

Matter and Energy- 5.5A(R); 5.5D(S); 3.5C(S)

Name _____

6. Becky sorted objects into two groups. The table below shows how she recorded her data.

Group 1	Group 2
Copper penny	Styrofoam lid
Iron nail	Rubber Duck
Large round rock	Ping pong ball

Based on these results, by which physical properties did Becky group the objects?

- (A) Group 1 contains objects that are conductors of electricity; Group 2 is not.
- (B) Group 1 contains objects that are solids; Group 2 contains objects that are liquids.
- (C) Group 1 contains objects that are good conductors of heat; Group 2 is not.
- (D) Group 1 contains objects that sink in water; Group 2 contains objects that do not.

7. Amanda is having a birthday party and needs ice for the drinks. She sets the ice out 5 minutes before the party begins to prevent it from melting too quickly. At what temperature will the ice begin to melt?

- (F) 100° C
- (G) 0° C
- (H) 32° C
- (J) 212° C

8. Victoria is testing different materials to see which ones are the best conductors of electricity. She repeats the investigation several times. What is one advantage of Victoria repeating her investigation several times?

- (A) To increase accuracy and reliability of results
- (B) To decrease accuracy and reliability of results
- (C) To formulate a hypothesis
- (D) To organize collected data

9. Which of these is the best insulator of electricity?

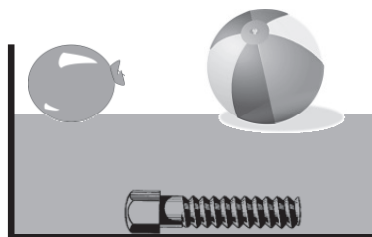
- (A) Steel bolt
- (B) Metal paper clip
- (C) Silver Dollar
- (D) Cotton string

10. A teacher pours tea powder and water together in a glass. She stirs the mixture together to create a solution. Which of the following science tools should be used to separate this mixture?



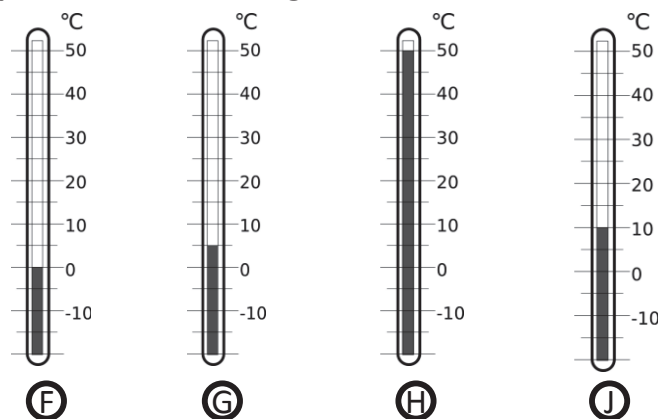
- (F) sieve or strainer
- (G) hot plate
- (H) magnet
- (J) pan balance

11. Which object would be classified as having the greatest density?



- (A) beach ball
- (B) balloon
- (C) water
- (D) bolt

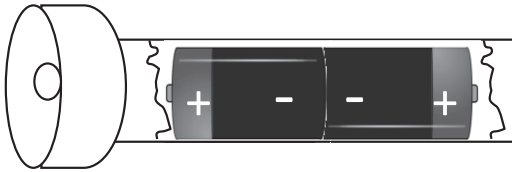
12. Which thermometer shows the freezing point of water in degrees Celsius?



Force, Motion, and Energy- 5.6A(R), 5.6B(R), 5.6D(S)

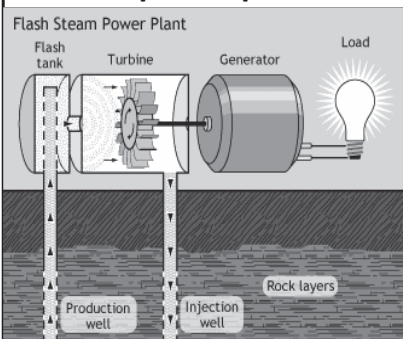
Name _____

1. Students are investigating light energy using a flashlight. One group could not get their flashlight to produce light. Which of these changes should be made to the flashlight?



- (A) Replace the bulb.
- (B) Shake the flashlight to see if any of the wires in the circuit have come loose.
- (C) Turn one of the batteries so the positive end and the negative ends are touching.
- (D) Turn the batteries so the two positive ends are touching.

2. A power plant uses geothermal energy to produce electricity. Heat from the Earth's surface makes the turbine spin. What type of energy is used to make the turbine spin in this power plant?

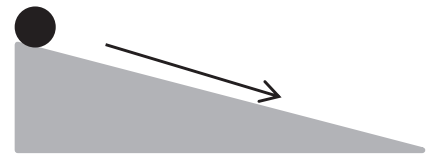


- (F) Sound Energy
- (G) Electrical Energy
- (H) Light Energy
- (J) Mechanical Energy

3. During an experiment, an aluminum thermometer is placed in a pot of water and then put on a hot plate. A student checks the temperature of the water, and notices the other end of the thermometer is warm. What type of energy traveled through the aluminum thermometer to his hand?

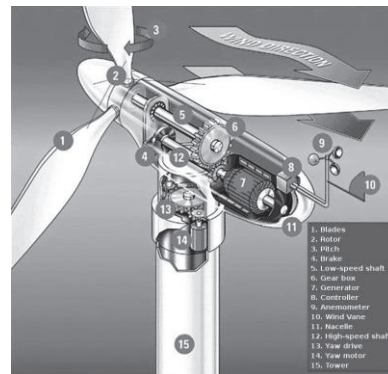
- (A) Thermal
- (B) Solar
- (C) Mechanical
- (D) Light

4. Students are testing the height of ramps and their effect on the distance a marble will travel. The students test the experiment by placing the marble at the top of the ramp and letting go without pushing it. What force is being applied to the marble, causing it to move down the ramp?



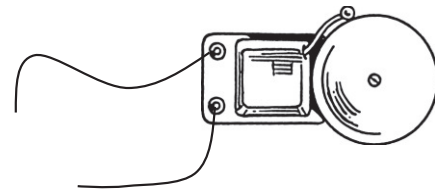
- (F) Magnetism
- (G) Gravity
- (H) Friction
- (J) Air Pressure

5. A wind turbine spins and converts energy of motion into electrical energy used to power factories and homes. Which type of energy is used to make the turbine spin?



- (A) Electrical
- (B) Sound
- (C) Light
- (D) Mechanical

6. The diagram below shows an open circuit. Which object should be added to the end of the wires to make the bell ring?



- (F) Light bulb
- (G) Knife switch
- (H) Energy source
- (J) Aluminum foil