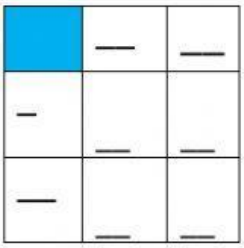
More Single Gene Crosses Using a Punnett Square

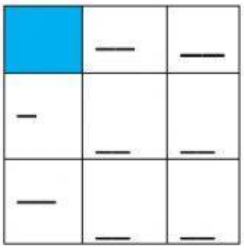
1. Tongue rolling is dominant to non-tongue rolling. Cross 2 non-tongue rollers.
   ___= tongue roller ____=non-tongue roller __ X __



__ = 100% non-tongue rollers = ____%

2. Dimples are dominant over no dimples. Cross a person heterozygous for dimples with a person having no dimples.

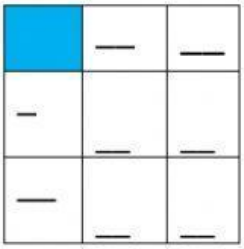
__=dimples __= no dimples ____ X ____



__% dimples, __% no dimples

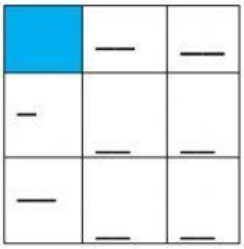
½ __, ½ _____

3. In cats, no tail is incompletely dominant to long tail. The heterozygote is a shorttail. Cross two short-tailed cats.
   L = _____ tail, N= ___ tail, LN= short tail ___ X ___



___ =LL, __= LN, __=NN
___:____: ___ is the ration of Long tail: short tail: no tail

4. In Andalusian chickens black feathers are incompletely dominant to white feathers. The heterozygous chicken is a blue grey. Cross a blue chicken with a white chicken.
   B= _____, ___= White, BW=blue. ___ X ____



___% white, ___% blue, ___% black
50% __, 50% ___t

5. In shorthorn cattle, red is incompletely dominant to white coat. The heterozygous condition results in a blending of white and read hairs called roan. Cross a red bull and a roan cow. __=red, w=white, ___=roan. ___X___

	___	___
_	___	___
___	___	___

____% red, ___% white, ___% roan

6. In pea plants, green pod color dominates yellow pod color. Two peas have been crossed, and the offspring have the phenotypic ratio of 3 green:1 yellow. Following the procedure described in the examples, show what occurred in the cross. _____ X _____

	___	___
_	green ___	green ___
___	green ___	yellow ___