

Name _____

Date _____

Worksheet: Dihybrid Crosses

Ex) A tall green pea plant (TTGG) is crossed with a short white pea plant (ttgg).

TT or Tt = tall

tt = short

GG or Gg = green

gg = white

TTGG X ttgg

TG TG TG TG

tg	TtGg	TtGg	TtGg	TtGg
tg	TtGg	TtGg	TtGg	TtGg
tg	TtGg	TtGg	TtGg	TtGg
tg	TtGg	TtGg	TtGg	TtGg

_____ Tall/Green :

_____ Tall/White :

_____ Short/Green :

_____ Short/ White

1) A tall green pea plant (TTGg) is crossed with a tall green pea plant (TtGg)

TTGg x TtGg

	TG	Tg	TG	Tg
TG	TTGG	TTGg	TTGG	TTGg
Tg	TTGg	TTgg	TTGg	TTgg
tG	TtGG	TtGg	TtGG	TtGg
tg	TtGg	Ttgg	TtGg	Ttgg

_____ Tall/Green : _____ Tall/White :

_____ Short/Green : _____ Short/ White

2) A tall green pea plant (TtGg) is crossed with a short white pea plant (ttgg).

TtGg x ttgg

	TG	Tg	tG	tg
tg	TtGg	Ttgg	ttGg	ttgg
tg	TtGg	Ttgg	ttGg	ttgg
tg	TtGg	Ttgg	ttGg	ttgg
tg	TtGg	Ttgg	ttGg	ttgg

_____ Tall/Green : _____ Tall/white :

_____ short/Green : _____ short/ white

3) A Homozygous tall, green flowered plant is crossed with a Homozygous short white flowered plant.

TTGG x ttgg

	TG	TG	TG	TG
tg	TtGg	TtGg	TtGg	TtGg
tg	TtGg	TtGg	TtGg	TtGg
tg	TtGg	TtGg	TtGg	TtGg
tg	TtGg	TtGg	TtGg	TtGg

_____ Tall/green :

_____ Tall/White :

_____ Short/green:

_____ Short/White

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4) Two Heterozygous Tall, Green pea plants are crossed.

$$\underline{TtGg} \times \underline{TtGg}$$

	TG	Tg	tG	tg
TG				
Tg				
tG				
tg				

_____ Tall/Green :

_____ Tall/White :

_____ Short/Green :

_____ Short/ White

5) In horses, black is dependent upon a dominant gene, B, and chestnut upon its recessive allele, b. The trotting gait is due to a dominant gene, T, the pacing gait to its recessive allele, t. If a heterozygous black trotter is mated with a homozygous chestnut pacer, what will be the appearance of the F1 generation?

$$\underline{BbTt} \times \underline{bbtt}$$

_____ Black/Trotting :

_____ Black/Pacing :

_____ Chestnut/Trotting :

_____ Chestnut / Pacing

6) In summer squash, white fruit color (W) is dominant over yellow fruit color (w) and disk-shaped fruit (D) is dominant over sphere-shaped fruit (d). A squash plant homozygous for white color and disk-shape is crossed with a plant homozygous for yellow color and sphere-shape:

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$$

_____ White/Disk-shaped :

_____ White/Sphere-shaped :

_____ Yellow/Disk-shaped :

_____ Yellow / Sphere-shaped

7) On a separate sheet of paper, create your own dihybrid cross problem. Include a solution to your problem.