

Name _____

Date _____

Snurfle Genetics and Punnett Squares

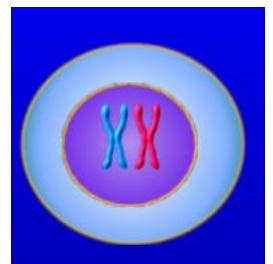
Instructions: Perform a Google search for Snurfle Meiosis (it is on the biomanbio site) or type the link bit.ly/3dzktrv. Click on Start New Game. Click on "Click Here to Continue." Read the introduction and click to continue again.

Complete the Genetics Interactive-Read the information and answer the questions below.

1. Sketch the Punnett square with the gametes and the alleles. Also fill in the boxes with the fertilized eggs (zygote).
2. What color snurfle did the following combinations result in: GG _____, Gg _____, gg _____
3. The genotype is the _____.
4. The phenotype is the _____.
5. Dominant alleles are represented by a _____.
6. Recessive alleles are represented by a _____.
7. How many recessive alleles are needed to show a recessive trait?
8. _____ means an organism has 2 copies of the _____ allele.
9. _____ means an organism has 2 _____ alleles in its genotype.
10. Write the genotypes for the snurfle babies that are homozygous _____ and heterozygous _____.

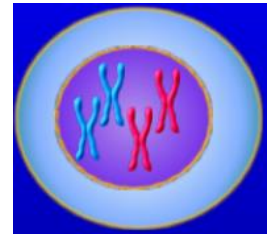
Complete the Chromosome Quandary-Read the information and answer the questions below.

11. Chromosomes are made of _____.
12. DNA is a long molecule, but during meiosis it is _____ and packaged to make _____.
13. Draw both pictures of a chromosome. Label your pictures.
14. How many chromosomes are pictured here? _____



15. How many chromosomes are pictured here? _____

16. Each cell at the end of Meiosis has _____ the number of chromosomes as the cell at the start of meiosis.



Complete the The Meiosis and Genetics Quiz - Answer the questions by writing out the answers

17. Which phase occurs before meiosis? _____

18. Which of the following take place during interphase? _____

19. What is true about the cell pictured below and how do you know?

20. Meiosis I and Meiosis II both have the same order for their phases. Which of the following is the correct order? _____

21. What important events take place during prophase I? _____

22. Why do organisms do meiosis? _____

23. The diagram to the right summarized Meiosis I. Which of the following statements is true?

24. Which phase of Meiosis is shown to the right? _____

25. Which phase of Meiosis is shown to the right? _____

26. Which phase of Meiosis is shown to the right? _____

27. Which phase of Meiosis is shown to the right? _____

28. The division of the cytoplasm as shown to the right is called _____.

29. What is shown to the right? _____

30. What is shown to the right? _____

31. What is shown to the right? _____

32. What is shown to the right? _____

33. What would be the genotype and phenotype of the baby produced by the following fertilization event?

34. What percent of the offspring in the Punnett square and heterozygous?

35. What percent of the offspring in the Punnett square and homozygous recessive?

36. The end result of meiosis is _____.