

11-1 and 11-3

Define inheritance –

Define genetics –

Describe self-pollination –

Describe cross-pollination –

List several traits that Mendel used in his pea studies.

P1 –

F1 (P2) –

F2 –

DNA REVIEW:

Where is DNA found in all cells?

What are the two main functions of DNA?

1.

2.

Gene –

Trait –

Each gene has two versions called _____.

One from the _____.

The other from the _____.

Dominance –

Recessiveness –

Law of segregation –

Produce a sketch showing how sex chromosomes segregate in males and females during gamete formation.

Explain WHY fathers determine the sex of their children.

11-3

Incomplete dominance –

Example –

Co-dominance –

Example –

Multiple alleles –

Example –

Polygenic inheritance –

Example –

11-2, 14-1, and 14-2

Probability -

Males have _____ chromosomes

Females have _____ chromosomes

Eggs

XX

Sperm

XY

Draw and complete a punnett square below to show the probability of having a boy or girl baby.

What is the probability of having a boy? _____ A Girl? _____

VERY IMPORTANT VOCABULARY

Phenotype –

Example -

Genotype –

Examples –

Homozygous –

Examples -

Heterozygous –

Examples -

CAPITAL LETTERS –

lower case letters -

Complete the punnett square in the space below as we complete it together.

Results:

Genotypes =

Phenotypes =

Practice problems

1. Dominant/recessive

2. incomplete dominance

3. Blood Type

4. Sex Linked

10-2 and 11-4

MITOSIS and MEIOSIS REVIEW

What is the result of mitosis?

Why must DNA be copied before a cell can undergo mitosis?

If a cell has 20 chromosomes and undergoes mitosis, how many chromosomes will the new cell have?

Gametes (sex cells) have _____ the number of chromosomes as the parent cell.

What would happen to the offspring of sexual reproduction if the number of chromosomes were not reduced by one half?

Meiosis –

Crossing over –

Non-disjunction –

Human example –

A _____ is formed when a sperm fertilizes an egg.

What happens to the number of chromosomes when a zygote is formed?

Which type of cell division occurs after the formation of a zygote and the development of an embryo?

What process do the cells of the embryo undergo as they divide to produce a new organism?