

Zork Genetics



Characteristic	Dominant Gene	Recessive Gene
Height	Tall (T)	Short (t)
Eye Number	One (E)	Three (e)
Lip Color	Purple (L)	Green (l)
Fang Number	One (F)	Two (f)



USE YOUR KNOWLEDGE OF GENETICS TO COMPLETE THIS WORKSHEET.

1. Use the information for a Zork's traits to write the **phenotype** (physical appearance) for each item.

a) TT _____

c) ee _____

b) Ll _____

d) Ee _____

2. Use the information in the chart to write the **genotype(s)** for each trait below.

a) One eye _____

c) Two Fangs _____

b) Short _____

d) Purple Lips _____

3. Determine the **genotypes** for each using the information in the chart.

a) Heterozygous purple lips _____

c) Homozygous one eye _____

b) Hybrid one fang _____

d) Purebred tall _____

4. A tall Zork named George met and fell in love with a tall Zork named Marge. Use your knowledge of genetics to answer the questions below.

- a. If Marge's father is a heterozygous tall Zork and her mother is a short Zork, what is Marge's genotype? Complete the Punnett square to show the possible genotypes that would result to help you determine Marge's genotype.

What is Marge's genotype? _____

- b. George is heterozygous for this height. What is his genotype? _____

- c. Complete the Punnett square to show the possibilities that would result if George and Marge had offspring.

- d. List the possible **genotypes** and **phenotypes** for the kids.

- e. What is the probability of tall Zork kids? _____%

- f. What is the probability of short Zork kids? _____%