Name _____ Period _____ Date _____

Lesson 4: How Do You Eat a Cracker?

Activity 4.1

Purpose
In this activity we will take a close look at how we use our teeth and tongue to chew and swallow a saltine cracker.

Word Wall Words

Enzyme:_____

Amylase:_____

✚ Safety
Do not eat the cracker if you have any dietary restrictions or allergies that would prevent it. If you have an allergy to wheat or gluten, please rely on your lab partners to help you acquire data.

Procedure (Mechanical Digestion)
Being very careful to pay attention to how you are using your **teeth** and **tongue**, bite a small corner off of the cracker, chew it up and swallow it. Set the rest of the cracker aside and answer the following questions:

Which teeth did you use to bite off the piece of cracker? Color these teeth **red** on the diagram to the right:
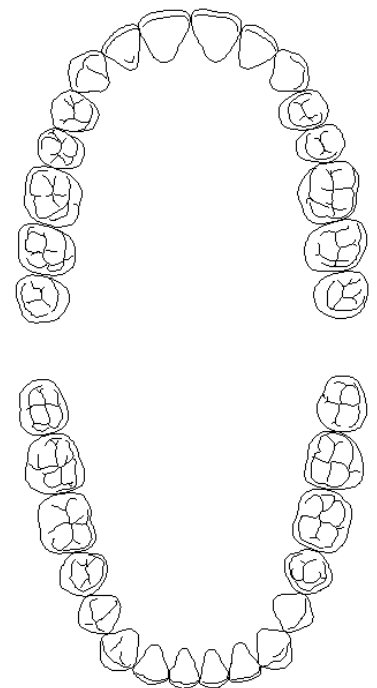
Which teeth did you use to grind up the piece of cracker? Color these teeth **blue** on the diagram to the right:

How are these teeth shaped differently for these roles?

_____

_____

_____

What role did the tongue have while chewing and after you were done chewing?

_____

_____

_____

For the second portion of this lab, you will need to eat the remaining portion of the cracker by chewing it continuously for 2 minutes without swallowing. When the teacher tells you, place the cracker in your mouth. The teacher will start a stopwatch as you start chewing. As you chew this cracker you should record a description of the taste and texture of the cracker during the entire time you are chewing.

Data Table

In the table below, record your observations about the **taste** and **texture** of the cracker as you are chewing it:

Time	Observations
First Starting to Chew	
After Chewing for One Minute	
After Chewing for Two Minutes	

Did the taste of the cracker change during the experiment? If so, how?

_____

_____

Did the texture of the cracker change during the experiment? If so, what does this imply about whether the cracker was dissolved or not?

_____

_____

Considering that taste and solubility are properties, what can you infer about what is going on in your mouth?

_____

_____