Wednesday, February 4, 2014

Genetics Lesson #2

**AIM:** *What is the difference between asexual and sexual reproduction?*

**Classwork:** 13 Regents questions collected and graded on Scantron

**Key Concepts:**

* Sexual reproduction involves 2 parents who each contribute a gamete.
* Gametes are formed by meiosis and combine together during fertilization.
* Because of the genetic recombination that occurs during meiosis and fertilization, offspring in sexual reproduction have a unique combination of the mother and father’s DNA.
* In sexual reproduction, offspring often resemble the parents because of the genes that they inherited from the parents.
* Genetic combination leads to variety, or variations in populations of species that reproduce sexually.
* Asexual reproduction, also known as cloning, involves a single parent making a copy of itself
* In asexual reproduction, the offspring is genetically identical.
* Single-celled organisms and bacteria rely on asexual reproduction to continue their species.
* Organisms that reproduce asexually divide by mitosis to make identical copies with identical DNA
* Body cells divide asexually, by mitosis, for growth and repair.
* Some plants and organisms such as starfish can reproduce both sexually and asexually.

**Key Vocabulary:**

**Sexual reproduction**- reproduction that involves 2 parents which make a genetically unique, but similar offspring

**Asexual reproduction-** reproduction that involves 1 parent which makes a genetically identical offspring

**Genetic recombination-** the random assortment of genes that occurs during meiosis and fertilization of sexual reproduction only

**Cloning-** making exact copies

**Practice Questions:**

1. Why is there variation within species that reproduce sexually?
2. Why do sexually produced offspring resemble their parents?
3. What types of organisms do asexual reproduction?
4. What is the difference between asexual and sexual reproduction?

**WEDNESDAY FEBRUARY 4, 2015**

**UNIT/LESSON:** GENETICS, Lesson 2

**AIM:** *What is the difference between sexual and asexual reproduction?*

**ASSIGNMENTS:**

* 13 Regents questions collected and graded on Scantron

**HOMEWORK:**

* no HW

**ABSENT:**