Chapter 3--Reading Quiz--PHYS 151--S16

Multiple Choice
Identify the choice that best completes the statement or answers the question.

1. Consider this diagram of a guy pushing a car to the left. What type of work is the normal force ($F_N$) doing on the car?
   a. positive work
   b. negative work
   c. zero work
   d. it depends on the weight of the car

2. Kinetic energy is the energy of ____________.
   a. acceleration
   b. motion
   c. potential
   d. position

3. Heat describes the ________________________.
   a. temperature of an object
   b. internal energy of an object
   c. motion of an object
   d. transfer of thermal energy

4. A system is 50% efficient. You put 100 J of energy into this system. How much work is produced?
   a. 150 J
   b. 100 J
   c. 0 J
   d. 50 J

5. Energy from food comes in the form of carbohydrates, proteins, and ____________.
   a. lipids
   b. muscles
   c. calories
   d. meat
   e. grains

6. Which is larger, TMR or BMR?
   a. TMR
   b. BMR
   c. both are the same
   d. it depends on the person’s metabolism

7. The freezing point of water is 0°C or 32°F. What is this temperature in kelvin?
   a. -273 K
   b. 0 K
   c. 136 K
   d. 273 K

8. Latent heat of fusion is the energy required to ____________________.
   a. sublimate matter
   b. change a liquid to gas
   c. raise the temperature of an object
   d. change a solid to liquid

9. The following describes thermal conduction. The thermal conduction through a material is 2 kcal/s. If the area of that material is doubled, what is the new rate of thermal conduction?
   \[
   \frac{Q}{t} = k \frac{A\Delta T}{d}
   \]
   a. 1 kcal/s
   b. 2 kcal/s
   c. 4 kcal/s
   d. 8 kcal/s
   e. 16 kcal/s

10. Who is my favorite student?
    a. Kyle Guidry
    b. Josh Thibodeaux
    c. Janelle Franz
    d. Jeri Leblanc
    e. Me!!
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#### Answer Section

**MULTIPLE CHOICE**

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