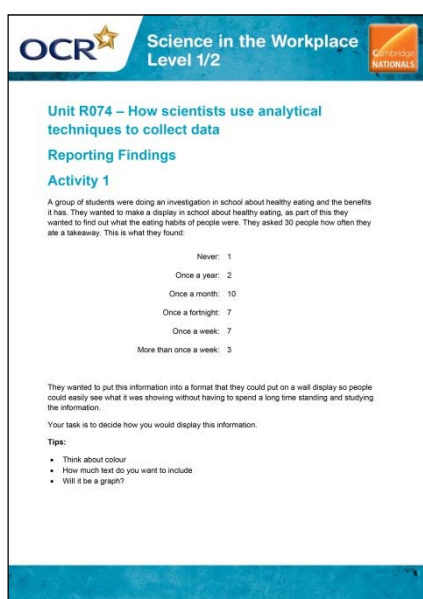




## Unit R074 – How scientists use analytical techniques to collect data

### Reporting Findings

#### *Instructions and answers for teachers*

*The activity below covers LO1: Be able to apply the principles of good laboratory practice*



OCR  Science in the Workplace  
Level 1/2 

Unit R074 – How scientists use analytical techniques to collect data

Reporting Findings

Activity 1

A group of students were doing an investigation in school about healthy eating and the benefits it has. They wanted to make a display in school about healthy eating, as part of this they wanted to find out what the eating habits of people were. They asked 30 people how often they ate a takeaway. This is what they found:

Never: 1  
Once a year: 2  
Once a month: 10  
Once a fortnight: 7  
Once a week: 7  
More than once a week: 3

They wanted to put this information into a format that they could put on a wall display so people could easily see what it was showing without having to spend a long time standing and studying the information.

Your task is to decide how you would display this information.

Tips:

- Think about colour
- How much text do you want to include
- Will it be a graph?

Associated files:

Reporting Findings (activity)

Activity 1 – approx. 1 hour



*This activity offers an opportunity for English skills development.*



*This activity offers an opportunity for maths skills development.*

In this activity learners study data and decide how to present it to best meet the needs of their target audience. Learners should decide if they need to tabulate the data, how best to present it visually, ie as a pie chart, bar graph, line graph etc. Learners should be reminded about the need for labels and the use of appropriate scales for the axis etc. Learners need to decide how they will explain/interpret the data to their target audience.

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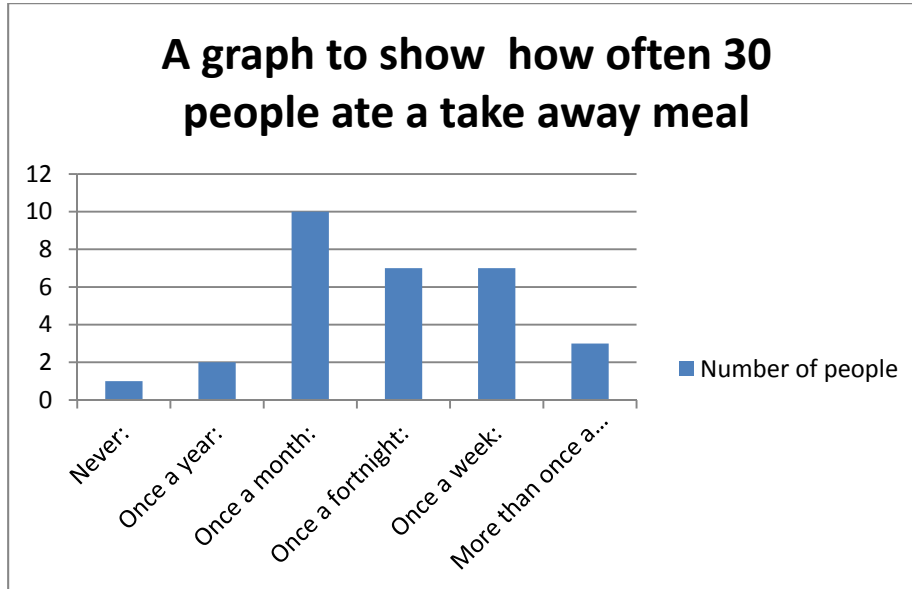
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### Tips:

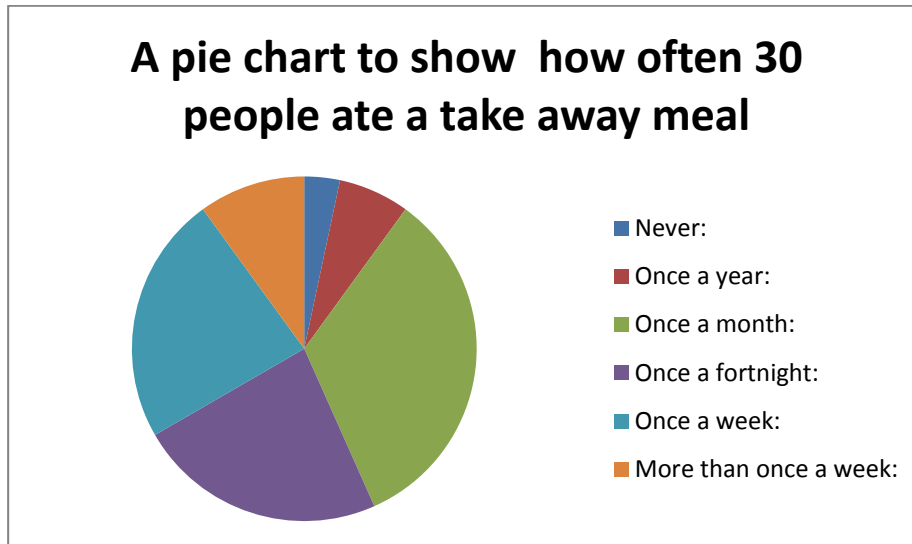
- Think about colour
- How much text do you want to include
- Will it be a graph?

Possible displays for this information are shown below:



Points to note:

- Make sure that all axis are correctly labelled
- Ensure that the graph has a suitable title
- Encourage the use of different colours – this could be used to make a key for the information



Points to note:

- Make sure that learners know how to work out the size of each segment of the pie chart
- Ensure that all parts are correctly labelled/a key is included

**General points to note:**

As an extension task, learners could be encouraged to write a brief paragraph interpreting the results (eg do 50% of the people asked eat a take away meal more or less often than once a week? Which is the largest group? Is this what you would expect? How can these finding be explained by the living habits of today's society?)

Learners could be asked to find out the health impacts of eating take away meals too much.

Ensure that correct scientific vocabulary is used and that any scientific words that the general public may not understand are explained in their work.

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