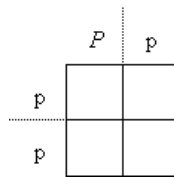# Mendel's peas

This task is about using punnet squares to show genetic characteristics.

Gregor Mendel was an Austrian Monk who did experimental work on the inheritance of characteristics using pea plants.
Look at Mendel's findings for peas in the table and answer the question below.

Characteristic	Dominant	Recessive
Seed shape	Round	Wrinkled
Flower colour	Purple	White
Plant height	Tall	Short

a) i) A pea plant with purple flowers, genotype Pp, was crossed with a white-flowered plant. Complete the punnet square to show the possible offspring.
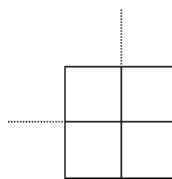
$$
\begin{array}{c|c|c}
 & P & p \\
\hline
p & & \\
\hline
p & & \\
\end{array}
$$

ii) What fraction of the plants produced would be expected to have purple flowers?

_____

b) Two plants which are both heterozygous for height are crossed. (T = tall, t = short)

i) These plants both have the same genotype, this is _____.

ii) Complete the punnet square to show the possible offspring.

iii) What percentage of the plants produced would be expected to be

- tall? _____%

- homozygous? _____%