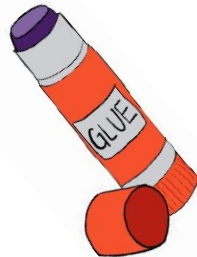




Glue this side into your notebook.



GENETICS

- CHECKLIST KEY**
- I could teach this.
 - I somewhat get it.
 - I've heard of it.
 - I need to learn this.

THE THINGS I SHOULD KNOW BEFORE 8th GRADE:

- All living things (organisms) are made from cells.
- Organisms inherit many traits from parents.
- Cells come from other pre-existing cells (Modern Cell Theory).
- Cells and their organelles perform specific functions, and many cells are different across kingdoms.
- Cells divide to result in more cells through mitosis.
- Living things are organized from cells to tissues to organs to organ systems to organisms.

THE MOST BASIC IDEAS TO KNOW AFTER THE UNIT:

- Organisms pass on genetic information through reproduction.
- Every organism on Earth comes from a long line of ancestors who reproduced successfully every generation.
- Reproduction can be the mixing of genes from two individuals or one individual to the next generation.
- DNA is the genetic code that is passed down from parent to offspring.
- Traits can be influenced by more than one gene.
- Genes can influence more than one trait.
- Environmental conditions and genetic factors can influence the expression of traits.

I KNOW...

- a. how deoxyribonucleic acid (DNA) , genes, and traits are related
- what alleles are related to genes
- that one gene can influence more than one trait and that one trait might be influenced by multiple genes
- what a pedigree is and what its purpose is
- b. what a Punnett square is and what its purpose is
- the difference between recessive, dominant, and co-dominant alleles
- the difference between genotype and phenotype

I CAN...

- a. complete pedigrees to
- show the relationship of phenotypes and genotypes and;
 - predict what traits offspring and parents have based on dominant, recessive, and co-dominant traits
- b. predict if a phenotype of a trait is recessive or dominant based on information
- conduct a long-term investigation to analyze and compare characteristics passed on from parent to offspring through sexual and asexual reproduction
- complete Punnett squares to
- show the probability of offspring related to genotype and phenotype and;
 - predict what traits offspring and parents have based on dominant, recessive, and co-dominant traits

VOCABULARY

<input type="checkbox"/> dominant	<input type="checkbox"/> recessive	<input type="checkbox"/> homozygous	<input type="checkbox"/> DNA
<input type="checkbox"/> co-dominant	<input type="checkbox"/> pedigree	<input type="checkbox"/> purebred	<input type="checkbox"/> probability
<input type="checkbox"/> genotype	<input type="checkbox"/> phenotype	<input type="checkbox"/> heterozygous	<input type="checkbox"/> trait
<input type="checkbox"/> Punnett square	<input type="checkbox"/> offspring	<input type="checkbox"/> hybrid	<input type="checkbox"/> allele
<input type="checkbox"/> sexual reproduction	<input type="checkbox"/> parent	<input type="checkbox"/> Gregor Mendel	<input type="checkbox"/> gene