

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

$\frac{1}{2}$ ____ , $\frac{1}{2}$ ____

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	white
white	white	white
white	white	white

____ % 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
green	green	yellow
green	green	yellow