## Frequency tables

A frequency table is a chart that shows the number of times an item or value occurs in a data set.

For example, the frequency table below shows the number of times each type of pet was adopted from the Rockford Animal Shelter over the last month.

| Pet adoptions |
| :---: |
| Type of pet Frequency |


| Bird | 7 |
| :--- | :---: |
| Cat | 29 |
| Dog | 20 |
| Rabbit | 11 |

## How do you make a frequency table from a data set?

You can make a frequency table from a data set by counting the number of times each entry appears in the data set and entering those values in the table.

Let's try it! Make a frequency table to represent the data set below.
Tiana recorded the numbers of hours she babysat each week.

| Hours Tiana babysat each week |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 4 | 3 | 5 | 3 | 3 |
| 4 | 2 | 2 | 5 | 4 |

Create a frequency table. The first column tells the number of hours Tiana babysat. The second column will tell the number of times each value appears in Tiana's data set.

| Hours Tiana babysat each week |  |
| :---: | :---: |
| Number of hours | Frequency |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |

Count the number times each data value occurs. Record that number in the frequency table.

Hours Tiana babysat each week

| 4 | 3 | 5 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| 4 | 2 | 2 | 5 | 4 |

Tiana baby sat for 2 hours two times.
Tiana baby sat for 3 hours three times.
Tiana baby sat for 4 hours three times.
Tiana baby sat for 5 hours two times.

| Hours Tiana babysat each week |  |
| :---: | :---: |
| Number of hours | Frequency |
| 2 | 2 |
| 3 | 3 |
| 4 | 3 |
| 5 | 2 |

## How do you make a frequency table from a histogram?

You can also make frequency tables from a histogram. Let's try it!
Melissa works at the Port City Zoo. She works in the reptile exhibit. She made the histogram below to show the lengths of the lizards in the exhibit.

## Lengths of lizards



This time, use ranges in the first column of your frequency table. The ranges in your table should match the ranges on the $x$-axis of the histogram.

| Lengths of lizards |  |
| :---: | :--- |
| Lengths (in centimeters) | Frequency |
| $1-30$ |  |
| $31-60$ |  |
| $61-90$ |  |
| $91-120$ |  |

The height of each bar shows the frequency for that corresponding range of lengths. So, find the height of each bar to complete the table.

| Lengths of lizards |  |
| :---: | :---: |
| Lengths (in centimeters) | Frequency |
| $1-30$ | 6 |
| $31-60$ | 11 |
| $61-90$ | 4 |
| $91-120$ | 2 |

## How do you make a frequency table from a dot plot?

You can also make a frequency table from a dot plot. Let's try it!
Aaron works at Grocery Depot. He recorded the number of items shoppers who used the express lane bought.

## Items bought



You can use ranges in the first column of your frequency table. Each range should be the same size, and all data values should be included.

Items bought

| Number of items | Frequency |
| :---: | :--- |
| $1-3$ |  |
| $4-6$ |  |
| $7-9$ |  |
| $10-12$ |  |

Count the dots in each range to find the frequency for each row in the frequency table.

## Items bought



| Items bought |  |
| :---: | :---: |
| Number of items | Frequency |
| $1-3$ | 4 |
| $4-6$ | 4 |
| $7-9$ | 6 |
| $10-12$ | 6 |

## Go to IXL to try some practice problems!

Owen counted the total number of shells collected by his friends during a walk on the beach. Use the data in the line plot to complete the frequency chart below.

Finding seashells


Fill in the missing numbers.

| Finding seashells |  |
| :---: | :---: |
| Seashells found | Number of people |
| 0 | 1 |
| 1 | $\square$ |
| 2 | 6 |
| 3 | $\square$ |

## $\forall$ Create frequency charts w8x

## Visit IXL for more related skills and lessons!

## Skills

Interpret frequency charts: one-step problems UEK
Interpret frequency charts: multi-step problems NJT

## Lessons

Histograms
Dot plots

Create frequency charts w 8 X

