Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Number: \_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_

**Handout: Male Female**

1. Draw a string of pearls on the line below:

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The pearl necklace represents the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, while the pearls represent the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The material that makes up the pearl necklace is **D**eoxyribo**N**ucleic **A**cid or \_\_\_ \_\_\_ \_\_\_.

1. Draw and label a pair of human male (\_\_\_\_\_) chromosomes, and a pair of human

 female (\_\_\_\_) chromosomes.

 Male Female

1. a. What process separates the XY in males, and separates the XX in females? It

 is a type of sexual reproduction.

 b. What advantage does sexual reproduction give a species that asexual

 reproduction (mitosis or binary fission) not give?

 c. What three things ensure that genes are “reorganized” during meiosis?

1. Construct a 2 x 2 (4 box) Punnett Square below. Put X X across the top, and an X and Y along the side. Complete the cross. Give the phenotypic ratio for the cross.
2. a. Which gender controls if a male child or a female child is born?

 b. What percentage of time does each gender of child form?

 c. What is 50% written as a fraction?

 d. What are the odds of two girls being born consecutively to a couple?

 e. What are the odds of three boys being born consecutively to a couple?