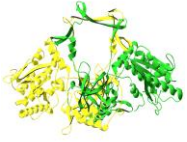


Name: _____



Taco Protein Synthesis Activity

HS-LS1-1
(____ points)



I can statements for the HS-LS1-1 Unit:

- I can **model** the structure of DNA and **describe** the importance of it within our cells.
- I can **construct an explanation** of how genes code for proteins.

Directions: In this activity you will use your knowledge of protein synthesis to decode a DNA strand to find out what type of taco you will build.

1. Complete the chart below using your codon wheel and what you have learned about protein synthesis.

DNA	RNA	Amino Acid
CCC		Glycine
CGT	GCA	
AAA	UUU	
TTT		
CCA		Glycine
TAA		Isoleucine
		Tryptophan
		Methionine

2. What would make up your DREAM taco?

3. There are several ways to produce the amino acids that build a protein. What does this mean?

Name: _____

4. Using the DNA strand you received from your teacher, decode the ingredients for a taco recipe. Use the chart below to guide you in the process.

DNA	mRNA	Amino Acid	tRNA	Taco Ingredient

5. Now that you have completed your table, draw a picture of your taco that was created on a separate sheet of paper (use color). Attach this piece of paper to this lab.

Make sure you label each part of your taco. For example, if you draw a hard shell it would be labeled AUG (see key).

Name: _____

6. Build your own taco recipe (your preferred taco) using the table below.

Taco Ingredient	tRNA	Amino Acid	mRNA	DNA

These ingredients are mRNA:

- UAC- Softshell
- AUG-Hardshell
- CAA-Chicken
- UGG-Beef
- CAG-Cheese
- AGA-Jalapenos
- CCC-Lettuce
- UAU-Sour Cream
- CGU-Olives
- ACC-Tomatoes
- CUA-Extra Cheese