**GPS – Rate of reaction intro**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_

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| ***Bellwork*** |
| 1 | 1. Do all reactions happen at the same speed?
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| 1. What does a “rate of reaction” mean?
	1. The speed of different chemical reactions varies hugely. Some reactions are very \_\_\_\_\_\_\_\_ and others are very \_\_\_\_\_\_\_\_\_\_.
	2. The speed of a reaction is called the \_\_\_\_\_\_\_\_\_ of the reaction.
	3. What is the rate of these reactions?

1. Rates of Reaction
	1. A chemical reaction involves a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between particles.
	2. The particles collide and make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
	3. The original particles which react are called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
	4. The substances which are made or produced are called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Reactions, particles and collisions

 Reactions take place when particles collide with a certain amount of \_\_\_\_\_\_\_\_\_\_\_.* 1. The rate of reaction depends on two things:

∙ the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of collisions between particles∙the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with which particles collide.* 1. The minimum amount of energy needed for the particles to react is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and is different for each reaction.
	2. If particles collide with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy than the activation energy, they will \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_. The particles will just bounce off of each other.

1. Changing the rate of reactions
	1. Anything that \_\_\_\_\_\_\_\_\_\_\_\_\_ the number of successful collisions between reactants will speed up a reaction.
	2. What factors affect the rate of reactions?

 ∙ increased \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ∙ increased \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of reactants or **pressure** of gases ∙ increased \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ of solid reactants ∙ use of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

***Work now on the directed readings.***