

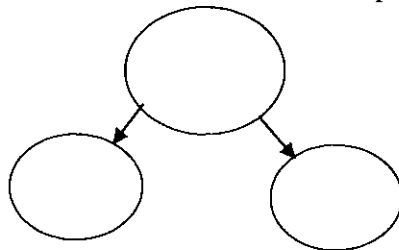
## Snurfle Meiosis

Name: \_\_\_\_\_

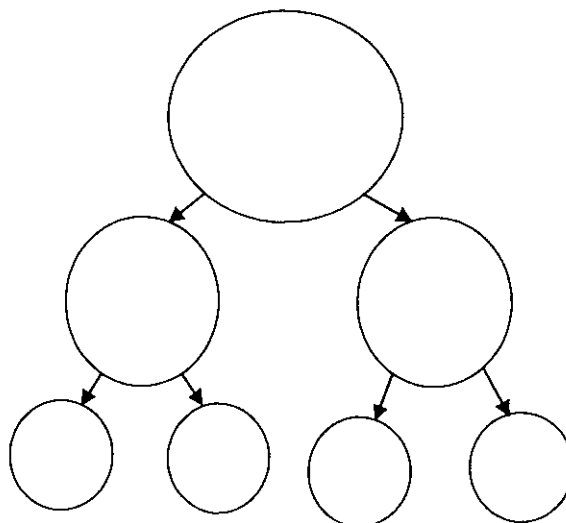
Date: \_\_\_\_\_

- Click on Snurfle Meiosis App
- Click on Continue
- Click on Continue
- Click on Meiosis and Genetics Interactive and follow directions as you answer the following questions.

1. When does interphase occur? \_\_\_\_\_
2. What occurs during interphase? \_\_\_\_\_
3. Uncoiled stringy DNA is called \_\_\_\_\_.
4. Human cells have \_\_\_\_\_ pieces of chromatin.
5. Half of your DNA comes from your \_\_\_\_\_ and half from your \_\_\_\_\_.
6. DNA has \_\_\_\_\_ that determines traits of an organism.
7. Different forms of a gene are called \_\_\_\_\_.
8. What are the 2 alleles for fur color in Snurfles and which letters represent those alleles?
  
9. \_\_\_\_\_ is when DNA copies itself and it occurs during \_\_\_\_\_.
10. \_\_\_\_\_ are made during Meiosis. Examples of gametes are \_\_\_\_\_ and \_\_\_\_\_.
11. Meiosis occurs in \_\_\_\_\_ divisions, Meiosis I and Meiosis II.
12. List the phases for Meiosis I.
  
13. List the phases for Meiosis II.
  
14. During prophase I the chromosomes \_\_\_\_\_ and become \_\_\_\_\_.
15. Chromosomes that are the same size and have the same genes are called \_\_\_\_\_.
16. Each half of a replicated chromosome is called a \_\_\_\_\_.
17. Sister chromatids of a chromosome are \_\_\_\_\_.
18. The nucleus \_\_\_\_\_ during prophase I.
19. Homologous chromosomes pair up during prophase I to form a \_\_\_\_\_.
20. During metaphase I the tetrads line up in the \_\_\_\_\_ of the cell.
21. The homologous chromosomes split up and move toward the opposite ends of the cell during \_\_\_\_\_.
22. \_\_\_\_\_ independent cells begin to form during \_\_\_\_\_.
23. \_\_\_\_\_ is the division of the cytoplasm to make two new cells.
24. The 2 new cells that are formed from Meiosis I are \_\_\_\_\_ because they contain half of the chromosome of the original cell that started meiosis.
25. At the start of Meiosis I you had 1 \_\_\_\_\_ cell.
26. Meiosis II must take place because each of our new cells still has too much \_\_\_\_\_.
28. Draw the chromosomes in Meiosis I. Label the cells as diploid or haploid



29. The nucleus \_\_\_\_\_ during prophase II.
30. In Metaphase II the chromosomes line up single file down the \_\_\_\_\_ of the cell.
31. In \_\_\_\_\_ the sister chromatids split up.
32. In Telophase II, \_\_\_\_\_ daughter cells are being formed. They are called \_\_\_\_\_.
33. Each newly formed cell will form a \_\_\_\_\_ around the chromosomes.
34. The chromosomes \_\_\_\_\_ to form \_\_\_\_\_.
35. \_\_\_\_\_ occurs at the same time at Telophase II.
36. At the end of Meiosis II you have made \_\_\_\_\_ gametes (sex cells).
37. Draw and label the Meiosis summary.



38. If the gametes are produced by a female, they are called \_\_\_\_\_ or \_\_\_\_\_.
39. If the gametes are produced by a male, they are called \_\_\_\_\_.
40. The \_\_\_\_\_ square is a tool that is used to predict the possible offspring of a genetic cross.
41. The letters on a punnett square actually represent possible \_\_\_\_\_.
42. When sperm and egg join it is called \_\_\_\_\_.
43. A fertilized egg is called a \_\_\_\_\_.
44. Complete the punnett square to the right.
45. A \_\_\_\_\_ is the genetic make-up of an organism.
46. Give examples of genotypes.
47. A \_\_\_\_\_ is the characteristic or appearance of the organism.
48. Give examples of phenotypes.
49. Dominant alleles are represented by \_\_\_\_\_ letters.
50. Recessive alleles are represented by \_\_\_\_\_ letters.
51. \_\_\_\_\_ alleles will show in your phenotype even if it only has one copy.
52. For recessive traits to show in the phenotype the snurfler will need \_\_\_\_\_ copies of the gene.
53. \_\_\_\_\_ means an organism has 2 copies of the same allele in its genotype (GG, gg)
54. \_\_\_\_\_ means an organism has 2 different alleles in its genotype (Gg, Tt, Rr)

	G	g
G		
g		

- Click on The Chromosome Quandary and follow the directions
- Click on The Meiosis and Genetics Quiz! Answer the questions.
- Click on Score Sheet. Record Scores. Overall Score: \_\_\_\_\_ Meiosis and Genetics: \_\_\_\_\_  
Chromosome Quandary: \_\_\_\_\_ Quiz: \_\_\_\_\_ Teacher's Initials: \_\_\_\_\_