

Example:

Roan (red and white)

Roan cow and roan bull mate

A roan cow genotype : $H^R H^W$

A roan bull genotype: $H^R H^W$

H is for hair

R and W are colour

What is the phenotype of offspring?

1 red ($H^R H^R$)

2 roan ($H^R H^W$)

1 white ($H^W H^W$)

	H^R	H^W
H^R	$H^R H^R$	$H^R H^W$
H^W	$H^R H^W$	$H^W H^W$

Assignment:

1. Checkered feathers in chickens are a mixture of black feathers (F^B) and white feathers (F^W). If a rooster with black feathers mates with a hen with white feathers, what are the probable genotypes and phenotypes of their offspring? Complete a Punnett square

<table border="1"> <tr> <td></td><td>F^B</td><td>F^B</td></tr> <tr> <td>F^W</td><td>$F^B F^W$</td><td>$F^B F^W$</td></tr> <tr> <td>F^W</td><td>$F^B F^W$</td><td>$F^B F^W$</td></tr> </table>		F^B	F^B	F^W	$F^B F^W$	$F^B F^W$	F^W	$F^B F^W$	$F^B F^W$	<p>Genotypes:</p> <p>_____ % $F^B F^B$</p> <p><u>100</u> % $F^B F^W$</p> <p>_____ % $F^W F^W$</p>	<p>Phenotypes:</p> <p>_____ % black</p> <p><u>100</u> % checkered</p> <p>_____ % white</p>
	F^B	F^B									
F^W	$F^B F^W$	$F^B F^W$									
F^W	$F^B F^W$	$F^B F^W$									

2. A female has type A blood ($I^A I^A$) and a male has type AB blood ($I^A I^B$). Determine the blood type of offspring

	I^A	I^A
I^A	$I^A I^A$	$I^A I^A$
I^B	$I^A I^B$	$I^A I^B$

Genotypes:

50 % $I^A I^A$

_____ % $I^B I^B$

50 % $I^A I^B$

Do any offspring have type B Blood? Explain

No

There's $I^A I^B$

↳ Type AB

AB both fully expressed