

Name: _____

Class: _____

ACTIVITY SHEET

Chapter 4 Revision

Use this revision sheet to check your understanding and guide your revision. Identify any concepts, models or other content that require more study, and then plan your study approach.

By the end of this chapter **you should know:**

	Revise	Complete
Mendel's experiments on peas		
Patterns of inheritance: dominant/recessive, incomplete, codominance		
How to do a monohybrid cross		
The phenotypic ratios of a monohybrid cross		
When a test cross is used		
The types of lethal phenotypes		
Multiple allele systems: blood types in humans		
How to do a dihybrid cross		
The phenotypic ratios of a dihybrid cross		
The process of independent assortment		
Polygenic inheritance, continuous and discontinuous variation		
Patterns of sex-linked inheritance		

By the end of this chapter **you should be able to:**

	Revise	Complete
Define the terms 'purebreeding', 'P', 'F ₁ ' and 'F ₂ ' generations		
Summarise the contribution of Mendel to our understanding of heredity		
Define the terms 'dominant' and recessive; include an example of each		
Define the term 'allele'; include an example		
Define the term 'genotype'; explain how a genotype can be homozygous or heterozygous; include an example of each; Figure 4.9 may assist you with this		
Define the term 'phenotype'; include an example		
Compare incomplete dominance and codominance		
Complete a monohybrid cross, using a punnett square		
Calculate the probability of a particular phenotype (or genotype) from a monohybrid cross		
Describe a test cross, including when it is used		
Describe the types of lethal phenotypes		
Predict the genotype or phenotype of a person (or their offspring) with respect to blood type		
Complete a dihybrid cross, using a punnett square		
Calculate the probability of a particular phenotype (or genotype) from a dihybrid cross		
Describe the process of independent assortment		
Define the term 'polygene'		

	Revise	Complete
Describe polygenic inheritance		
Compare continuous and discontinuous variation; include an example of each		
Define the term 'autosome'		
List the sex chromosomes of a female and a male		
Explain why only males are hemizygous		
Complete a punnett square for an X-linked dominant and an X-linked recessive trait		