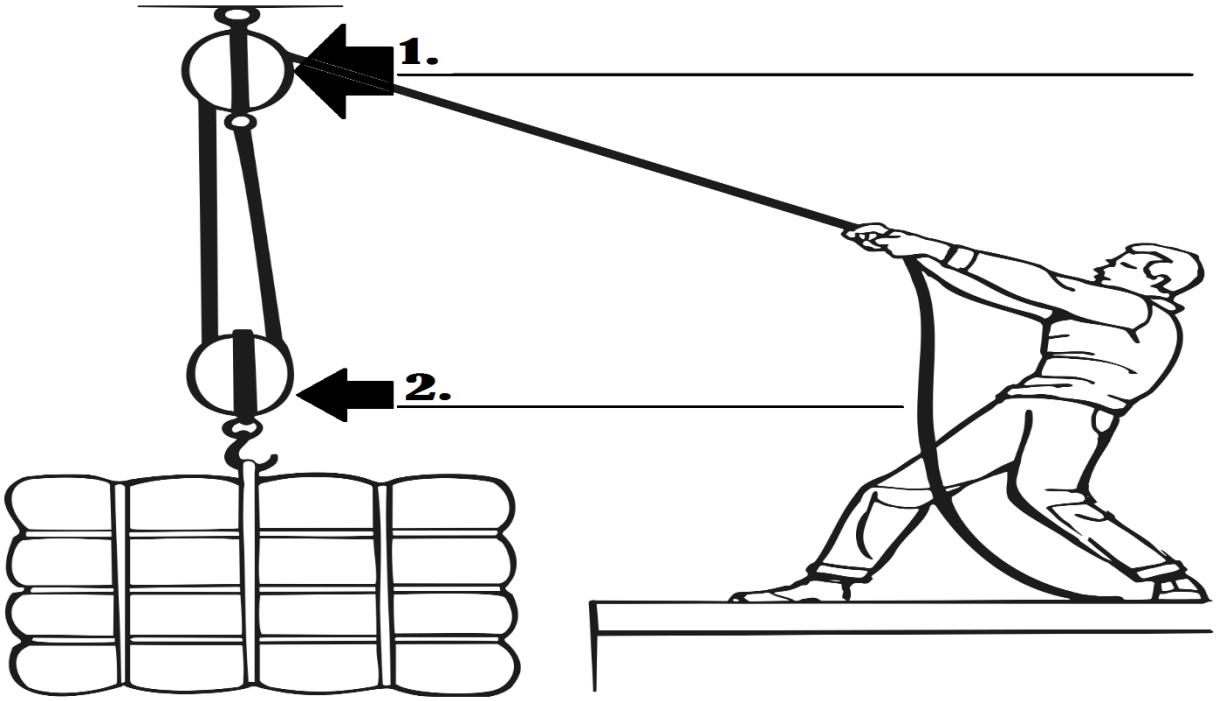


14. How can you reduce effort force to get something up a ramp easier?

_____

_____

15. Block and tackle systems do two things, please list each by the numbers below for the pulley the arrow is pointing to.



16. A screw is related to which other simple machine? _____
How? _____

17. What simple machines are in a bike? _____

18. What is a compound/complex machine? _____

19. Give two examples of a compound/complex machine: 1. _____ 2. _____

20. What is machine efficiency? _____