

Name: \_\_\_\_\_ Block: \_\_\_\_\_ Date: \_\_\_\_\_

### PUNNETT SQUARE PRACTICE #1

Complete the Punnett Squares for unattached/attached earlobes (E, e)

1.

		<u>    </u> <b>E</b> <u>    </u>	<u>    </u> <b>e</b> <u>    </u>	Mother's alleles
Father's alleles	<u>    </u> <b>E</b> <u>    </u>			
	<u>    </u> <b>E</b> <u>    </u>			

*What is the probability that the child will have an attached earlobe? \_\_\_\_\_*

2.

		<u>    </u> <b>E</b> <u>    </u>	<u>    </u> <b>e</b> <u>    </u>	Mother's alleles
<u>    </u> <b>E</b> <u>    </u>				
<u>    </u> <b>e</b> <u>    </u>				

*What is the probability that the child will have an attached earlobe? \_\_\_\_\_*

3.

		<u>    </u> <b>e</b> <u>    </u>	<u>    </u> <b>e</b> <u>    </u>	Mother's alleles
<u>    </u> <b>E</b> <u>    </u>				
<u>    </u> <b>e</b> <u>    </u>				

*What is the probability that the child will have an attached earlobe? \_\_\_\_\_*

4. Freckles are a dominant trait. Fill in the Punnett Square showing the possible genetic outcomes for the child of a father who has freckles (F f) and a mother that does not have freckles (f f):

		_____	_____	Mother
Father	_____			
	_____			

What is the probability that the child will have freckles? \_\_\_\_\_

5. Unattached earlobes are a dominant trait. Fill in the Punnett Square showing the possible genetic outcomes for the child of a father who has unattached earlobes (E e) and a mother that has unattached earlobes (E e):

		_____	_____	Mother
Father	_____			
	_____			

What is the probability that the child will have unattached earlobes? \_\_\_\_\_

6. CHALLENGE QUESTION: Bob is left handed. His mom is right handed. He does not know if his father is left handed or right handed. Which of the Punnett squares could be a possibility for his parents' genes? Circle ALL that are possible:

		H	h	Mother
Father	H	HH	Hh	
	h	Hh	hh	

		H	H	Mother
Father	h	Hh	Hh	
	h	Hh	Hh	

		H	H	Mother
Father	H	HH	HH	
	H	HH	HH	

		H	h	Mother
Father	h	Hh	hh	
	h	Hh	hh	