

Biology Mini Assessment #9

- 1 In the Punnett square below, which genotype will be found in the box labeled **X**?

	AB	Ab	aB	ab
AB	AABB	AABb		AaBb
Ab	AABb	X	AaBb	Aabb
aB		AaBb	aaBB	aaBb
ab	AaBb	Aabb	aaBb	

- A AaBB
 B AAbb
 C AaBb
 D aabb

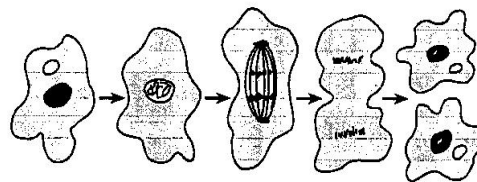
- 2 What is the end product of meiosis in humans?
 A 2 daughter cells with 46 chromosomes each

- B 2 daughter cells with 23 chromosomes each
 C 4 daughter cells with 46 chromosomes each
 D 4 daughter cells with 23 chromosomes each

- 3 Which method provides the greatest variation in heredity?

- A fission
 B budding
 C regeneration
 D fusion of egg and sperm

- 4 Which phrase *best* describes the process represented in the diagram below?



- A germination of a pollen grain in a flower
 B daughter cells being formed by mitosis
 C identical gametes being formed by mitosis
 D development of ovules by meiosis

- 5 In dogs, wire hair (D) is dominant over smooth hair (d). Two wire-haired dogs produce a smooth-haired pup. Which genotypes *best* describe the parents?

- A DD and DD
 B DD and Dd
 C Dd and Dd
 D Dd and dd

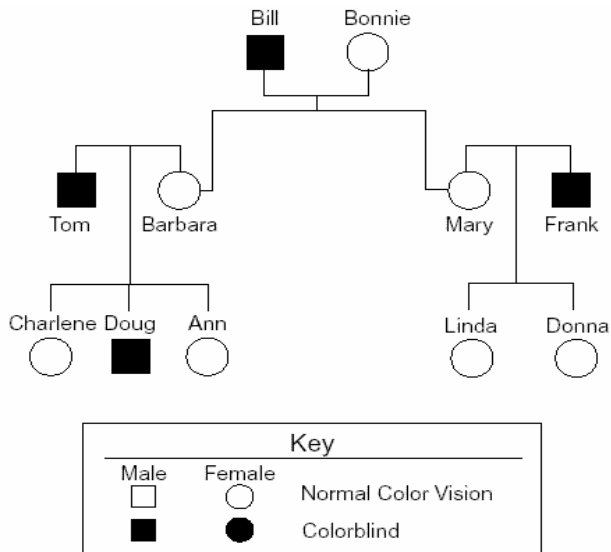
- 6 What are the possible blood types in offspring of a cross between a heterozygous type A female and a heterozygous type B male?

- A A only
 B AB and B only
 C O and B only
 D A, B, AB, and O

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Use the chart below to answer the following question.



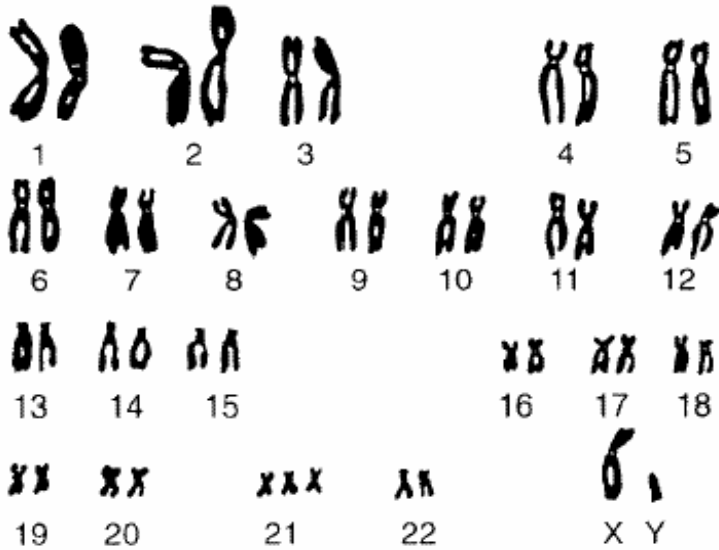
Barbara is expecting another child. What is the probability that the new baby will be colorblind?

- A 0%
- B 25%
- C 50%
- D 100%

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Use the karyotype below to answer the following question.



What conclusions can be drawn from this karyotype?

- A This is a male with Down Syndrome.
- B This is a male with Huntington's disease.
- C This is a female with sickle-cell anemia.
- D This is a female with Tay-Sachs disease.

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Use the Punnett square that shows the cross between two squash plants to answer questions 9-10 .

	D	D	
d	Dd	Dd	Key: DD = Disc-shaped squash Dd = Disc-shaped squash dd = Round squash
d	Dd	Dd	

9 What term **best** describes the genotypes of the squash offspring?

- A All are round.
- B All are disc-shaped squash.
- C All are heterozygous.
- D All are homozygous dominant.

10 Which genetic principle is **best** illustrated by the phenotype of the offspring?

- A dominance
- B codominance
- C multiple alleles
- D independent assortment

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?	⊙	Answer/ Scale	Objective	?	⊙	Answer/ Scale	Objective
1	1	B	2.03 Laws of Probability	6	6	D	2.03 Laws of Probability
2	2	D	2.02 Asexual Sexual Reproduction	7	7	C	2.03 Laws of Probability
3	3	D	2.02 Asexual Sexual Reproduction	8	8	A	2.03 Laws of Probability
4	4	B	2.02 Asexual Sexual Reproduction	9	9	C	2.03 Laws of Probability
5	5	C	2.03 Laws of Probability	10	10	A	2.03 Laws of Probability

Total questions on test: 10

Minimum points required to achieve mastery category

Objectives measured: 2	Items	Points	●	◐	Questions measuring this objective
2.03 Laws of Probability	7	7	6	5	1 5 6 7 8 9 10
2.02 Asexual Sexual Reproduction	3	3	3	2	2 3 4
Totals		10	9	7	

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Items used in test

?	Item name	?	Item name	?	Item name
1	Jn02.B2.03.1	5	Exg.c5.16.B2.03	8	cms_203_2
2	SCIS1060201.61.var	6	cms_203_3	9	cms_203_1
3	cms.202_1	7	nys_203_1	10	cms_203_4
4	Exg.c4.30.B2.02				