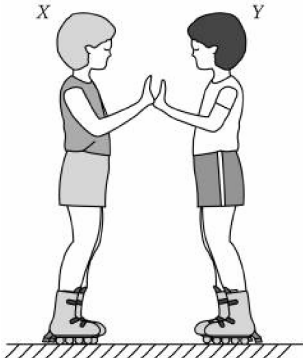


**1ST PERIODICAL TEST IN SCIENCE 8
SY**

Multiple Choice. Encircle the letter of the correct answer.

1. The tendency of an object to resist change in its motion is known as
a. Mass b. Inertia c. Force d. Motion
 2. A net force (an unbalanced force that changes motion) causes an object to
a. stay at the same speed. b. not move. c. Accelerate or decelerate d. None of these
 3. Forces that are equal in magnitude and opposite in direction are known as
a. balanced forces b. net forces c. friction forces d. None of these
 4. Two boys wearing in-line skates are standing on a smooth surface with the palms of their hands touching and their arms bent, as shown above. If Boy X pushes by straightening his arms out while Boy Y holds his arms in the original position, what is the motion of the two boys?

a. Boy X does not move and Boy Y moves backward.
b. Boy Y does not move and Boy X moves backward.
c. Boy X and Boy Y both move backward. The motion depends on how hard Boy X pushes.
d. Both will not move.
- 
5. In science, a push or a pull of an object is called a(n)
a. force. b. acceleration. c. inertia. d. friction
 6. You are riding fast on a skateboard when your wheel suddenly gets stuck in a crack on the sidewalk. Why does your body go flying forward?
a. there is a net force pushing you off your skateboard
b. your inertia keeps you moving forward
c. someone pushed you
d. none of these
 7. The force that pulls falling objects toward Earth is called
a. Gravity b. Free fall c. Inertia d. Acceleration
 8. According to Newton's third law of motion, when a hammer strikes and exerts force on a nail, the nail
a. creates a friction with the hammer.
b. disappears into the wood.
c. exerts an equal force back on the hammer.
d. Nothing will happen
 9. A hot iron is turned off and cools down to room temperature. The iron cools because
a. the iron does not hold heat very well.
b. the room transfers cold energy to the iron
c. heat energy is transferred from the warm iron to the cooler room.
d. the thermal energy is destroyed during an interaction with the room.
 10. Tom boils some water to make a cup of tea. While the water is boiling the temperature
a. increases. b. decreases. c. stays the same. d. none of these
 11. White light is actually a combination of several different _____ of light traveling together.
a. speeds b. types c. Wavelengths d. none of these
 12. Compared to sound, light travels:
a. slow b. very fast c. about the same d. none of these
 13. Light travels in straight paths called:
a. cubes b. rays c. wavelengths d. none of these
 14. Light that bounces off an object is
a. refracted b. transmitted c. reflected d. amplified
 15. Which would light travel through fastest?
a. outer space b. air c. water d. a wall

16. Which of the following sentences uses work in the scientific sense.
- Stan goes to work on the bus.
 - Anne did work on the project for 5 hours.
 - Joseph found that holding the banner in place was hard work.
 - An engine does work on a car when the car is moving.
17. In which of the following cases is no work done?
- A weightlifter lifts a barbell.
 - A weightlifter holds a barbell overhead.
 - A weightlifter slowly lowers a barbell.
 - A weightlifter drops a barbell and the barbell falls to the ground.
18. Energy transferred as heat occurs between two bodies in thermal contact when they differ in which of the following properties?
- mass
 - specific heat
 - density
 - temperature
19. When the net force is equal to zero the forces are said to be _____.
 - Balanced
 - Unbalanced
 - Changing
 - Unchanged

20-27 Choose the best answer from the box below:

- Isaac Newton
 - Law of Inertia
 - Law of Acceleration
 - Law of Interaction

20. The 2nd Law of Motion
21. The 3rd Law of Motion
22. The 1st Law of Motion
23. This law states that “ The acceleration of an object is directly proportional to the force applied and inversely proportional to its mass”
24. The scientist who proposed the “The Three Laws of Motion”
25. This law states that “ A body will remain at rest or move at constant velocity unless acted upon by an external net or unbalanced force”
26. “ For every action there is an equal and opposite reaction”
27. If the force you exert does not make an object move, it basically means
 - No work is done
 - work is done
 - working
 - none of these
28. Work is done when the force applied to an object causes the object to have a _____.
 - Displacement
 - Force
 - Magnitude
 - Change
29. The work done can be calculated as
 - $W = Fd$
 - $F = wd$
 - $d = fw$
 - $w = df$
30. “When work is done, there is a transfer of energy”
 - True
 - False
 - Maybe
 - Not Sure
31. The energy of a moving object is called _____.
 - Potential Energy
 - Kinetic Energy
 - Thermal Energy
 - None of these
32. Stored energy is _____.
 - Potential Energy
 - Kinetic Energy
 - Thermal Energy
 - None of these
33. The rate of using energy is
 - Work
 - Energy
 - Power
 - None of these

34-40 Choose the answer from the box below:

- True
 - False
 - Maybe
 - It depends

34. Work is done on an object when the force applied to it covers a distance in the direction of the applied force.
35. Work is a way of transferring energy
36. When work is done by an object, the object gains energy
37. When work is done on an object, the object loses energy
38. The energy of an object enables it to do work.
39. The unit for power is joules per second
40. Stored energy is known as Kinetic Energy

41. Exists as 'energy in transit' and it is not contained in an object
 - a. Heat
 - b. Temperature
 - c. hotness
 - d. coldness

42. The energy that is contained due to the motion of its particles is called _____
 - a. Temperature
 - b. Solar Energy
 - c. Thermal Energy
 - d. Heat

43. If the objects absorbs heat, what happens
 - a. Its temperature remains constant
 - b. Its temperature changes
 - c. Its temperature does not change
 - d. Nothing will happen

44. What is the tool that measures temperature
 - a. Geiger counter
 - b. Thermometer
 - c. Ammeter
 - d. Rainmeter

45. Thermal expansion can be applied to
 - a. Solids
 - b. Liquids
 - c. Gas
 - d. All of these

46. What measures electric current?
 - a. Voltmeter
 - b. Thermometer
 - c. Ammeter
 - d. Rainmeter

47. What measures the voltage in Electricity?
 - a. Voltmeter
 - b. Thermometer
 - c. Ammeter
 - d. Rainmeter

48. This is the hindrance for the electric charges to flow through the wires.
 - a. Flow of charges
 - b. resistance
 - c. circuits
 - d. current

49. This type of connection increases with increasing loads.
 - a. Parallel Connection
 - b. Series Connection
 - c. Circuit Connection
 - d. None of these

50. This type of connection decreases with increasing loads.
 - a. Parallel Connection
 - b. Series Connection
 - c. Circuit Connection
 - d. None of these