

1(a)(i)	AABB AABb AaBB AaBb ; ;																									
1(a)(ii)	long chocolate ;																									
1(b)	A B A b a B a b A B A b a B a b ; <table><tr><td></td><td>AB</td><td>Ab</td><td>aB</td><td>Ab</td></tr><tr><td>AB</td><td>AABB</td><td>AABb</td><td>AaBB</td><td>AaBb</td></tr><tr><td>Ab</td><td>AABb</td><td>AAbb</td><td>AaBb</td><td>Aabb</td></tr><tr><td>aB</td><td>AaBB</td><td>AaBb</td><td>aaBB</td><td>aaBb</td></tr><tr><td>Ab</td><td>AaBb</td><td>Aabb</td><td>aaBb</td><td>aabb ;</td></tr></table> <i>F2 offspring phenotype number ratio:</i> 9 3 3 1 ; short short long long black chocolate black chocolate ; <i>Mp 4 need phenotypes linked to genotypes by colour, symbol or initials</i>		AB	Ab	aB	Ab	AB	AABB	AABb	AaBB	AaBb	Ab	AABb	AAbb	AaBb	Aabb	aB	AaBB	AaBb	aaBB	aaBb	Ab	AaBb	Aabb	aaBb	aabb ;
	AB	Ab	aB	Ab																						
AB	AABB	AABb	AaBB	AaBb																						
Ab	AABb	AAbb	AaBb	Aabb																						
aB	AaBB	AaBb	aaBB	aaBb																						
Ab	AaBb	Aabb	aaBb	aabb ;																						
1(c)	1 structural gene codes for, (named) structural / functional, protein / polypeptide ; 2 regulatory gene codes for, transcription factor / repressor protein or regulatory gene, controls / helps / restricts, expression of (other) genes ;																									