

## BUILD A COW WORKSHOP

Roll the colored dice to determine what genes your offspring will carry. Match the genetic traits each parent will pass on to his/her offspring by recording the uppercase or lowercase letter from the dice in your chart.

### MOTHER'S TRAITS

### FATHER'S TRAITS

	heads dominant	tails recessive		heads dominant	tails dominant
<b>1. Male/female</b>	<b>X = female</b>	<b>X</b>	<b>1. male/female</b>	<b>X</b>	<b>Y = male</b>
<b>2. polled/ horned</b>	<b>P = polled</b>	<b>p</b>	<b>1. polled/ horned</b>	<b>P</b>	<b>p</b>
<b>3. Black coat/ red coat</b>	<b>B = black</b>	<b>b</b>	<b>3. Black coat/ red coat</b>	<b>B</b>	<b>b</b>
<b>4. Solid coat/ spotted coat</b>	<b>S = spotted</b>	<b>s</b>	<b>4. Solid coat/ spotted coat</b>	<b>S</b>	<b>s</b>

	Mother's trait	Father's trait	Circle appropriate trait combination		
Sample trait	B	b	BB	<b>Bb</b>	bb
1. Male/female			male XY	Female XX	n/a
2. polled/horned			polled PP	polled Pp	horned pp
3. black coat/red coat			black coat BB	black coat Bb	red coat bb
4. solid/spotted			solid SS	solid Ss	spotted ss

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3. black coat/red coat			black coat BB	black coat Bb	red coat bb
4. solid/spotted			solid SS	solid Ss	spotted ss