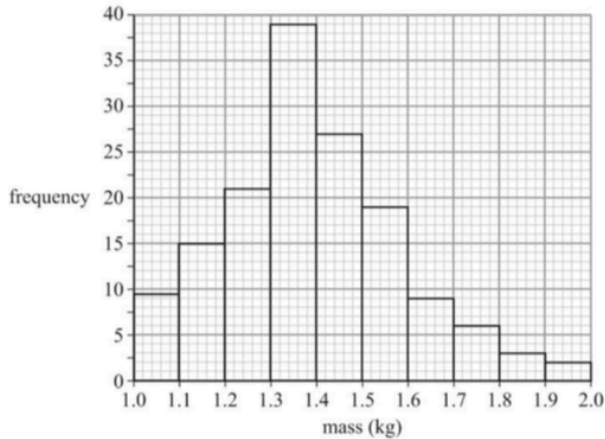# Maths HL12 Core – Histograms
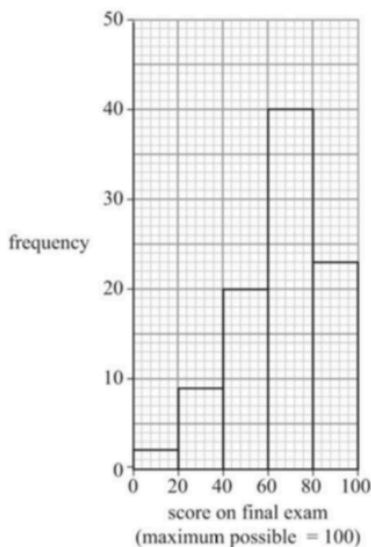
1 This histogram shows the masses of 150 roast chickens sold at a deli counter in one week.

Histogram of masses of 150 chickens

a What is the modal mass of the roast chickens?

b What range of masses was recorded?

c How many roast chickens had a mass of more than 1.8 kg?

d How many chickens had a mass between 1.3 and 1.6 kg?

2 This histogram shows the frequency of different marks in a mathematics test.

Histogram of marks scored in a maths test

a What is the modal mark?

b A mark of 80 or higher is awarded an A. How many students achieved an A?

c Can you tell how many students scored less than 70% from this graph? Explain why or why not.

3 This table gives the mass, in kilograms, of 200 students. Draw a histogram to show this distribution.

Mass (kg)	$40 \leqslant m < 50$	$50 \leqslant m < 60$	$60 \leqslant m < 70$	$70 \leqslant m < 80$	$80 \leqslant m < 90$
Frequency	35	55	60	35	15

4 The ages of 33 young adults attending a youth camp are shown below.

12	15	17	18	16	17	18	19	20	18	11
16	13	14	15	17	19	18	17	19	18	12
13	15	15	16	17	19	20	18	15	15	23

a Organise the data using this frequency table.

Ages	Frequency
$10 \leqslant$ age < 15	
$15 \leqslant$ age < 20	
$20 \leqslant$ age < 25	

b Draw a histogram to represent the ages of the students.