**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**8th Grade Science**

**Lesson 2 Notes**

**Genetics**

1. **What is the passing of traits from parents to offspring called?**
2. **What are alleles? Give examples.**
3. **What is genetics? How is it different from heredity?**
4. **Who is the father of genetics? What type of plant did he mostly study on and why?**
5. **What is a hybrid?**
6. **What is a purebred?**
7. **Describe cross – pollination?**
8. **What is a dominant allele? Show one.**
9. **What is a recessive allele? Show one.**
10. **What is a punnett square used for?**
11. **Explain the difference between genotype and phenotype.**

**Genotype –**

**Phenotype-**

1. **Explain the difference between homozygous and heterozygous.**

**Homozygous –**

**Heterozygous –**

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**8th Grade Science**

**Lesson 2 Notes**

**Genetics Since Mendel**

1. **Describe incomplete dominance.**
2. **Example of incomplete dominance: In 4 o’clock flowers cross a red flower with a white flower.**
3. **In 4 o’clock flowers cross a red flower with a pink flower.**
4. **What are multiple alleles?**
5. **Name the three alleles for blood type.**
6. **Name the four blood type phenotypes and then give the genotypes of each.**

**1)**

**2)**

**3)**

**4)**

1. **What is polygenic inheritance? Give three examples.**
2. **Describe chromosomes disorders.**

**1)**

**2)**

**3)**

**4)**

1. **Name the gene pairs for male and female.**

**Male –**

**Female -**

**10. What is a sex-linked gene? Give examples.**