# P2W Skills for Success Activity Set 23: Graphs <br> Part 2 

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## 23.1: Circle Graphs

What do circle graphs show?

Circle graphs are mainly used to represent proportions (parts) or percentages. The circle represents the whole, and the proportion or parts of the whole are represented as pieces, or segments, of the circle. Circle graphs can also be called pie graphs or pie charts.

How are circle graphs used?

Here are some situations where workers use circle graphs:
$\checkmark$ Sales associates read circle graphs to see which products consumers buy most.
$\checkmark$ Administrative assistants create circle graphs to show the proportion of time they spend completing different activities each day.

## What do circle graphs look like?

Circle graphs can take a number of formats. Single or multiple circles may be used, and sections may be separated from one another. When multiple circles are used, the smaller circle provides extra detail about one piece of the main circle graph. Information may be placed directly on the circle or in a legend.

How do you read circle graphs?

To interpret a circle graph, you must first understand what the whole and segments of the whole are that are represented in the graph. Here are some steps to follow to help find this information:

1. Scan the circle graph to identify the title.
2. Locate the legend, if presented, to identify the categories displayed.
3. Examine the segments of the circle to identify any additional information contained in the circle. In some cases, the data labels for the segments of the circle contain a great deal of information. Any combination of the following can be included: percentage, number or category name.

## 23.2: Circle Graphs Practice A

This graph displays the number and type of injuries that occurred in a large manufacturing facility.

## Dolmin Steel Products <br> Total Reported Injuries


$\square$

## 23.2: Circle Graphs Practice A

Refer to the graph to answer the questions below.

1. What is the title of the graph?
2. Which injuries are displayed on the graph?
3. How many back injuries were reported?
4. What percentage of injuries were related to the arm?
5. Which injury makes up 10 percent of all injuries?
6. How many injuries were reported in total?
7. Which two injuries combined make up half of all injuries?

## 23.3: Circle Graphs Practice B

## Interpret the graph to answer the questions below.

## Acute Hazard Fatalities, 2010 to 2019 by Cause



| Cause of Death | Count |
| :--- | :---: |
| Mesothelioma | 68 |
| Mobile Vehicle | 54 |
| Other Cancer | 36 |
| Asbestosis | 21 |
| Struck by Objects | 19 |
| Fall From Height | 15 |
| Heart Injury | 14 |
| Machinery Contact | 11 |
| Other Acute | 9 |
| Other Disease | 9 |
| Drowning | 6 |
| Explosion/ Fire/ <br> Electrical | 6 |
| Acute Poisoning/ <br> Carbon Monoxide | 3 |
| Violence/ Homicide | 2 |
| Total | $\mathbf{2 7 3}$ |

1. How many fatalities are represented in the graph?
2. What percentage of fatalities were caused by falls?
3. Which category has the highest proportion of fatalities?
4. What is the total number of fatalities caused by mobile vehicle and mesothelioma (a type of cancer associated with asbestos exposure) combined?
5. Underline all the unfamiliar terms used in the graph. Look up definitions online or in a dictionary.

## 23.4: Creating Circle Graphs

1. Check the box that describes what you can do using Excel.

| Tasks | Yes | A bit | No |
| :--- | :--- | :--- | :--- |
| a) Create a circle graph in Excel |  |  |  |
| b) Change the formatting of a circle graph |  |  |  |
| c) Add a title to a circle graph |  |  |  |

2. Need to learn more?

## Yes, please!

Ask your instructor to help you learn or review these skills.

## No, I'm good.

Use Excel to create a circle graph.

1. Open the Excel workbook you created to make a bar graph in 22.5: Creating Bar Graphs.
2. Save the workbook under a different file name.
3. Highlight the data and create a circle graph (pie chart).
4. Add a title to the graph.
5. Save the workbook in a folder on the computer.

## Let's

- Compare the bar graph and the circle graph.
- In what ways do bar graphs and circle graphs emphasize different things?
- Do you find one type of graph easier to interpret? Why do you think that is?

