**Enzymes Break it Down: Exit Slip**

1. What color was the uneaten cracker when treated with iodine?
2. **Taste test**: record the taste of your cracker every 2.5 minutes

|  |  |  |  |
| --- | --- | --- | --- |
| First taste | 2.5 min. | 5 min. | 7.5 min. |
|  |  |  |  |

1. What color was the eaten cracker when treated with iodine? Why do you think this happened?
2. **Demonstration**: Record results

|  |  |  |  |
| --- | --- | --- | --- |
| Student 1  Water | Student 1  Saliva | Student 2  Water | Student 2  Saliva |
|  |  |  |  |

1. Why do you think there were different results in the second saliva demonstration?
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are proteins that speed up or slow down a chemical reaction and are not consumed by the reaction. The most easily understood use of enzymes is in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ process.
3. Amylose, one of three forms of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, is a long polymer of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ subunits bonded together, and is found in crackers. Iodine molecules cause the starch to turn \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in color.
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is an enzyme found in saliva that breaks down amylose into its individual glucose subunits. As the cracker is chewed, salivary amylase starts \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ down the amylase into shorter glucose polymers. Some will be converted and taste a little \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. Because of the large amount of starch in the cracker in the first trial there wasn’t enough amylase in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to break down all of the glucose, resulting in a blue/black color.
6. In the second trial, with a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ piece of ground up cracker in a large \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of saliva, there was enough amylase to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ all of the starch in a few minutes, resulting in a brownish color.

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2. **Demonstration**: Record results

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| Student 1  Water | Student 1  Saliva | Student 2  Water | Student 2  Saliva |
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