

NAME: _____ DATE: _____

Joseph and Alice are the parents of four children. Joseph has brown eyes, which is a dominant trait. Joseph has blue eyes, which is a recessive trait. Use the two Punnett Squares ("B" represents the dominant brown gene, and "b" represents the recessive blue gene) to fill in the boxes.

JOSEPH

		B	B
		b	b
A L I C E	b		
	b		

JOSEPH

		B	b
		b	b
A L I C E	b		
	b		

1. What fraction represents the probability that Joseph and Alice will have children with brown eyes in the first Punnett Square?

1/4

0/4

4/4

2/4

2. What fraction represents the probability that Joseph and Alice will have children with brown eyes in the second Punnett Square?

1/4

0/4

4/4

2/4

3. What fraction represents the probability that Joseph and Alice will have children with brown eyes in both squares altogether?

1/8

0/8

4/8

2/8