Genetics   Name:

Big Nose Punnett Square   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%

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Assume a big nose is a dominant trait (**N**) over a small nose (**n**). Make a Punnett square for the cross **Nn x Nn.**

What are the genotypes of the parents? _____ and _____

What are the phenotypes of the parents? **Nn**: _____ and **Nn**:_____

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

What is the % chance that their children will have a big nose? _____

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

7.2d