



MAKER JOURNAL

Name: _____

Date: _____

Unit: Effects of Structural Gene Changes on Proteins and Traits

Lesson 2: Point Mutation Telephone Game

Record the template gene sequence and assembled sequences for each round of the “telephone style” activity.

Name of Organism (e.g. duck, lizard, etc.): _____	
Round 1: <i>Template Sequence:</i> _____ <i>Assembled Sequence:</i> _____	
Round 2: <i>Template Sequence:</i> _____ <i>Assembled Sequence:</i> _____	
Round 3: <i>Template Sequence:</i> _____ <i>Assembled Sequence:</i> _____	
Round 4: <i>Template Sequence:</i> _____ <i>Assembled Sequence:</i> _____	
Analysis:	<p><i>Starting from left to right, compare the template and assembled sequences. Identify and circle locations along the sequences where the incorrect bases were added.</i></p> <pre> C C C G ↓ ↓ ↓ ↓ G A G C </pre>



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Draw the trait key provided by your teacher below. For each round, record the mutated traits identified in the analysis.

Mutated Traits for _____ (Name of Organism)

Trait Key Example:

*Mutation(s) occurred in locations: 4, 6
Traits: Black feathers, Long tail*

Position	Traits associated with mutation
1	Non-webbed feet
2	Short, stubby wings
3	Curved bill
4	Black feathers
5	Super large eyes
6	Long tail
7	Short, stubby legs
8	Uneven wing placement
9	Crooked face
10	Dead

Organism Trait Key (draw below):

Round 1 - Mutation(s) occurred in locations:

Traits:

Round 2 - Mutation(s) occurred in locations:

Traits:

Round 3 - Mutation(s) occurred in locations:

Traits:

Round 4 - Mutation(s) occurred in locations:

Traits: