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| Name: | Grade |
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8th grade Physical Science

Five-A-Days Week 21

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| Monday | Tuesday | Wednesday | Thursday | Friday |
| Every form of matter has two types of properties. What are they?  **Physical and Chemical** | Mike and Mitchell decide to have a foot race. They mark off a stretch of 100 yards, and recruit Cindy to work the stopwatch. Mike took less time than Mitchell to run the 100 yards, what does this tell us about his speed?  **Mike is faster than Mitchell** | Jim is rearranging his apartment and needs to move his entertainment center. If the gravity exerts 15 N and there is 10 N of friction, how much force will Jim need to exert to move it?  **30N( must exert more force than combined forces of gravity and friction** | Liz puts a 1 kg weight and a 10 kg weight on identical sleds. She then applies a 10N force to each sled. Describe why the smaller weight has a larger acceleration.  **Acceleration depends indirectly on the mass of the object** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_  means making a forecast of what will happen in the future based on past experience or evidence.  **inference** |
| Because particles are free to move, a \_\_\_\_\_\_\_\_\_\_\_\_\_ has no definite shape.  **Gas** | While out hiking, you and your buddy decide to have some fun with the rocks laying all around. While sitting on a high cliff, overlooking a lake, you each drop a rock into the water. Describe the change in motion of the rock as it enters the water.  **Speed of rock changes,but not its direction** | Why does an object in motion stay in motion unless acted on by an unbalanced force?  **Because forces are what start and stop motion** | Newton's second law states that the force on a drag racer is equal to the mass of the car times its acceleration. One of the most important factors determining the cars acceleration is the tires on the car. This is because the force accelerating the car forward is provided by  **friction** | Explain kinetic energy? |
| Define Sublimation? | A new type of oven that cooks food quickly and more completely is the convection oven. The key difference in this type of oven and regular oven is that it…..  **Circulates hot air** | \_\_\_\_\_\_\_\_ is anything that has mass and takes up space. | Suppose you have a container filled with iron and sand. You can separate the iron form the sand if you use a magnet, so this is a \_\_\_  **mixture** | What must be added to water in order to change state from liquid to a gas?  **Energy or heat** |
| A \_\_\_\_\_\_\_\_\_\_\_\_\_ is made of two or more elements that are chemically combined. | Forces that are equal in strength and opposite in direction are  **Balanced forces** | James is trying to prove Newton's 2nd law of motion. He tries to move four different objects with different masses from point A to point B. The objects are a toy car, a car, a refrigerator and a kitchen table. James finds that it takes the least amount of force to move the \_\_\_\_.  **Toy car** | In which situation are the individual molecules moving the fastest?  a. in a bowl of hot soup  b. in a glass of tap water  c. in a cup of boiling water  **c** | \_\_\_\_\_\_\_\_ is a type of matter with a fixed composition that cannot be separated by physical means. |
| A substance with a definite volume but no definite shape is a (n)? | When you see steam, fog, or clouds, you are seeing water in the \_\_\_\_\_\_\_\_\_\_ state.  **gas** | Define dependent variable. | What is a bar graph used for? | What is a substance made up of atoms with same identity called? |