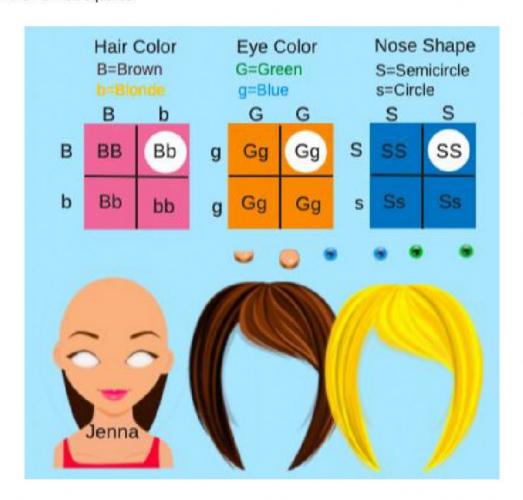


Answer each question of this workshop with the sources of information that are in the last page of this file.

## **EXERCISES TO PRACTICE**

Let's practice Mendel's Laws of inheritance:

1. Drag and drop the appropriate traits on Jenna's face based on the traits denoted by the white circles in the Punnett squares.



are her father's. Which of Jenna	's parent's traits are heterozygous? Select all that apply:
A. Father's eye color	
B. Mother's nose shape	
C. Mother's hair color	
D. Father's nose shape	
E. Mother's eye color	
F. Father's hair color	
3. Fill in the appropriate name (e	either dominance, segregation, or independent assortment) for each
law based on their descriptions:	
Law of	: Each parental allele pair is separated during the formation of
gametes.	
Law of	: Each trait is passed down separately. The inheritance of one trait
will not affect the inheritance of	another trait.
Law of	: Recessive alleles will always be masked in the presence of a
dominant allele.	
Law of	: Genetic linkage violates this law.
Law of	: A heterozygous genotype will have a dominant phenotype.
Law of	: Offspring has an equal probability of receiving either one of the two
alleles from each parent.	

2. In the Punnett squares, the horizontal parental genes are Jenna's mother's, while the vertical ones

green e	eyes	-	G	G	Gg			
g: blue eyes		_	Gg		99			
. Identify	the genet	tic combinatio	ons where the	dominant	or recessive	traits will appe	ar in the p	henoty
	R	r		Р	P		S	S
r	Rr	rr	р	Pp	Pp	s	SS	SS
r	Rr	rr	р	Pp	Pp	s	Ss	Ss
. Look at	the follow	ving Punnett	square and ar	nswer the	questions of	phenotype an	d genoty	oe:
						В	В	
: Brown : : white fu								
					b	ВЬ	Bb	
Vhat perc	entage o	f the offspring	will be homo	zygous?		Bb	Bb	
		<del></del>			ь	00	00	١ ١

What percentage of the offspring will have white fur?

7. Mr. Johnson was creating a Punnett square, but he didn't check his work. Below, check his answers
and figure out where he made his mistake. Choose Mr. Johnson's mistake in the Punnett square:

A: long toile		A	а	
A: long tails a: short tails	а	Aa	aa	
a. SHOIT talls	а	aa	aa	

He said: "I figured out that 25% will have long tails and 75% will have short tails"

If solved correctly,	what SHOULD Mr. Johnson's real results be? "I figured out that	will have
long tails and	will have short tails"	

## SOURCES OF INFORMATION

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