**Meiosis Summarization**

1. What is a gamete?

2. What is the male gamete called?

3. What is the female gamete called?

4. What happens during fertilization?

5. What is a zygote?

6. Which of the following are haploid: egg sperm, zygote?

7. Which of the following are diploid: egg sperm, zygote?

8. How many pairs of chromosomes do humans have?

9. Pairs 1-22 are called what?

10. Pair 23 is called what?

11. Females have what sex chromosomes?

12. Males have what sex chromosomes?

13. Where are genes located?

14. Are the homologous chromosomes exactly the same?

15. Are sister chromatids exactly the same?

16. What is an allele?

17. What is the purpose of meiosis?

18. How many cells are produced as a result of meiosis (haploid or diploid)?

19. Why do we need to reduce the number of chromosomes?

20. How many cell divisions does meiosis go through?

21. In males, what is produced as a result of meiosis?

22. In females, what is produced as a result of meiosis?

23. Draw a picture of what Prophase I looks like.

24. What is crossing over?

25. Why is it important?

26. What phase does the cell spend most of its life in (meiosis, NOT mitosis!)

27. Draw a picture of anaphase I.

28. Draw a picture of telophase I.

29. Draw a picture of prophase II

30. Draw a picture of metaphase II.

30. Draw a picture of anaphase II.

31. Draw a picture of telophase II.

32. How many cells are produced as a result of meiosis?

33. Haploid or diploid?

34. What is nondisjunction?

35. What is it called when you have twice the amount of genetic material?

36. What is it called when you have half the amount of genetic material?

37. What is amniocentesis?

38. What is a karyotype, and why are they important?