**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Reproduction**

**TOTAL: \_\_\_\_\_\_\_ /68**

**PART A Multiple Choice: 2 points each ( / 20)**

1. Which of the following statements is true:
   1. In general, boys enter puberty before girls
   2. The last set of chromosomes code for a male (xx) or a female (xy)
   3. The birth control pill works by preventing the ovary from releasing an egg
   4. Gametes contain one set of chromosomes.
2. Which of the following is a gamete cell?
   1. A blood cell
   2. A sperm cell
   3. A tissue cell
   4. A bone cell
3. The only method of contraceptive, which protects you from most STI’s is:
   1. Oral contraceptives (Birth Control Pills)
   2. Condoms
   3. The patch
   4. Injectable contraception
4. What is the hormone responsible for the major changes in puberty in boys
   1. Testosterone
   2. Progesterone
   3. Estrogen
   4. Ovulation
5. During ovulation the female egg travels from the ovary into the
   1. Uterus
   2. Cervix
   3. Fallopian Tube
   4. Fetus
6. There are \_\_\_\_ chromosomes in a new cell
   1. 10
   2. 23
   3. 46
   4. 21
7. The \_\_\_\_\_\_ is the part of the plant male reproductive organ where pollen is produced and stored.
   1. Stigma
   2. Style
   3. Anther
   4. Ovary
8. HIV can be spread…
   1. through the use of a pre-used needle
   2. through contact with blood of an infected person
   3. through sexual intercourse with an infected person
   4. All of the above
9. The process of cellular respiration occurs in the
   1. Nucleus
   2. Chloroplast
   3. Mitochondrion
   4. Cytoplasm
10. The process of photosynthesis occurs in the
    1. Nucleus
    2. Chloroplast
    3. Mitochondrion
    4. Cytoplasm

**PART B: Fill in the Blank (2 point each /14)**

WORD BANK:

Embryo Fetus Birth

Fertilization Ovum Zygote Spermatozoon

Steps in Human Reproduction:

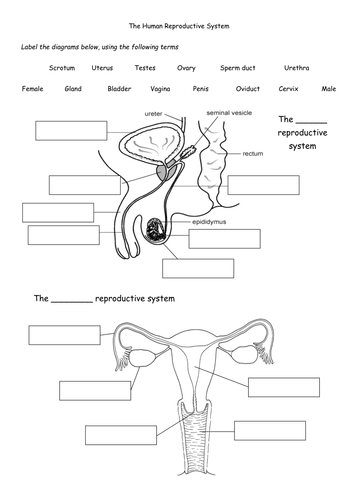
1. The male gamete (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) fuses with a female gamete

(\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_). This process is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. This fusion produces an initial cell called a \_\_\_\_\_\_\_\_\_\_\_ that contains complete genetic material.
2. Between week 1 to 9 cell division occurs and the developing young is referred to as

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. After this point the offspring is then referred to as a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ happens after full gestation occurs. For humans, this could occur between week 38 and 40.

**PART C: Label the diagrams ( 1 point each /14)**

**PART D: Fill in the chart (1 point each /10)**

|  |  |  |
| --- | --- | --- |
|  | Inputs | Outputs |
| Photosynthesis | 1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Cellular respiration | 1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**PART E: EXPANDED ANSWER /10 points**

Using the apple tree as an example, explain the sexual reproduction of this angiosperm (from flowering to new plant growth.)