

Topic 1.3 Sexual Reproduction and Meiosis

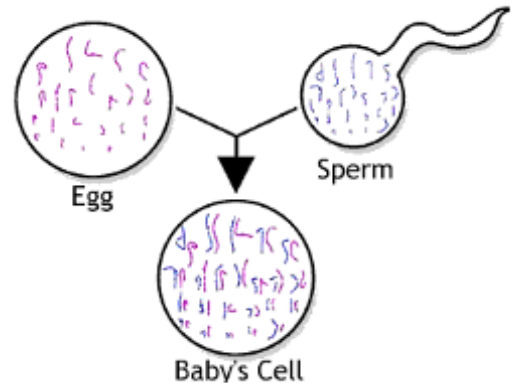
KSA Gr 9 Science Quiz Topic 1.3 Concept 1 & 2

Total: 15 points

Name: _____

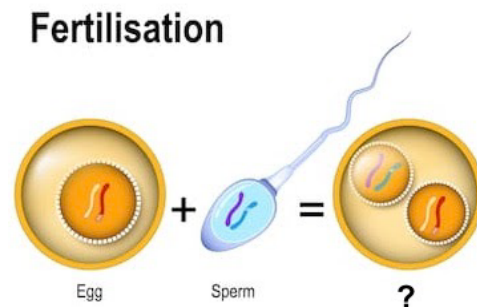
1) How are eggs and sperm similar ?

- A - They are diploid cells
- B - They are haploid cells
- C - They are produced by mitosis
- D - They are produced by fertilization



2) What is formed when a sperm fertilizes an egg ?

- A - Gamete
- B - Zygote
- C - Haploid cell
- D - Homologous chromosomes



3) A Vancouver Island Sea Otter has 38 chromosomes in its body cells. How many chromosomes would you expect a female Sea Otter to have in its egg cells?

- A - 38 chromosomes
- B - 76 chromosomes
- C - 38 chromosomes
- D - 19 chromosomes



4) Which of the following (I - III) is associated with sexual reproduction ?

| | |
|-----|---------------|
| I | meiosis |
| II | fertilization |
| III | pollination |

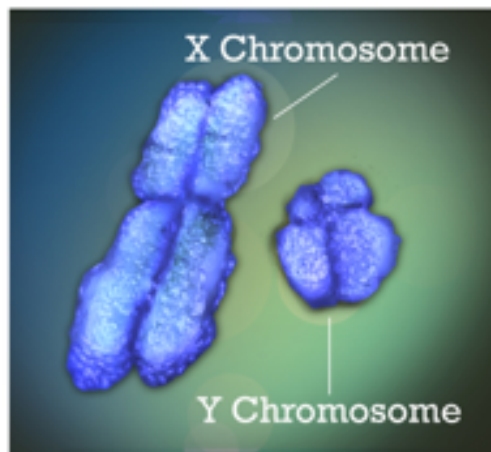
- A - I and II only
- B - I and III only
- C - II and III only
- D - I, II, and III

5) During the first four phases of Meiosis I (Prophase I, Metaphase I, Anaphase I, Telophase I), two haploid cells are produced. True or False ?

- A - True
- B - False

6) How many chromosomes are in the human gamete ?

- A - 47
- B - 23
- C - 21
- D - 46



7) During which phase of Meiosis are the homologous chromosomes lined up in the middle of the cell ?

- A - Metaphase I
- B - Anaphase I
- C - Prophase II
- D - Metaphase II

8) During which phase of Meiosis does the nuclear membrane disappear ?

- A - Anaphase I and Prophase II
- B - Prophase I and Prophase II
- C - Interphase and Prophase I
- D - Telophase I and Telophase II

9) How many chromosomes are in the body cells of a normal human being ?

- A - 46
- B - 23
- C - 47
- D - 45



10) Through the complete process of meiosis, four diploid cells are produced.
True or false ?

- A - True
- B - False

11) Another term used to describe sex cells (egg, sperm) ?

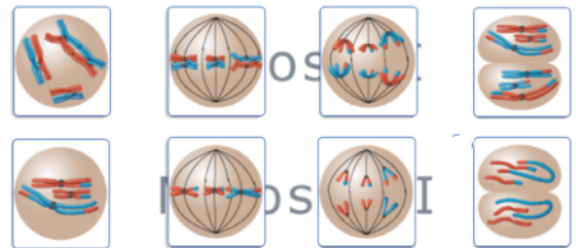
- A - zygote
- B - homologous
- C - gamete
- D - duploid



12) Briefly describe the purpose of Meiosis ?

(Short Answer)

13) What do the terms haploid and diploid mean ?
(Short Answer)



14) Do all living things have two biological parents ? Briefly explain why or why not.



15) Briefly describe the fertilization process ?

(Short Answer)



16) Of the many sperm that approach and surround an egg, only one can fertilize the egg. In terms of the fertilization process and chromosome numbers, explain why is this logical ? Bonus question.

