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In cats, a single gene codes for hair length. The form of the gene for short hair (**H**) is dominant to the form of the gene for long hair (**h**).

- Identify the structures where the gene for hair length is stored in the nucleus of a cell.
- What percentage of a mother cat's genetic information is inherited by her offspring?

A cat that has long hair (**hh**) is crossed with a cat that has short hair (**Hh**). The Punnett square below represents this cross.

	<b>H</b>	<b>h</b>
<b>h</b>	Hh	hh
<b>h</b>	Hh	hh

- Use the Punnett square to determine the probability that an offspring of these two cats will have long hair.
- Explain how you determined your answer to part (c).