Bio K/H: Unit 4 EXAM REVIEW – Meiosis and Genetics

1. What did Gregor Mendel prove with his pea plant experiment?
2. What does a punnett square show?
3. Where is the location of meiosis?
4. How many cells begin and end for meiosis?
5. How many cells begin and end for mitosis?
6. Do DNA from muscle and skin have the same or different DNA? What about the DNA in a gamete?
7. What is a tetrad?
8. List 3 differences between cell cycle/mitosis compared to meiosis.

9. What is the result of meiosis?
10. What is the importance of mitosis and meiosis?
11. If a cell contains 12 chromosomes, how many chromosomes are in each daughter cell for mitosis? Meiosis?
12. What is the result of crossing-over? When does crossing over occur?
13. What is haploid?
14. What is diploid? Give an example
15. What is the human diploid and haploid number?
16. What is independent assortment? What does it produce?
17. What is the law of segregation?
18. What is fertilization? What does it result in?
19. What happens in an incomplete dominance problem?
20. What diseases are sex-linked?
21. What does the term heterozygous mean? Homozygous?
22. What does the term recessive mean? Dominant?
23. What do the shaded/unshaded shapes on a Pedigree mean? What does a carrier look like?

Bio K/H: Unit 4 EXAM REVIEW – Meiosis and Genetics

1. What did Gregor Mendel prove with his pea plant experiment?
2. What does a punnett square show?
3. Where is the location of meiosis?
4. How many cells begin and end for meiosis?
5. How many cells begin and end for mitosis?
6. Do DNA from muscle and skin have the same or different DNA? What about the DNA in a gamete?
7. What is a tetrad?
8. List 3 differences between cell cycle/mitosis compared to meiosis.

9. What is the result of meiosis?
10. What is the importance of mitosis and meiosis?
11. If a cell contains 12 chromosomes, how many chromosomes are in each daughter cell for mitosis? Meiosis?
12. What is the result of crossing-over? When does crossing over occur?
13. What is haploid?
14. What is diploid? Give an example
15. What is the human diploid and haploid number?
16. What is independent assortment? What does it produce?
17. What is the law of segregation?
18. What is fertilization? What does it result in?
19. What happens in an incomplete dominance problem?
20. What diseases are sex-linked?
21. What does the term heterozygous mean? Homozygous?
22. What does the term recessive mean? Dominant?
23. What do the shaded/unshaded shapes on a Pedigree mean? What does a carrier look like?

24. Know how to do 1 factor/monohybrid cross. Two eyebrows are dominant to a unibrow. Cross a heterozygous two eyebrows with a unibrow.

25. Know how to do 2 factor/dihybrid problems. Brown eyes are dominant to green and two eyebrows are dominant to a unibrow. Cross a heterozygous brown eyed person, unibrow with a green eyed unibrow.

26. Know how to do incomplete dominance crosses. In some flowers, red is incompletely dominant over white. Cross a pink flower with a red.

27. Know how to do blood type problems. Cross a woman with heterozygous blood type A with a man with heterozygous type B blood.

28. Know how to do sex-linked problems. Cross a colorblind man with a woman whose dad is colorblind.

29. Know how to setup trihybrid problems.
30. What is a pedigree? Know how to draw/track traits.

24. Know how to do 1 factor/monohybrid cross. Two eyebrows are dominant to a unibrow. Cross a heterozygous two eyebrows with a unibrow.

25. Know how to do 2 factor/dihybrid problems. Brown eyes are dominant to green and two eyebrows are dominant to a unibrow. Cross a heterozygous brown eyed person, unibrow with a green eyed unibrow.

26. Know how to do incomplete dominance crosses. In some flowers, red is incompletely dominant over white. Cross a pink flower with a red.

27. Know how to do blood type problems. Cross a woman with heterozygous blood type A with a man with heterozygous type B blood.

28. Know how to do sex-linked problems. Cross a colorblind man with a woman whose dad is colorblind

29. Know how to setup trihybrid problems.
30. What is a pedigree? Know how to draw/track traits.