

Count and Construct

Activity 1 – Age Survey

FRESH MINIMARKET made an investigation.

The shop recorded the ages of people in the shop on a Saturday between 9am and 10am.

Then they recorded the data on a **frequency chart**.

Age	Tally	Frequency
21 - 30		2
31 - 40		5
41 - 50		19
51 - 60		11
61 - 70		3

- 1) Complete the frequency chart.
- 2) How many people visited the shop between 9am and 10am?
 $2 + 5 + 19 + 11 + 3 = 40$ people
- 3) How many people were 50 years or younger?
 $19 + 5 + 2 = 26$ people
- 4) The shop manager says the oldest person visiting the shop was 70.
Explain why this might not be correct.
We cannot know if the oldest person visiting the shop was 70.
The data only shows that 3 people between the age of 61 and 70 visited the shop. There could have been no one of that age.
- 5) Write two statements from this data collected.

Example answer:

- i. Senior citizens and young adults are less likely to visit the shop on a Saturday morning.
- ii. Adults between the ages of 41 and 50 are more likely to visit the shop on a Saturday morning.
- iii. Frequency chart can look different if this was a Monday morning rather than a Saturday morning.

Inspired by: <https://corbettmaths.com/wp-content/uploads/2013/02/tally-charts-pdf1.pdf>

Activity 2 – Kitchen Cupboard Survey

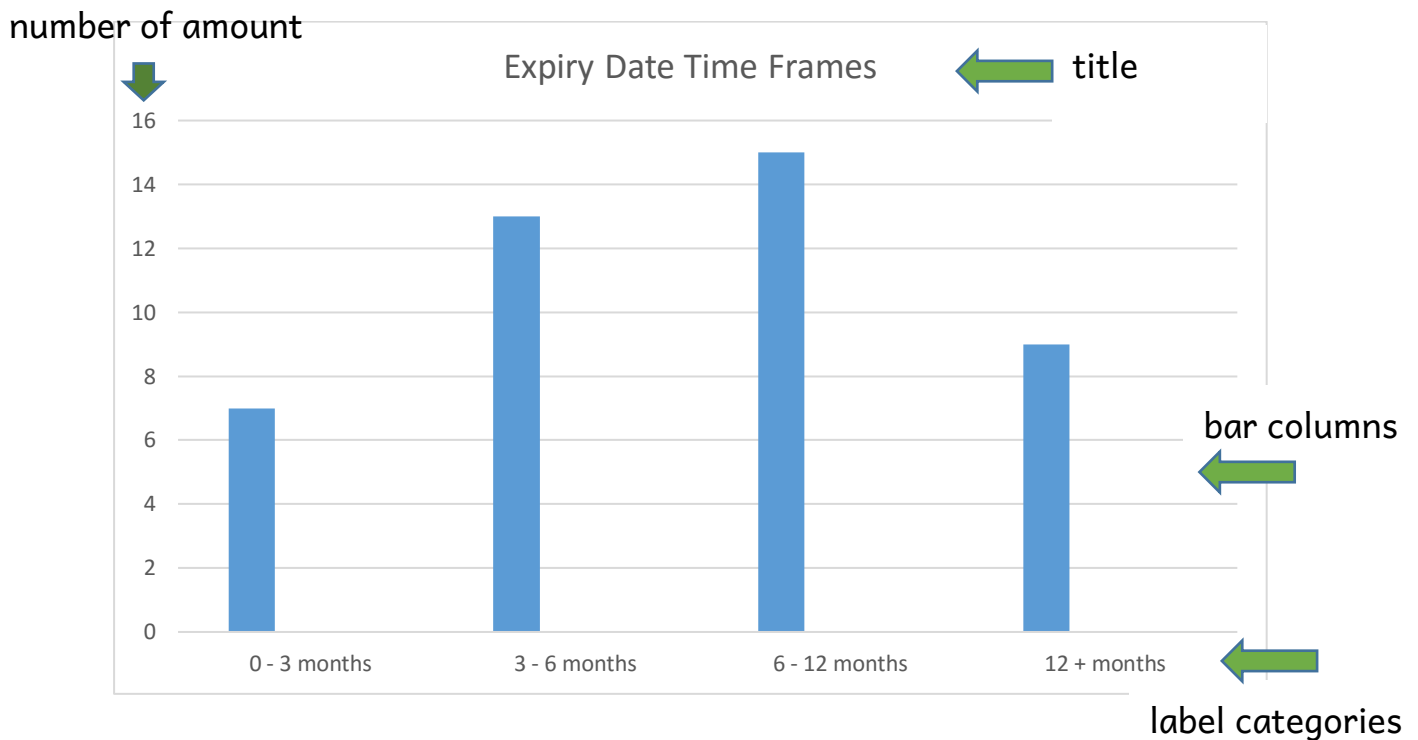
Some food products have a date printed on them.

This can be either a **USE BY** or **BEST BEFORE** date.

- a) Look at all the **food products** in the kitchen cupboard.
- b) Check the date (**best before/used by**) printed on them.
- c) **Sort them out:** expire in the next 3 months (**0 – 3 months**), expire in the next 4 to 6 months (**4 – 6 months**), expire in the next 6 months to 1 Year (**6 – 12 months**), expires in a year or more (**12 months +**)
- d) **Construct a bar graph** according to these expiry date frames.
You can use a graph paper to construct your bar graph.
Make sure that your bar graph has all its important features.



Example answer:



Use your collected data to answer these questions:

1) How many products were used to collect this data?

$7 + 13 + 15 + 9 = 44$ products

2) Which food product in your cupboard has the longest shelf life?

Tinned Coconut Cream (BB 11/01/2023)

3) Which food product in your cupboard is going to expire first?

Whole grain rice (BB 02/10/2020)

4) Do you think it's the type of packaging or the type of food that gives it a long shelf life? (Both)

a) Food goes bad naturally.

b) However, some food may be stored for longer due to its natural preservatives such as acidity.

c) Added preservatives in processing and packaging food can add its shelf life however these preservatives may not always

be good for our health. Some of them kill both our good and bad bacteria in our bodies.

d) Environmental factors (such as humidity) also affect preservation and preparation of food.

Did you know:

People who live in higher altitudes need to use less sugar in cakes and use more liquids when cooking because water evaporate quicker.

Astronauts cannot take bread to space because the yeast cells grow much quicker than on Earth and it would mould quickly.