

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