

2011 Genetics Review Sheet

VOCABULARY

Name _____

Chromosome	Homozygous	Meiosis
Gene	Hybrid	Replication
Trait	Heterozygous	Cytokinesis
Allele	Mendel	Mutation
Dominant	Probability	Cancer/Tumor
Recessive	Punnett square	Amino acid
Phenotype	Haploid	DNA
Genotype	Diploid	RNA
Purebred	Mitosis	Carrier

DNA STRUCTURE AND FUNCTION

Resources: DNA worksheet, DNA extraction lab, DNA quiz

- ☐ What is a gene?
- ☐ Where are chromosomes located?
- ☐ 2 main scientists that established the structure of DNA?
- ☐ Female scientist who paved the way for them?
- ☐ Shape of DNA?
- ☐ Sugar of DNA?
- ☐ 4 bases of DNA?
- ☐ What pairs with what?
- ☐ How does it copy itself? What is the term for this?

MITOSIS

Resources: Mitosis Notes in Notebook

- ☐ What is it and why is it important?
 - o Describe the major stages and put them in order?
 - o How many cells are made from mitosis?
 - o How many chromosomes are found in each cell after mitosis? Haploid or diploid?
 - o What type of cells does this occur in?
 - o What happens during interphase and cytokinesis stages of cell division?

CANCER

Resources: Cancer- Cell Division Gone Wrong Worksheet, Cancer reading.

- ☐ What is cancer?
- ☐ What are some ways cancer is treated?
- ☐ What things can we do to possibly prevent getting cancer?

PUNNETT SQUARES

Resources: SpongeBob Worksheet, Challenge worksheet(s), Term/ Punnett Square Quiz

- ☐ Be able to set up and execute a Punnett square problem.
 - o Be able to describe the outcome of a Punnett square problem:
 - o What are the possible genotypes? Possible phenotypes?
 - o Figure out the probability/percentage of inheritance of a trait using a Punnett square

PROTEIN SYNTHESIS

Resources: Class notes, book pages 99-101 and the "Decoding" Worksheet