

Friday, February 21, 2014

Unit: Genetics

Lesson 25

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 their knowledge of probability, dominant versus recessive, homozygous vs heterozygous, and genotype versus phenotype to complete a lab activity with a partner.
2. Students will be able to define probability and its relationship to genetics.
3. Students will be able to explain co-dominance and incomplete dominance.

Materials

Science Notebooks

Science books

SmileyFace Lab Sheets

Colored Pencils

Procedures/Strategy

1. Students will enter the classroom and take down the I can statements in their notebooks. Teacher will go over the statements as objectives of the day, preparing the students for the busy lab day.
2. Activation of prior knowledge (Engage): Consider yesterday lab.
 - Talk with a partner about the characters your smiley face had
 - Are there any characteristics that show co-dominance inheritance patterns?
Or incomplete dominance patterns?
3. Explore: Smiley Face Lab
 - Directions given in direct instructions
 - More work up front means less confusion later--be explicit for students!

- Materials at the front of the room
4. Explain: Follow up post lab sheet
 - Students to complete the post lab independently or with their partner. To be discussed next class or at the end of class pending time.
 5. Elaborate: Create your Smiley Face/ Complete reading activity “Why can your brain read this?”
 - Students use the colored paper, colored pencils, etc. to create their smiley face.
 - Students answer questions in their science notebook about the article.

Content Vocabulary

Genetics	Purebred	Trait
Dominant Allele	Hybrid	Allele
Recessive Allele	Gene	
Heredity	Fertilization	

Evaluation

1. Formative

Discussion (observe/listen), Think/Pair/Share Feedback, Post Lab

2. Summative

N/A

Extensions/Next Steps

- Individual attention to students who are struggling with punnett squares. Pull students during study hall if necessary.
- Next Lesson: Smiley Lab continued/Reading
- Homework: Lesson 3 Text boxes and vocabulary due Monday.