

INCOMPLETE DOMINANCE

Description of the phenomenon:

Incomplete dominance involves 'blended inheritance' in which two or more alleles for a trait *both manifest in heterozygotes*. This results in a third phenotype in which the expressed physical trait is generally intermediate between the homozygous phenotypes. Thus the hallmark of incomplete dominance is that neither allele 'dominates' the other in a heterozygote and a third phenotype is displayed.

****Note how the last sentence gives us the 'Angry Birds/judo' point of attack: it's the crux of identifying this phenomenon.*

Example found in nature:

Incomplete dominance is observed with red and white flower alleles in snapdragon (*Antirrhinum*). When homozygous, one (a1) produces the red color and the other (a2) white color. Heterozygotes (a1a2) are pink.

Traditional Mendelian case:

	A	a
A	AA	Aa
a	Aa	aa

****Note the coloration. Not just frilly; it adds information to the presentation that makes it more clear and quicker to assess. This example is rather trivial, but it's the kind of thing where bonus points can be found*

Phenotypic results would be $\frac{3}{4}$ Red Snapdragons (AA, Aa), $\frac{1}{4}$ White Snapdragons (aa). A is wholly dominant to a.

Deviant case: Incomplete dominance

Alleles for the incomplete dominant case will be denoted a1 and a2 since they are 'equal'

****This sort of thing is important. Read the intro--talking about A and a here would not just be confusing, it'd be **wrong***

	a1	a2
a1	a1a1	a1a2
a2	a1a2	a2a2

Phenotype results would be $\frac{1}{4}$ red Snapdragons (a1a1), $\frac{1}{2}$ pink Snapdragons (a1a2), and $\frac{1}{4}$ white Snapdragons (a2a2).