Work and Simple Machines Practice Test Answers

1. The speed is steady
2. A line that curves upward away from the x axis would show acceleration on a DISTANCE v. TIME graph
3. Acceleration
4. 1 m/s -------- (2-0)/2=1
5. Stays at a steady speed
6. No
7. 3 meters
8. Acceleration at a constant pace
9. 3 m/s -------(60-30)/10=2
10. 330=30/t---- 330t=30---- 30/330=.09 seconds
11. 80/40=2 m/s
12. 30=d/60---- 30 x 60 = d----180m
13. Knife=wedge, can opener= wheel and axle and wedge
14. Pulley system or incline plane as a ramp
15. Wedge and lever
16. Do Not complete This Question
17. Raising a flag on a flag pole, using the pulley system on a crane to lift something heavy
18. Incline plane
19. Scissors= wedge and lever, pencil sharpener=wheel and axle and wedge, wheel barrow=lever and wheel and axle
20. Scissors
21. Incline plane
22. Wedge
23. Fulcrum
24. 300 x 15=4500 Joules
25. 520/5=104 watts
26. 500 x 10=5,000 Joules
27. You must apply a force and move the object over a distance
28. Joules
29. 100=20/t---- 100t=20-------20/100=t--------.2 seconds
30. 100 x 4 = 400 Joules of work. P=400/50---- 8 watts of power
31. 3.30=90 Joules
32. Hold
33. Spreads the force over a longer distance
34. Changes the size or direction of a force
35. 120/10= 12
36. Mechanical advantage
37. A. 12/4 = 3----3 x 100= 300%
38. 12/12=1----1x 100=100%