Genetic Variations (Mutations, Crossing Over) etc

Name: _____ **Date:** _____

1. The bacterium *Agrobacterium tumefaciens* infects plants, and a portion of its DNA is inserted into the plant's chromosomes. This causes the plant to produce gall cells, which manufacture amino acids that the bacterium uses as food. This process is a natural example of

   A. polyploidy.

   B. genetic manipulation.

   C. grafting.

   D. hybridization.

2. Genetic engineering has produced goats whose milk contains proteins that can be used as medicines. This effect was produced by

   A. mixing foreign genes into the milk.

   B. injecting foreign genes into the goats' udders.

   C. inserting foreign genes into fertilized goat eggs.

   D. genetically modifying the nutritional needs of the goats' offspring.

3. Mutations within a DNA sequence are

   A. natural processes that produce genetic diversity.

   B. natural processes that always affect the phenotype.

   C. unnatural processes that always affect the phenotype.

   D. unnatural processes that are harmful to genetic diversity.

4. A substitution of thymine with adenine in one DNA codon causes a particular disorder.

   Which statement explains how the change in DNA leads to this disorder?

   A. The deletion mutation prevents the production of the hemoglobin protein in the body.

   B. The frameshift mutation prevents the production of several proteins found in the blood.

   C. The insertion mutation causes extra hemoglobin proteins to attach to red blood cells.

   D. The point mutation causes a different amino acid to be added to the hemoglobin protein.

5. A rare genetic condition causes dwarfism and immunodeficiencies. Which of the following is the *most likely* cause of this condition?

A. a parasitic infection B. a mutation in DNA

C. a bacterial disease D. an excess of ATP

6. Which of the following *best* describes the result of a mutation in an organism's DNA?

A. The mutation may produce a zygote.

B. The mutation may cause phenotypic change.

C. The mutation causes damage when it occurs.

D. The mutation creates entirely new organisms.

7. In phenylketonuria (PKU), an enzyme that converts one amino acid into another does not work properly. Which of the following is the *most likely* cause of this genetic condition?

A. an error in the transcription of the gene for the enzyme

B. a mutation in the DNA sequence that codes for the enzyme

C. an excess of the amino acids necessary to produce the enzyme

D. a structural variation in the amino acid modified by the enzyme

8. The box below contains a statement about mutations.

> In many cases throughout geologic history, if mutations in the genetic material of existing species had not occurred, new species would not have appeared.

Which of the following conclusions about mutations in the DNA sequence of a gene is *most* consistent with the statement?

A. Mutations are always rapidly occurring.

B. Mutations are always beneficial.

C. Mutations are the only way new species arise.

D. Mutations are an important mechanism for the evolution of new species

9. A hereditary muscular disease in horses causes abnormal opening and closing of the sodium ion channels in the muscle cells. Which of the following statements describes the *most likely* origin of this disease?

A. A virus evolved specifically to attack the muscle cells of horses.

B. Motor neurons near some of the muscle cells degenerated over time.

C. High levels of sodium in the blood irreversibly damaged the ion channels.

D. A mutation occurred in the gene coding for the sodium ion channel protein.

10. Huntington's disease (HD) is a hereditary disease that destroys brain cells. In individuals with HD, the functioning of a specific protein is altered, and this leads to the disease's effects.

    Which of the following is the *most likely* cause of the altered protein function in individuals with HD?

    A. a mutation in the DNA sequence that codes for the protein

    B. an increase in the amount of fat rather than protein in the diet

    C. a decrease in the amount of glucose and amino acids in the blood

    D. a structural abnormality in the endoplasmic reticulum of brain cells

11. During DNA replication, the wrong nucleotide was inserted in the DNA sequence. Which of the following terms describes this situation?

    A. mutation
    B. regeneration
    C. transcription
    D. translation

12. Crossing-over *most commonly* results in

    A. new species

    B. new populations

    C. new combinations of genes

    D. new numbers of chromosomes

13. What technology was made possible by the discovery of the structure of DNA?

    A. organ transplants

    B. antibiotic production

    C. gene splicing

    D. artificial fertilization

14. Scientists have altered crop plants to make them more resistant to insects and disease. Which of these processes makes it possible for scientists to alter plants?

    A. natural selection
    B. gene splicing
    C. adaptation
    D. chemosynthesis

15. Which of these is an environmental factor that causes damage to chromosomes?

    A. acid rain
    B. lead paint
    C. methane gas
    D. ultraviolet light

16. Which of these describes a mutation that can be inherited?

A. random breakage in a liver cell's DNA

B. abnormal lung cells produced by toxins in smoke

C. a nitrogen base substitution in a gamete cell

D. ultraviolet radiation damage to skin cells

17. Which of these results when one nitrogen base replaces another in a segment of genetic material?

A. an enzyme substrate

B. a mutation

C. a feedback loop

D. an adaptation

18. A rare disorder is caused by changes in a gene. Parents of individuals with the disorder have only normal copies of this gene. Which of these *most likely* causes this disorder?

A. mitosis

B. gene splicing

C. mutation

D. natural selection

19. Certain plant crops are genetically engineered to grow faster and resist disease. These genetically engineered plant crops cannot reproduce because they have a "terminator" gene that keeps their seeds from sprouting. However, once the genetically engineered plant crops are planted outside, they may cross-pollinate with unaltered plant crops.

The use of terminator genes is *least likely* to result in

A. increased costs for seeds

B. decreased varieties of food

C. terminator genes spreading to other crops

D. scientists being harmed from working with the terminator genes

20. In the laboratory, scientists remove the gene for insulin from human chromosomes.They insert the gene into the DNA of bacteria. This causes the bacteria to produce human insulin. The insulin is used to treat diabetes in humans. Which of these describes this process?

A. meiosis

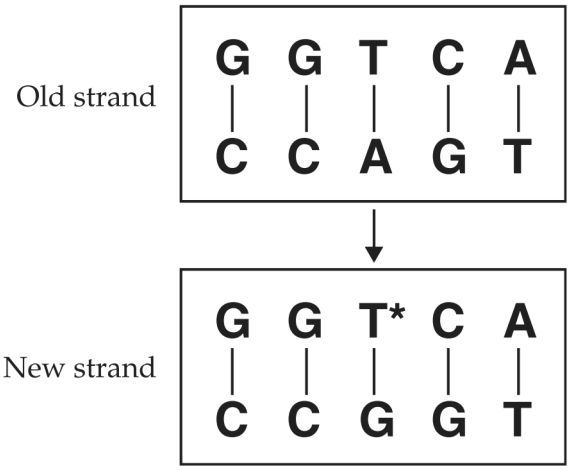
B. fertilization

C. gene splicing

D. DNA fingerprinting

21. Two segments of DNA are shown in the diagram below.

TWO DNA SEGMENTS



Normal thymine (T) is found in the old strand. It is replaced by an abnormal molecule (T*) in the new strand. The abnormal molecule (T*) binds to guanine (G) instead of binding to adenine (A). This is an example of

A. an adaptation
B. protein synthesis
C. a mutation
D. binary fission

22. Most bacteria do not have the ability to break down oil that is accidentally spilled into the ocean by tankers. However, scientists can insert a gene into the DNA of a bacterium to give it the ability to break down the oil. This technology is an example of

A. crossing-over
B. DNA replication
C. gene splicing
D. translation

23. When the segment of human DNA that codes for insulin production is inserted into bacterial DNA, the bacterium begins producing human insulin.

Which of these *best* identifies the process by which human DNA is inserted into bacterial DNA?

A. gene splicing
B. crossing-over
C. mutation
D. cloning

24. Scientists can genetically alter corn so that it makes a protein that will harm a certain caterpillar that feeds on it. Which of the following is an advantage of producing this type of corn?

A. The corn will have a better color.
B. The corn will be able to resist insects.
C. The insects will reproduce more quickly.
D. The insects will become immune to the poison.

25. Risks of having genetic mutations are increased with excessive exposure to—

A. high air pressure.
B. high humidity.
C. ultraviolet rays.
D. oxygen.

26. Red blood cells contain the protein hemoglobin which aids in transportation of the respiratory gases. Most humans have a form of hemoglobin called hemoglobin A. Individuals with sickle cell anemia have a very similar form called hemoglobin S. This hemoglobin is slightly changed in shape and has a reduced ability to transport oxygen. It is the presence of hemoglobin S that results in the signs and symptoms of sickle cell anemia.

Which of the following is the expected cause of the production of hemoglobin S?

A. Translocation of a chromosome

B. Deletion of part of a chromosome

C. Duplication of the hemoglobin A gene

D. A point mutation of the hemoglobin A gene

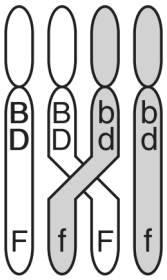
27. A botanist inserts a new gene sequence into a pink-flowering plant. He hopes that the genetically modified plant will now produce blue flowers.

In nature, which of the following processes would result in this kind of change?

A. Grafting B. Mutation

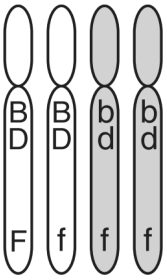
C. Photosynthesis D. Transpiration

28. The process of crossing over is shown below.

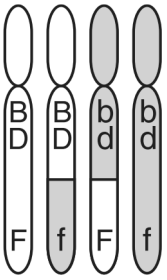


Which of the following chromosome pairs contain the above chromosomes after crossing over is complete?

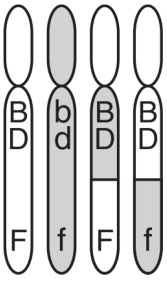
A.



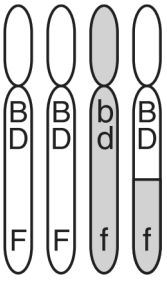
B.



C.



D.



29. The table shows a mutation in a DNA sequence.

Original Sequence	GCA TAT GCT ATA GCG ACT
Mutated Sequence	GCA TTG CTA TAG CGA CT

What is the result of this mutation during the translation process?

A. The translation process will fail to begin.

B. The mRNA will be translated at a faster rate than normal.

C. Everything after the mutation will be translated incorrectly.

D. Some of the proteins formed during translation will be unstable.

30. Which genetic abnormality can be identified through karyotyping?

A. point mutation B. recessive allele

C. extra chromosome D. sex-linked allele

31. Which would *best* allow a species to survive environmental changes?

A. similar physical features

B. low mutation rate

C. small population

D. genetic diversity

32. Which would *most likely* produce a mutation that is passed on to offspring?

A. radiation changing the DNA sequence in skin cells

B. a gamete with an extra chromosome forming

C. tobacco smoke altering the genes in lung cells

D. exposure to chemicals altering nerve cell function

33. Which will *most likely* cause variations to occur within a species?

A. competition B. mutation

C. mutualism D. predation

34. Instead of using chemicals to destroy some insects, scientists are now able to produce a type of corn that will repel insects. How are scientists able to produce this type of corn?

A. by not spraying the corn plants

B. by soaking corn seeds in insect spray

C. by changing the genetics of the corn plants

35. Which will *most likely* cause a gene to mutate?

A. water B. radiation C. soil

36. A mutation occurs in the genes that code for coat color in deer. Which change will *most likely* result from this mutation?

A. a change in the selection pressures acting on coat color

B. a change in the coat-color genes of deer predator species

C. an increase in coat-color diversity in the population

D. an increase in the number of genes for coat color in the population

37. This chart shows a list of messenger RNA codons.

Codons in mRNA

First Base	Second Base								Third Base
	U		**C**		**A**		**G**		
	UUU	Phenylalanine	UCU	Serine	UAU	Tyrosine	UGU	Cysteine	**U**
U	UUC	Phenylalanine	UCC	Serine	UAC	Tyrosine	UGC	Cysteine	**C**
	UUA	Leucine	UCA	Serine	UAA	Stop	UGA	Stop	**A**
	UUG	Leucine	UCG	Serine	UAG	Stop	UGG	Tryptophan	**G**
	CUU	Leucine	CCU	Proline	CAU	Histidine	CGU	Arginine	**U**
C	CUC	Leucine	CCC	Proline	CAC	Histidine	CGC	Arginine	**C**
	CUA	Leucine	CCA	Proline	CAA	Glutamine	CGA	Arginine	**A**
	CUG	Leucine	CCG	Proline	CAG	Glutamine	CGG	Arginine	**G**
	AUU	Isoleucine	ACU	Threonine	AAU	Asparagine	AGU	Serine	**U**
A	AUC	Isoleucine	ACC	Threonine	AAC	Asparagine	AGC	Serine	**C**
	AUA	Isoleucine	ACA	Threonine	AAA	Lysine	AGA	Arginine	**A**
	AUG	Methionine or start	ACG	Threonine	AAG	Lysine	AGG	Arginine	**G**
	GUU	Valine	GCU	Alanine	GAU	Aspartic Acid	GGU	Glycine	**U**
G	GUC	Valine	GCC	Alanine	GAC	Aspartic Acid	GGC	Glycine	**C**
	GUA	Valine	GCA	Alanine	GAA	Glutamic Acid	GGA	Glycine	**A**
	GUG	Valine	GCG	Alanine	GAG	Glutamic Acid	GGG	Glycine	**G**

A strand of DNA with the sequence AAC AAG CCC undergoes a mutation, and the first A is changed to a C. How will this mutation affect the amino acid sequence?

A. One amino acid will change.

B. Two amino acids will change.

C. All of the amino acids will change.

D. The amino acids will remain the same.

38. Which of these would *most* likely cause a mutation?

A. the placement of ribosomes on the endoplasmic reticulum

B. the insertion of a nucleotide into DNA

C. the movement of transfer RNA out of the nucleus

D. the release of messenger RNA from DNA

39. One human disease is caused by a change in one codon in a gene from GAA to GUA. This disease is the result of

A. a mutation. B. a meiosis error.

C. crossing-over. D. polyploidy.

40. 5' G T A ____ ____ ____ A A 3'
3' C A T G C A T T 5'

This segment of DNA has undergone a mutation in which three nucleotides have been deleted. A repair enzyme would replace them with

A. CGT. B. GCA. C. CTG. D. GTA.

41. Radon is a radioactive gas that is sometimes present in homes. If radon is inhaled, its decay products are deposited in the lungs. Radioactive particles can penetrate cells and cause changes to the cells' DNA.

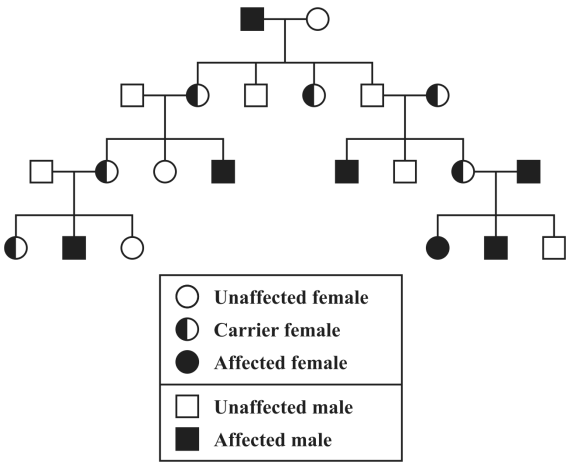
These changes in DNA are an example of which of the following?

A. homeostasis
B. mitosis
C. mutation
D. transcription

42. People who inherit hemophilia type A are unable to make a protein required to clot blood. This disorder is directly related to which of the following?

A. A mutation in one gene
B. A chromosome that is duplicated
C. A gene that was incorrectly copied
D. A trait acquired from the environment

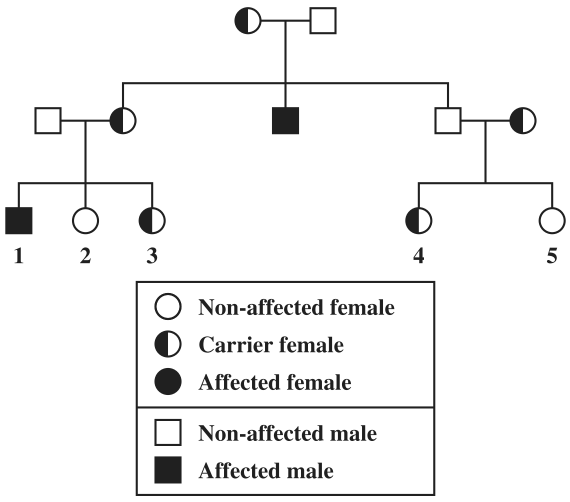
43. The transmission of a genetic disorder is represented in the pedigree below.



What is the mode of inheritance shown in the pedigree?

A. Autosomal dominant
B. Autosomal recessive
C. Sex-linked carried on the X chromosome
D. Sex-linked carried on the Y chromosome

44. The pedigree below shows the transmission of a disorder within a family.



Which statement describes the offspring that would result if individual 1 has children with a woman that does not carry the allele for this disorder?

A. None of the daughters will inherit the allele for the disorder.

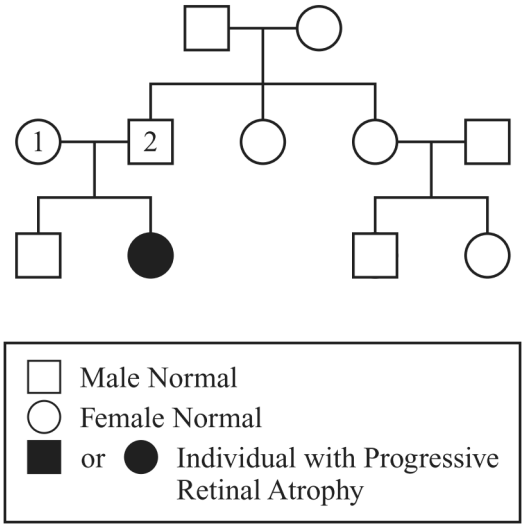
B. All of the sons will inherit the allele for the disorder.

C. All of the daughters will be affected by the disorder.

D. None of the sons will be affected by the disorder.

45. Blue heelers are a breed of dog. A pedigree of blue heelers kept by a breeder is shown below.

Blue Heeler Pedigree



One of the dogs has progressive retinal atrophy, a condition that damages the retina. What are the genotypes of dog 1 and dog 2?

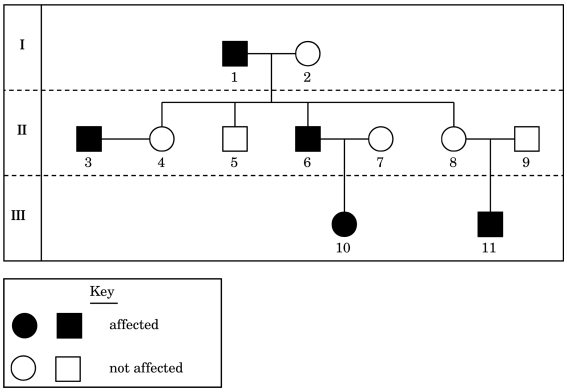
A. Dog 1 is aa and dog 2 is aa.

B. Dog 1 is aa and dog 2 is Aa.

C. Dog 1 is Aa and dog 2 is Aa.

D. Dog 1 is AA and dog 2 is Aa.

46. This diagram shows a pedigree for a recessive genetic disorder.



What is the genotype of individual 6?

A. X^HX^H

B. X^HX^h

C. X^HY

D. X^hY

47. How would overexposure to X-rays affect *most* animal cells?

A. It would increase cell specialization in organs.

B. It would change the sequence of DNA nucleotides in affected cells.

C. It would produce new nucleotides for DNA molecules.

D. It would cause an increase in red blood cell production.

48. A genetic mutation resulted in a change in the sequence of amino acids of a protein, but the function of the protein was not changed. Which statement *best* describes the genetic mutation?

A. It was a silent mutation that caused a change in the DNA of the organism.

B. It was a silent mutation that caused a change in the phenotype of the organism.

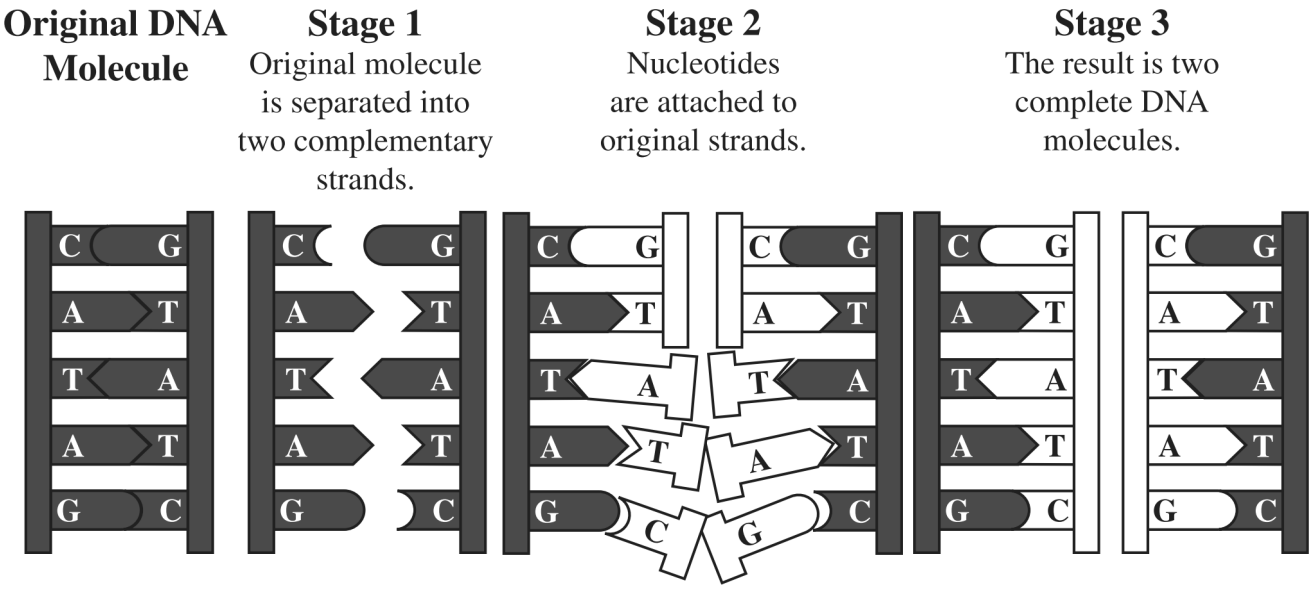
C. It was a nonsense mutation that caused a change in the DNA of the organism.

D. It was a nonsense mutation that caused a change in the phenotype of the organism.

Use the information to answer the the following question(s).

DNA

Scientists study DNA to understand heredity, disease, and the evolutionary history of organisms. During these studies, DNA must first be separated into two complementary strands. Next, the appropriate nucleotides are attached to the nucleotides in each original strand to produce two new complete DNA strands. The diagram below shows a simple model of this process. The letters A, T, C, and G represent the four nucleotides.



49. A partial DNA sequence for normal hemoglobin and a partial DNA sequence for sickle-cell anemia are shown below.

G-G-A-C-T-T-C-T-T

Normal hemoglobin

G-G-A-C-A-T-C-T-T

Sickle-cell anemia

Based on the DNA sequences, sickle-cell anemia is caused by

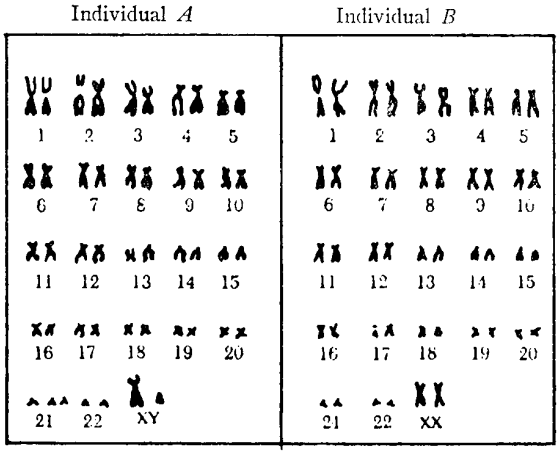
A. a sex-linked trait.

B. a dominant nucleotide.

C. a mutation in the genetic code.

D. an incomplete separation of chromosomes.

50. The charts show human chromosomes arranged in pairs.



The chromosome numbered 1 through 22 are known as

A. ribosomes B. lysosomes

C. centrosomes D. autosomes

51. The preparation of these charts for individuals *A* and *B* is known as

A. microsurgery B. karyotyping

C. blood typing D. chemical screening

52. Which genetic disorder in individual *A* is indicated by the number of chromosomes labeled 21?

A. phenylketonuria (PKU)

B. Tay-Sachs

C. sickle-cell anemia

D. Down's syndrome

53. A change in the sequence of nitrogenous bases in DNA may result in

A. a gene mutation B. sex linkage

C. polyploidy D. nondisjunction

54. A change that alters the base sequence in an organism's DNA is called a

A. synapsis B. mutation

C. disjunction D. replication

55. Down syndrome is a genetic disorder caused by the presence of an extra chromosome number 21 in the body cells of humans. This extra chromosome most likely is a result of

A. mitotic cell division in the brain

B. development of an unfertilized egg

C. multiple allelic pairs of genes

D. nondisjunction during meiosis

56. Select the technique, *chosen from the list below*, that is best described by the statement shown.

> This technique involves the use of a photograph to study the homologous pairs of chromosomes of an individual in order to detect genetic disorders.

A. Chemical analysis of body fluids

B. Cloning

C. Genetic engineering

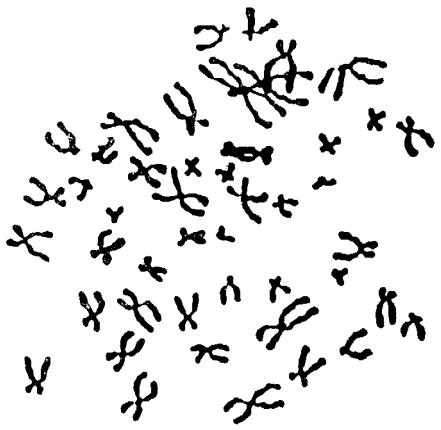
D. Karyotyping

57. Certain genetic disorders can be detected by preparing and studying an enlarged photograph of paired chromosomes from a cell. The preparation of this photograph is known as

A. genetic screening B. karyotyping

C. genetic counseling D. amniocentesis

58. The diagram shown represents a photographic enlargement of replicated chromosomes from a fetal cell. For which technique would this photograph be used to determine if the chromosomes of the fetus exhibit any genetic abnormalities?



A. cleavage B. plasmolysis

C. chemosynthesis D. karyotyping

59. Down syndrome in humans may result from

A. the presence of an extra chromosome in a zygote

B. the absence of a single chromosome in a zygote

C. a mutation of one gene in a zygote

D. failure of a chromosome to replicate in a zygote

60. X rays, formaldehyde and asbestos fibers are all similar in that they are

A. animal preservatives

B. used to treat diseases

C. used to diagnose diseases

D. mutagenic agents

61. The preparation of an enlarged photograph showing paired homologous chromosomes is known as

A. amniocentesis B. blood screen

C. karyotyping D. urine analysis

62. An analysis of chromosomes may show the loss of a portion of a chromosome. This type of chromosomal change is known as

A. nondisjunction B. an addition

C. translocation D. a deletion

63. The use of chemicals such as formaldehyde and asbestos has decreased because they have been

A. found to cause sterility in plants

B. replaced by more toxic chemicals

C. linked to uncontrolled meiotic cell division

D. found to increase the incidence of mutations

64. Select the term, *chosen from the list below*, that is best described by the statement shown.

A photograph of paired human chromosomes is prepared.

A. Karyotyping B. Cloning

C. Deletion D. Translocation

65. Which genetic disorder is usually detected by analyzing a karyotype?

A. phenylketonuria B. Tay-Sachs

C. Down syndrome D. sickle-cell anemia

66. Select the genetic technique, *chosen from the list below*, that is best described by the statement shown.

> Enlarged photographs of homologous chromosomes are prepared for examination to detect chromosomal defects.

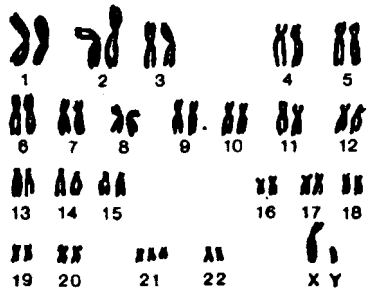
A. Screening

B. Karyotyping

C. Cloning

D. Genetic engineering

67. The diagram represents a



A. deletion

B. synapsis

C. karyotype

D. disjunction

68. The chromosomes are arranged to show

A. homologus pairs

B. tetrads

C. independent assortment

D. nucleotides

69. The individual from whom these chromosomes were taken is a

A. male

B. female

C. hermaphrodite

D. polyploid

70. This chromosomal arrangement indicates that the individual has

A. phenylketonuria

B. Down syndrome

C. sickle-cell anemia

D. Tay-Sachs disease

71. Substances that increase the chance of gene alterations are known as

A. mutagenic agents

B. genetic agents

C. chromosomal agents

D. adaptive agents

72. In humans, Down syndrome is often a result of the

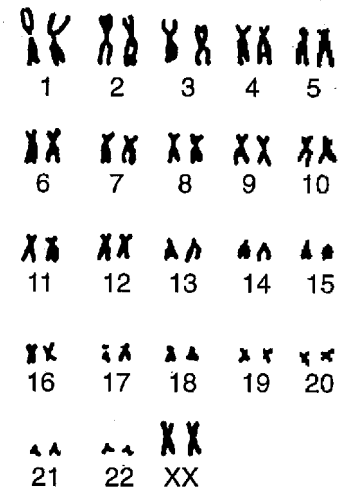
A. disjunction of homologous chromosomes during meiotic cell divisions

B. nondisjunction of chromosome number 21 in one of the parents

C. combination of an egg and sperm, each carrying a recessive allele for this disorder

D. fusion of two 2*n* gametes during fertilization

73. Which phrase best describes a human with the chromosomes represented in the diagram shown?



A. a female who exhibits Down syndrome

B. a male who exhibits Down syndrome

C. a female who does *not* exhibit Down syndrome

D. a male who does *not* exhibit Down syndrome

74. The technique known as karyotyping is used to detect abnormalities in

A. chromosomes B. ribosomes

C. blood and urine D. amniotic fluid

75. The addition, removal, or substitution of nitrogenous bases in a DNA molecule may be caused by

A. mutagenic agents

B. cloning

C. vegetative propagation

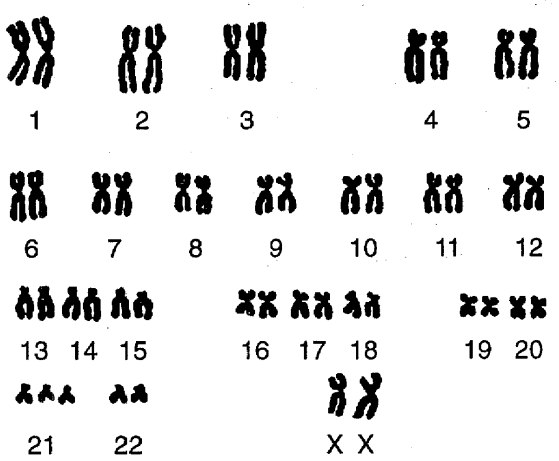
D. nondisjunction

76. Mutations can be transmitted to the next generation only if they are present in

A. brain cells B. sex cells

C. body cells D. muscle cells

77. A karyotype is shown in the diagram. Information in this karyotype indicates that the individual is a



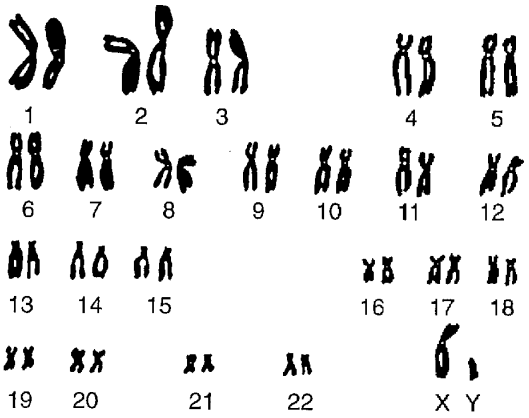
A. female with sickle-cell anemia

B. male with Tay-Sachs disease

C. female with Down syndrome

D. male with phenylketonuria

78. Genetic information is shown in the diagram. This type of diagram is used to



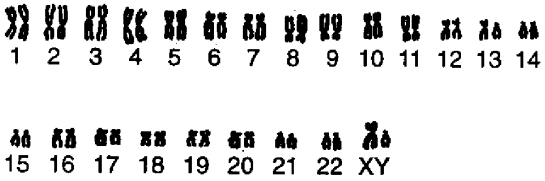
A. reveal chromosome disorders

B. determine the number of genes in a human genotype

C. detect sickle-cell anemia

D. correct the disorder known as PKU

79. The arrangement of chromosomes shown in the diagram is known as



A. a karyotype

B. a urine analysis

C. amniocentesis

D. blood typing

80. Examination of the diagram indicates that these are the chromosomes of a

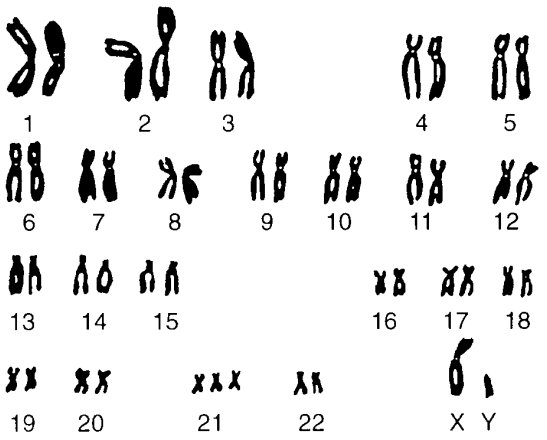
A. female with Down syndrome

B. male with Down syndrome

C. female without Down syndrome

D. male without Down syndrome

81. Base your answer on the diagram of paired homologous chromosomes shown and on your knowledge of biology. The genetic disorder shown in the diagram most likely resulted from



A. crossing-over B. nondisjunction

C. polyploidy D. segregation

82. Base your answer on the diagram of paired homologous chromosomes shown and on your knowledge of biology. Which technique was used to organize the chromosomes as shown in the diagram?

A. screening B. chromatography

C. karyotyping D. grafting

83. For *each* phrase in the following question(s), select the genetic disorder, *chosen from the list below*, that is most closely associated with that phrase. Then record its *number* on the seperate rate answer paper.

Genetic Disorders

(1) Tay-Sachs
(2) Phenylketonuria
(3) Sickle-cell anemia
(4) Down syndrome

Changes in speech patterns and mental retardation due to the presence of and extra chromosome

A. (1) B. (2) C. (3) D. (4)

84. A single change in the sequence of nitrogenous bases in a DNA molecule would most likely result in

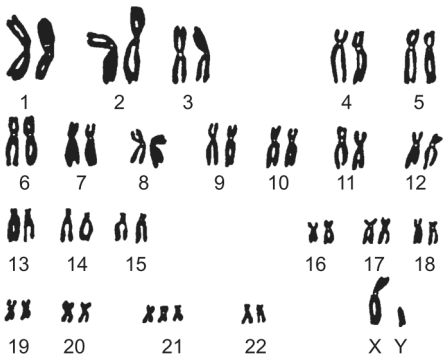
A. crossing-over

B. polyploidy

C. nondisjunction of chromosomes

D. a gene mutation

85. The chromosomes of a person with a genetic disorder are shown in the diagram below.



This genetic disorder resulted from

A. hybridization
B. nondisjunction
C. polyploidy
D. segregation

Genetic Variations (Mutations, Crossing Over) etc 4/24/2019

1.
Answer: B

2.
Answer: C

3.
Answer: A

4.
Answer: D

5.
Answer: B

6.
Answer: B

7.
Answer: B
Objective: B.06E

8.
Answer: D

9.
Answer: D

10.
Answer: A
Objective: B.06E

11.
Answer: A

12.
Answer: C

13.
Answer: C

14.
Answer: B

15.
Answer: D

16.
Answer: C

17.
Answer: B

18.
Answer: C

19.
Answer: D

20.
Answer: C

21.
Answer: C

22.
Answer: C

23.
Answer: A

24.
Answer: B

25.
Answer: C

26.
Answer: D

27.
Answer: B

28.
Answer: B

29.
Answer: C

30.
Answer: C
Objective: B.06H

31.
Answer: D

32.
Answer: B

33.
Answer: B

34.
Answer: C

35.
Answer: B

36.
Answer: C

37.
Answer: A

38.
Answer: B

39.
Answer: A

40.
Answer: A

41.
Answer: C

42.
Answer: A

43.
Answer: C

44.
Answer: D

45.
Answer: C

46.
Answer: D

47.
Answer: B

48.
Answer: A

49.
Answer: C

50.
Answer: D

51.
Answer: B

52.
Answer: D

53.
Answer: A

54.
Answer: B

55.
Answer: D

56.
Answer: D

57.
Answer: B

58.
Answer: D

59.
Answer: A

60.
Answer: D

61.
Answer: C

62.
Answer: D

63.
Answer: D

64.
Answer: A

65.
Answer: C

66.
Answer: B

67.
Answer: C

68.
Answer: A

69.
Answer: A

70.
Answer: B

71.
Answer: A

72.
Answer: B

73.
Answer: C

74.
Answer: A

75.
Answer: A

76.
Answer: B

77.
Answer: C

78.
Answer: A
Objective: B.06H

79.
Answer: A

80.
Answer: D

81.
Answer: B

82.
Answer: C

83.
Answer: D

84.
Answer: D

85.
Answer: B