

	Lesson 6.12	Dragon Traits				
<i>Allele</i>	<i>Trait</i>	<i>Dominant/Recessive</i>	<i>Genotype</i>	<i>Phenotype</i>	<i>Hetero.</i>	<i>Homo.</i>
A	Chin spike	Dominant	AA, Aa	Chin spike	Aa	AA
a	No chin spike	Recessive	aa	No chin spike		aa
B	Rounded tail spikes	Codominance	BB	Rounded tail spikes		BB
b	Pointed tail spikes	Codominance	bb	No tail spike		bb
	Rounded / Pointed tail spikes	Codominance	Bb	Pointed tail spikes	Bb	
C	2 Back spikes	Dominance/ Polygenic	CC	2 Back Spikes		CC
	1 back spike	Incomplete/ Polygenic	Cc	1 Back Spike	Cc	
c	No back spikes	Recessive/Polygenic	cc	No Back Spikes		cc
D	Visible ear hole	Dominant	DD, Dd	Visible ear hole	Dd	DD
d	No visible ear hole	Recessive	dd	No visible ear hole		dd
E	Pointed eye	Codominance	EE	Pointed eye		EE
e	Oval eyes	Codominance	ee	Oval eyes		ee
	Round eye at front	Codominance	Ee	Round eye at front	Ee	
F	Long neck	Dominant	FF, Ff	Long neck	Ff	FF
f	Short neck	Recessive	ff	Short neck		ff
G	No hump back	Dominant	GG	No hump back		GG
g	Large hump back	Recessive	gg	Large hump back		gg
	Small hump back	Incomplete	Gg	Small hump back	Gg	
H	4 clawed feet	Dominant	HH, Hh	4 clawed feet	Hh	HH
h	3 clawed feet	Recessive	hh	3 clawed feet		hh
I	Long tail	Dominant	II, Ii	Long tail	Ii	II
i	Short tail	Recessive	ii	Short tail		ii

J	2 Back Spikes	Dominance/Polygenic	JJ	2 Back Spikes		JJ
	1 Back Spike	Incomplete/Polygenic	Jj	1 Back Spike	Jj	
j	No back spikes	Recessive/Polygenic	jj	No back spikes		jj
K	Red eyes	Dominant	KK, Kk	Red eyes	Kk	Kk
k	Yellow eyes	Recessive	kk	Yellow eyes		kk
L	Spots on neck	Pleiotropic	LL, Ll	Spots on neck	Ll	LL
l	No spots on neck	Pleiotropic	ll	No spots on neck		ll
M	Wings	Dominant	MM, Mm	Wings	Mm	MM
m	No wings	Recessive	mm	No wings		mm
N	No fang	Dominant	NN, Nn	No fang	Nn	NN
n	Fangs	Recessive	nn	Fangs		nn
O	Spots on back	Pleiotropic	OO, Oo	Spots on back	Oo	OO
o	No spots on back	Pleiotropic	oo	No spots on back		oo
P	Blue spots (thigh)	Pleiotropic	PP, Pp	Blue spots (thigh)	Pp	PP
p	Gold spots (thigh)	Pleiotropic	pp	Gold spots (thigh)		pp
Q	Bright Green	Dominant	QQ	Bright Green		QQ
q	Purple	Recessive	qq	Purple		qq
	Dark Olive	Incomplete	Qq	Dark Olive	Qq	
R	Small comb (head)	Dominant	RR, Rr	Small comb (head)	Rr	RR
r	Large comb (head)	Recessive	rr	Large comb (head)		rr
S	Normal pigment proteins, results in normal pigmentation determined by genotype at loci L, O, P and Q					
s	Abnormal pigment proteins, results in only yellow pigments, despite genotype at loci L, O, P and Q					
T	No elbow spike	Dominant	TT, Tt	No elbow spike	Tt	TT
t	Elbow spike	Recessive	tt	Elbow spike		tt
U	Long arms	Dominant	UU, Uu	Long arms	Uu	UU
u	Short arms	Recessive	uu	Short arms		uu
V	Chest plate	Dominant	VV, Vv	Chest plate	Vv	VV
v	No chest plate	Recessive	vv	No chest plate		vv

W	2 Back spikes	Dominant/Polygenic	WW	2 Back spikes		WW
	1 Back spike	Incomplete/Polygenic	Ww	1 Back spike	Ww	
w	No back spikes	Recessive/Polygenic	ww	No back spikes		ww
X	Female					
Nose Spike and ability to fire breath are only on X chromosome, not on the Y						
Z	Nose spike	Dominant	<i>ZZ, Zz</i>	Nose spike	<i>Zz</i>	<i>ZZ</i>
z	No nose spike	Recessive	<i>zz</i>	No nose spike		<i>zz</i>
+	Non –fire breather	Dominant	+	Non-fire breather		
-	Fire-breather	Recessive	-	Fire breather		
Y	Male	Nose spike and ability to fire breather are only on X Chromosome, not on Y				