

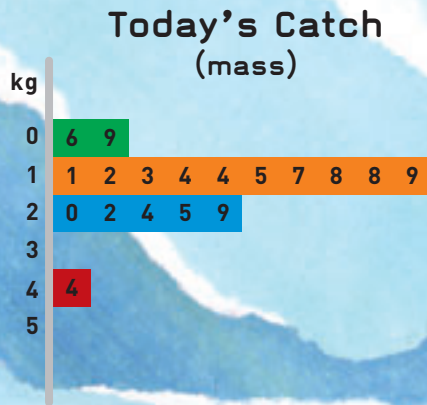
Fish Figures

You need ★ a computer spreadsheet/graphing program ★ a classmate

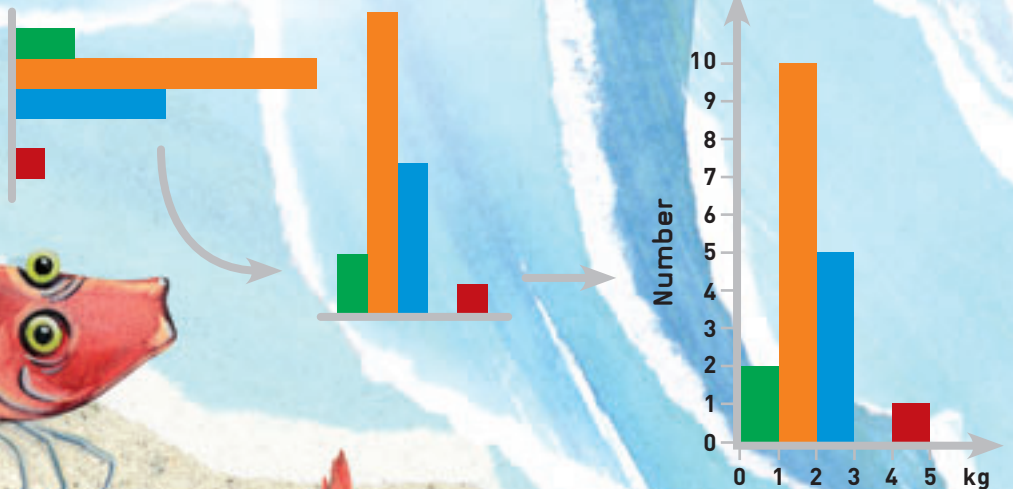
Angela and her dad have had a very good day's fishing. Angela records the mass (weight) and length of their catch in this table:

Mass (kg)	1.2	2.2	2.9	1.3	1.4	1.9	1.4	1.8	0.9	2.4	2.5	1.1	1.5	0.6	4.4	2.0	1.7	1.8
Length (cm)	34	46	52	37	39	43	35	41	27	46	48	33	37	20	62	45	38	36

She wants to be able to describe the catch to her friends, so she graphs the mass of each fish, using a stem-and-leaf graph:



She changes this graph to a histogram:



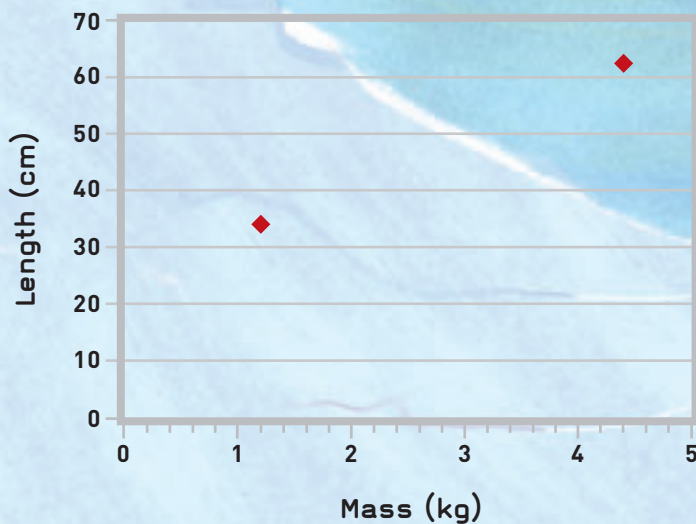
Activity One

1. Using Angela's data, draw a stem-and-leaf graph (similar to the one on page 12) of the lengths of the fish and then use the graph to draw a histogram.
2. Using the graphs to help you, describe the interesting features of the catch (both mass and length) to a classmate.

Activity Two

Angela wonders what kind of relationship there is between the length and the mass of the fish. She uses the XY (Scatter) function in her computer spreadsheet program to create a graph that will help her answer this question. Here it is, with just two fish entered:

Today's Catch



1. Enter Angela's data in a computer spreadsheet and create the complete graph. Describe the resulting pattern. What does it tell you?
2.
 - a. Use the Add Trendline function to add a trendline to your graph.
 - b. What does this line tell you?
 - c. Use the trendline to estimate the length of a fish weighing 3.5 kg. If another fish was 48 cm long, roughly how much would it weigh?