

Genetics
Minion Punnett Square

Name:
Period:

Make a Punnett square for the cross below, and answer the questions. You can use Chapter 6, Section 2 of your book to help you. Remember:

genotype - what the genes say with their alleles

phenotype - what you see when looking at the organism

alleles - variations of a gene (dominant with a CAPITAL, recessive with a lower case)

each box of the Punnett square will have two letters in it

count the number of boxes that have the alleles you are looking for

as there are only four boxes, your percents can only be: 0%, 25%, 50%, 75%. or 100%

Assume that having two eyes is a dominant trait (**E**) over having just one eye (**e**). Make a Punnett square for the cross **Ee x ee**.

What are the genotypes of the parents? _____ and _____

If there is at least one **E** in the genotype, will you see the dominant trait or the recessive trait?

If there are two **e** codes in the genotype, will you see the dominant trait or the recessive trait?

What are the phenotypes of the parents? **Ee**: _____ and **ee**: _____

List all of the possible genotypes of the offspring of this cross that show up: _____, _____

What is the % chance that their children will have two eyes? _____

What is the % chance that their children will *carry* an allele with the recessive trait **e**? _____

