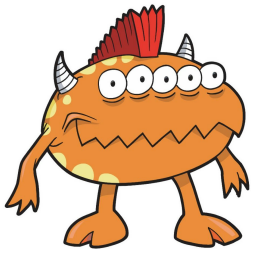
Melomonster Punnett Square Problems



1. For each genotype, indicate whether it is heterozygous (HE) or homozygous (HO).

AA _____	Ee _____	Ii _____	Mm _____	Bb _____
ff _____	Jj _____	nn _____	Cc _____	GG _____
kk _____	OO _____	Dd _____	HH _____	Ll _____

2. For each genotype, determine the phenotype.

Purple fur is dominant to gellow fur.
FF _____
Ff _____
ff _____

One horns is dominant t two horns
HH _____
Hh _____
hh _____

Spotted fur is dominant to solid fur
SS _____
Ss _____
ss _____

Large fangs are dominant to small fangs
FF _____
Ff _____
ff _____

3. For each genotype listed below, provide the genotypes possible.

Round body is dominant to a square body
Round: _____
Square: _____

Square eyes are dominant to round eyes
Square: _____
Round: _____

Three toes is dominant to two toes
Three Toes: _____
Two Toes: _____

Pointy ears is dominant to round ears
Pointed: _____
Round: _____

4. Complete the following crosses:
   a. Round bodies (R) are dominant to square bodies (r). Cross Rr X rr. What percentage of the offspring will be round bodied?

b. Pointy ears (P) are dominant to round ears (p). Cross Pp X Pp. What percentage of the offspring will have pointy ears?

c. Three toes (T) is dominant to two toes (t). Cross TT X Tt. What percentage of the offspring will have three toes?

5. In melomonsters, the trait for two toes (t) is recessive to having three toes (T). A heterozygous toed melomonster (Tt) meets a homozygous melomonster with two toes (tt). What percentage of their offspring will be homozygous dominant?

6. While Marvin, a yellow melomonster, was sitting on his rock he saw a beautiful female yellow melomonster. He instantly fell in love. They sat at his rock, dreaming of their many melomonster children to come. They hope to have children with purple fur. Is this possible?

7. Harry, a five-eyed melomonster (a dominant trait) has his eyes on a pretty little four-eyed melomonster (a recessive trait). There is a problem, however; he wants all five-eyed children. Harry's family is a pure line while his love is purebred for her four-eyes. What will their children look like?