

Names: _____ Period: ____ Score: ____ / 4

Breast Cancer Explanation Rubric

	Exceeds Standard 4 Accurately describes the following:	Meets Standard 3 Accurately describes but leaves out details	Approaching Standard 2 Describes but leaves out details and/or has some mistakes	Below Standard 1 Describes but leaves out vital details and includes incorrect information
Understands the relationship between DNA, genes, and chromosomes	Accurately and in detail describes the relationship between the BRCA1 gene, chromosome 17, and DNA.	Correctly uses the terms that show general understanding of the relationship but w/o details.	Correctly uses terms for 2 or the 3 but does not give details.	Does not attempt to explain the relationship among DNA, genes, and chromosomes.
What is breast cancer? Why can everyone get it?				
Mutations	Explains the three different types of mutations • Gives details of the mutations in the BRCA1 gene	Gives details about EITHER mutations in general or the BRCA1 gene mutations	Attempts to give discuss mutations but leaves out details	Incorrect or vaguely discusses mutations.
What are the different types of mutations? What mutations happen in the BRCA1 gene?				
Cause and Effect	Explains how each item below is caused - cancer - protein dysfunction - incorrect mRNA and DNA	Correctly explains how 2 of the 3 is caused	Correctly explains how 1 of the 3 is caused	Incorrectly explains how any are caused but attempts to explain.
What happens if there is a mutation in the BRCA1 gene?				
Use of Vocabulary	Uses the following vocabulary appropriately and accurately	Uses 10-11 of the words correctly and in context.	Uses 7-9 words correctly and in context.	Uses 6 or less words correctly and in context.
	<ul style="list-style-type: none"> Chromosome Gene DNA mRNA, tRNA, rRNA 	<ul style="list-style-type: none"> BRCA1 Codon Anticodon Protein 	<ul style="list-style-type: none"> Transcription Translation Mutation Cell Cycle 	<ul style="list-style-type: none"> Cell Cycle Checkpoints Shape Function Repair

This is the standard that we were trying to learn. Read it and **HIGHLIGHT** all the parts you understand.

The *genetic information* responsible for inherited *characteristics* is encoded in the DNA *molecules* in *chromosomes*. DNA is composed of four subunits (A,T,C,G). The sequence of subunits in a *gene* specifies the amino acids needed to make a protein. Proteins express inherited traits (e.g., eye color, hair texture) and carry out most cell *function*.

Do you think your group met this standard?

Circle: Yes or No

Do you think **you** met this standard?

Circle: Yes or No