

PUNNETT SQUARES

Key

1) IN COWS, BLACK FUR $\rightarrow B$ IS DOMINANT OVER WHITE FUR $\rightarrow b$. DO A PUNNETT SQUARE SHOWING A CROSS BETWEEN A HOMOZYGOUS DOMINANT COW & A WHITE COW.

PARENT 1 GENOTYPE: BB

PARENT 2 GENOTYPE: bb

	B	B
b	Bb	Bb
b	Bb	Bb

GENOTYPE RATIO:
100% Bb

PHENOTYPE RATIO:
100% black
(heterozygous)

2) SHOW A CROSS BETWEEN A HOMOZYGOUS DOMINANT COW & A HETEROZYGOUS COW.

PARENT 1: BB

PARENT 2: Bb

	B	B
B	BB	BB
b	Bb	Bb

GENOTYPE RATIO:
50% BB
50% Bb

PHENOTYPE RATIO:
100% black

3) SHOW A CROSS BETWEEN A HETEROZYGOUS BLACK COW & A HOMOZYGOUS RECESSIVE COW.

PARENT 1: Bb

PARENT 2: bb

	B	b
b	Bb	bb
b	Bb	bb

GENOTYPE RATIO:

50% Bb

50% bb

PHENOTYPE RATIO:

50% black

50% white

4) SHOW A CROSS BETWEEN 2 HETEROZYGOUS COWS.

PARENT 1: Bb

PARENT 2: Bb

	B	b
B	BB	Bb
b	Bb	bb

GENOTYPE RATIO:

25% BB

50% Bb

25% bb

PHENOTYPE RATIO:

75% black

25% white