

Thursday, February 13, 2014

Unit: Genetics

Lesson 20

Big Ideas

Genetic information is passed from parent to offspring.

Living things change over time: Evolution

Living things are alike yet different

Objectives

1. Students will be able to use context vocabulary to read and understand text.
2. Students will be able to identify an allele and understand how it effects inheritance.
3. Students will be able to explain the difference between dominant, recessive, homozygous, and heterozygous in a genetics activity.

Materials

Science Notebooks

Science books

Spongebob practice sheets

Procedures/Strategy

1. Students will enter the classroom and take down the I Can statements in their notebooks. Teacher will use these as the objectives of the day.
2. Activation of prior knowledge (Engage): Quick Review
 - Think/Pair/Share:
 - What does it mean to say something is dominant or recessive? What are the roles of alleles in inheritance? What does it mean to be homozygous, heterozygous?
 - Students lead to consider these questions in pair groups.
3. Explain: Chalk Talk:
 - Using textbox from lesson 2, what is a monohybrid cross?
 - How do we perform a cross? What does it show us?
 - Difference between phenotype and genotype

4. Elaborate: Spongebob guided and independent practice
 - Using the Bikini Bottom Genetics Sheet, go through #'s 1, 2, 3 and on to #4 before partnered practice and then independent practice.
 - Have extra sheets for those ready to move on

Content Vocabulary

Genetics	Gene	Phenotype
Dominant Allele	Fertilization	Homozygous
Recessive Allele	Trait	Heterozygous
Heredity	Allele	Punnett Square
Purebred	Probability	
Hybrid	Genotype	

Evaluation

1. Formative

Discussion (observe/listen), Thumbs up/down, worksheet check

Entrance Slip tomorrow

2. Summative

N/A

Extensions/Next Steps

- If students are struggling in the transition to genetics, reading for homework and extra practice will help. Continuation of practice tomorrow.
- Next Lesson: Punnett Squares Practice.
- Homework: Bikini Bottom Practice Page