Punnet Squares: Two Genes





- S= solid, G=gray, w=whiteface
- F=fawn, B=black
- gray male (GS/BB) x

Whiteface Fawn female (WSFB)

Need to figure out the possible gametes (sperm/eggs)

Every sperm or egg has only one copy of each gene

So each sperm from the male could have either the G or the S allele from the whitespot gene and it can have either B or B from the color gene

Possible male gametes are GB, SB Possible female gametes are WF, WB, SF, SB Make a punnet square from two genes,

Results of the Mating

	GB	SB
SF	GSBF	SSBF
	Rosegray	SolidFawn
WF	GWBF	SWBF
	BEW	Whiteface
		Fawn
SB	GSBB	SSBB
	Silvergray	SolidBlack
WB	GWBB	SWBB
	BEW	Whiteface Black

- Outcomes: Just count the cells in the punnet square
- 1/8 Rose gray
- 1/8 Solid Fawn
- 2/8 BlueEyedWhite
- 1/8 Silver gray
- 1/8 WhiteFaceFawn
- 1/8 WhiteFaceBlack
- 1/8 Solid Black