

Learning Outcomes:

Nature of Science	Students should be able to organise and communicate their research and investigative findings in a variety of ways fit for purpose and audience, using relevant scientific terminology and representations
Biological World	Students should be able to describe asexual and sexual reproduction; explore patterns in the inheritance and variation of genetically controlled characteristics

Before you read the chapter, think about what you know about genetics. In the first column, record three things you already know about the passage of traits from parents to offspring. In the second column, write three things you would like to learn about this topic. When you have completed the chapter, think about what you have learned and complete the What I Learned column.

K	W	L
What I Know	What I want to learn	What I have learned

Design an investigation to if wrinkled leaves or smooth leaves is the dominant factor in a true-breeding plant?

Which is the dominant trait?

Imagine you are Gregor Mendel's lab assistant studying pea plant heredity. Mendel has crossed true-breeding plants with axial flowers and true-breeding plants with terminal flowers. Use the data below to determine which trait is dominant.

Pea Flower Location Results		
Generation	Axial (Number of offspring)	Terminal (Number of Offspring)
First	794	0
Second	651	207

Determine which trait is dominant and which trait is recessive. Support your answer with data.

Analyse the first-generation data. What evidence do you have that one trait is dominant over the other?