## Multiple Allele Notes:

What happens if there are 3 possible alleles for a trait? How do they combine to make a genotype and phenotype?

Blood Type alleles $=A, B, O$

If you receive this from your parents:
00
AB
AA or AO
BB or BO

You will be this blood type:
Type 0
Type AB
Type A
Type B
$A$ and $B$ are both dominant so they will both show if you get one of each, giving you $A B$ blood.
$O$ is recessive and will be hidden by $A$ or $B$ if you get $A O$ or $B O$, so Type $A$ and Type $B$ blood have 2 possibilities.

Working a problem:
Mom is homozygous A (she's AA) and dad is heterozygous B (he's BO). What are the possible offspring blood types?


Offspring are Type AB and Type A

Can a Type AA mom and Type BO dad have a Type O baby?


No, not possible!

Work the problems on the worksheet. Only fill in the first column (Possible Genotypes) on the table for Question \#1.

