

Name _____

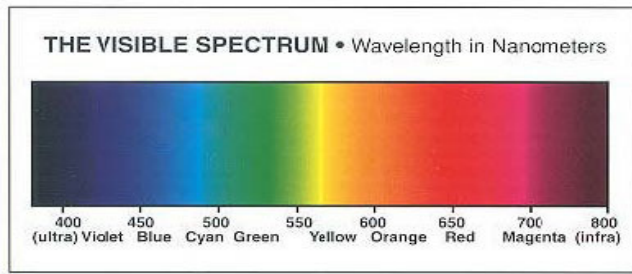
Energy and Waves Common Assessment Review

Place the following examples under the correct type of energy.

Digesting food	Refrigerator	Lava Lamp	Roasting a marshmallow
Juggling	Toaster	Hand Warmers	Sunbathing
Tanning Booth	Injury Packs	Jumping Rope	Powering up computer
Throwing a Ball	Batteries	Hitting a Nail	Riding a Bike
Natural Gas	Bonfire Heat	Television	Curling Iron

<u>Chemical</u>	<u>Mechanical</u>	<u>Thermal</u>	<u>Electrical</u>
1.	6.	11.	16.
2.	7.	12.	17.
3.	8.	13.	18.
4.	9.	14.	19.
5.	10.	15.	20.

- All forms of energy are a combination of what? _____
- If you compress a slinky, what type of energy is increased? _____
- What is the energy transformation of a ball rolling down a hill? _____
- What is the energy transformation of food heating in an oven? _____
- What is the energy transformation of a light bulb lighting up? _____
- What is the energy transformation of a person lifting weights? _____
- What energy transformation takes place when wood is burned? _____
- Give an example of conduction. _____
- Give an example of convection. _____
- Give an example of radiation. _____



31. Compare a length of a violet wavelength to the length of a magenta wavelength.

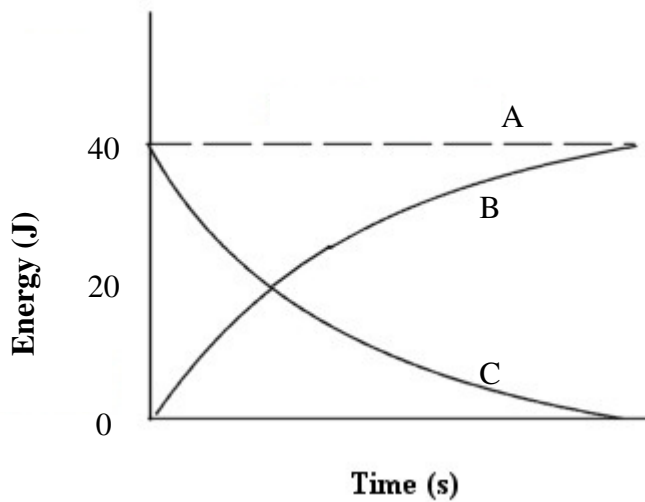
32. Give an example of refraction? _____

33. If you are looking at a red apple, why do you see red?

34. Why would you wear a black coat instead of a white coat in the winter?

35. Does sound travel fastest through a solid, liquid, or a gas?

The graph below represents the energy of a downhill skier as they ski down a hill.



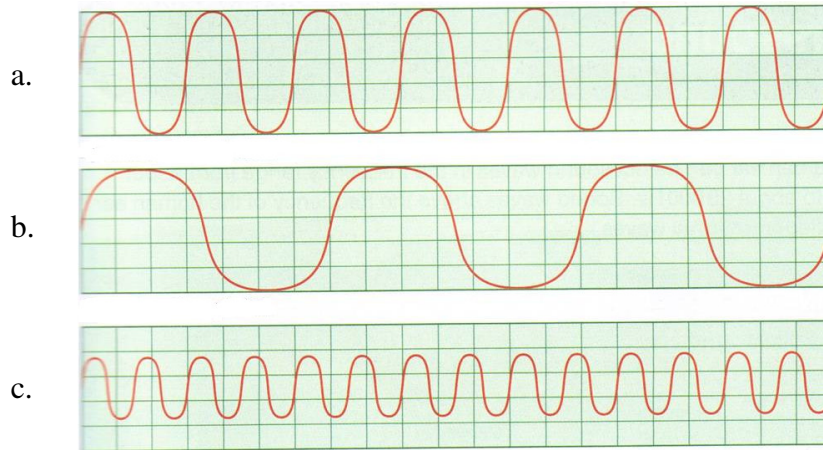
36. Which line represents the kinetic energy of the skier?

37. If the skier's potential energy is 25 J, how much kinetic energy do they have?

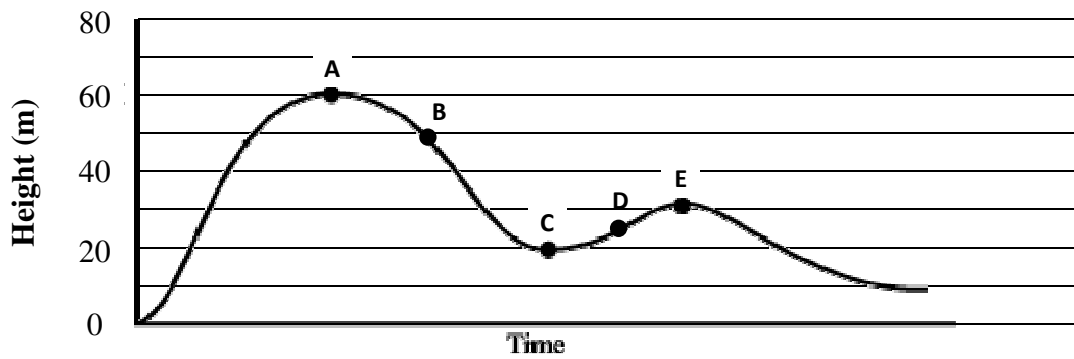
38. Describe the frequency in diagrams a, b, and c.

39. Describe the wavelengths in diagrams a, b, and c.

40. Describe the amplitude in diagrams a, b, and c.



The graph below shows the height of a rollercoaster over time.



41. Where does the roller coaster have the most kinetic energy? _____

42. Where is the roller coaster energy transforming from potential energy to kinetic energy?

43. What is the height of the roller coaster in kilometers (km) at point A? Be sure to include units.
