

Oompa Loompa Incomplete Dominance Problems

Name: _____

1. Oompahs can have red (RR), blue (rr) or purple (Rr) hair. The allele that controls this trait is **INCOMPLETELY DOMINANT**. Complete the key for the genotype and phenotype.

_____ = Blue

_____ = Red

_____ = Purple

2. Orville Oompah has purple hair and is married to Opal Oompah who brags that she has the reddest hair in the valley. Show a punnett square.

How many of Opal's children will have her red hair? _____

How many of Opal's children will have Orville's purple hair? _____

One of Opal's children is born with shocking blue hair!!!! Is Orville the father of this child? _____

3. Olga Oompah has red hair and marries Oliver Oompah who has blue hair. What is the color of their children's hair? _____ Show a punnett square.

4. Olivia Oompah is married to Odo oompah. They both have purple hair. They have 100 children. How many children will have each color of hair? Show a punnett square.

_____ Red; _____ Blue; _____ Purple

5. A homozygous blue faced (GG), blue haired (BB) oompah named Ortimer marries a orange faced (gg) red haired (bb) oompah named Odette. Face color is incompletely dominant with purple face being the hybrid color. Hair color is completely dominant.

Parental Genotype: GGBB x ggbb

Create a punnett square to determine the phenotype of the children. What will the phenotype of all the children be? _____