

Simple Machines Web Quest

Name _____

Go to this website: http://www.physics4kids.com/files/motion_velocity.html

1. Why is velocity a vector and speed is not?
2. What is instantaneous velocity?
3. Describe the difference between instantaneous speed or velocity and average speed or velocity.
4. How can you describe decelerating if you also describe the vector of the measurement? IN other words, if you are decelerating, where are the acceleration and velocity pointing?

Go to this website: http://www.physics4kids.com/files/motion_moment.html

5. What kind of measurement is momentum? What makes momentum this kind of measurement?
6. If you throw a large ball and a small ball with the same force, why does a large ball hurt more? (be specific).
7. Explain why a bullet has high momentum even if it has a small mass.

Go to this website: http://atlantis.coe.uh.edu/archive/science/science_lessons/scienceles1/finalhome.htm

8. What is a simple machine?
9. How many types of simple machines are there?
10. List the six types of simple machines
 - a.
 - b.
 - c.
 - d.
 - e.
 - f.

11. Click on the lever.

a. Describe what a lever is.

b. Give an example of a lever.

12. Click on the inclined plane.

a. Describe what an inclined plane is.

b. Give an example of an inclined plane.

13. Click on the wheel and axle.

a. Describe what a wheel and axle is.

b. Give an example of a wheel and axle.

14. Click on the screw.

a. Describe what a screw is.

b. Give an example of a screw.

15. Click on the wedge.

a. Describe what a wedge is.

b. Give an example of a wedge.

16. Click on the pulley.

a. Describe what a pulley is.

b. Give an example of a pulley.

Go to this website: <http://www.enchantedlearning.com/physics/machines/Levers.shtml>

17. Describe the placement of the different parts of a lever as they are in a 1st class lever.

18. Draw a first class lever.

19. Give two examples of first class levers.

20. Describe the placement of the different parts of a lever as they are in a 2nd class lever.

21. Draw a second class lever.

22. Give two examples of second class levers.

23. Describe the placement of the different parts of a lever as they are in a 3rd class lever.

24. Draw a third class lever.

25. Give two examples of third class levers.

26. Go to the Edhead website

<http://www.edheads.org/activities/simple-machines/>

Click on the Start button

Click on the House button

Complete the 4 house activities. Remember to click finish!!!

Kitchen: Find all 10 simple machines and answer the questions regarding them.

What was your score out of 60 points? _____ pts.

Garage: Find all 10 simple machines and answer the questions regarding them.

What was your score out of 60 points? _____ pts.

Bedroom: Find all 10 simple machines and answer the questions regarding them.

What was your score out of 60 points? _____ pts.

Bathroom: Find all 10 simple machines and answer the questions regarding them.

What was your score out of 60 points? _____ pts.

27. Click on the tool shed and find all the simple machines in each compound machine.

Wheel barrow: Write down all the simple machines that make up the wheelbarrow

Can opener: Write down all the simple machines that make up the can opener.

Stapler: Write down all the simple machines that make up the stapler.

Drill: Write down all the simple machines that make up the drill

What was your overall score out of 65 points? _____ pts.

28. Go to the Tinker Ball website

http://inventionatplay.org/playhouse_tinker.html

Play Tinker Ball at least 3 times. Draw the path you use to solve the puzzle (complete with pictures).

Tinker Ball #1

Tinker Ball #2

Tinker Ball #3

If you finish, you may go to this website and play the simple machines game:

<http://www.msichicago.org/play/simplemachines/>