Physics Review Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1.

****

 A B C

1. Determine if the above solids are positive, negative or neutral.

A: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

B: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

C: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Explain how you determined how to classify the solids.

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1. Will the following combinations attract or repell.

A & B \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

A & C \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

B & C \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Object A when rubbed with fur picks up 5 rice crispies, whereas when Object B is rubbed the same way with fur it picks up none. Explain why one material picks up the rice crispies when the other does not.

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What material could Object A be made out of? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What material could Object B be made out of? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. What are the three laws of static charge?

 i) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 ii) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

iii) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. What is required to form an electrochemical cell (a battery).

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5. What is required to form an electrochemical cell (a battery).

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6. For each of the following: draw the symbol and write the purpose of the component in the circuit.

Conducting Wire

Bulb (Load)

Switch (open)

Switch (closed)

Battery

Cell

Voltmeter

Ammeter

7. Draw a circuit with a 5-cell battery with three light bulbs arranged in parallel with a switch that only controls one of the light bulbs

8. Draw a circuit with a 7-cell battery with three light bulbs arranged in series.

Is it possible in series to have a switch that only controls one light bulb? Explain.

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9. What happens to the total resistance of a series circuit when another resistor is added?

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10. What happens to the total resistance of a parallel circuit when another resistor is added?

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11. Two resistors are connected in parallel to a battery. What must the voltage be across these two resistors? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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12. How is a parallel circuit different from a series circuit?

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13.

14.