

Lesson 1.3: Data

Task	Page(s)	Learning Target
1	2	I can describe data tables and graphs.
2	3	I can create a data table and graph that follows a constant scale.

Task 1 Learning Target: I can describe data tables and graphs.

Watch the video link:

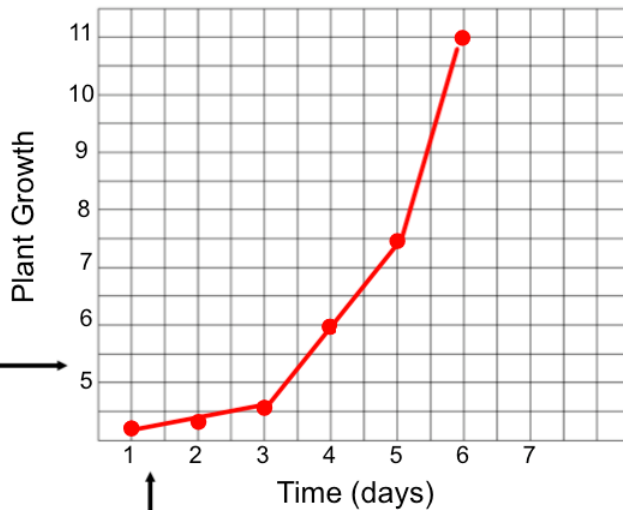
<https://www.khanacademy.org/math/statistics-probability/displaying-describing-data/more-on-data-displays/v/misleading-line-graphs>

- A. **Data Table:** a chart that organizes data

- B. **Graph:** a picture that shows data
 - 1. **Bar graph:** shows a comparison
 - 2. **Line graph:** shows change over time; **time will always go on the x axis.**

- C. **Constant Scale:** from the beginning of the graph to the end
 - 1. the **spacing** between numbers is the same
 - 2. the **numbers** follow the same counting pattern (counting by 1s, 5s or 10s.....)

Plant Growth Over Time



Not a constant scale:
The **spacing** between numbers is the same. The student started skipping 2 boxes...and then continued to skip 2.

The **numbers** do not follow the same counting pattern (counting by 5's... but then counts by 1's).

Not a constant scale:
The **spacing** between numbers is not the same. The student started skipping 1 box...but then skipped 2
The **numbers** follow the same counting pattern (counting by 1's).

In the graph above:

- 1. The graph **title** is: _____
- 2a. The **x axis label** is: _____
- 2b. The **x axis "unit of measure"** is: _____
- 3a. The **y axis label** is: _____
- 3b. The **y axis "unit of measure"** is: _____

*If you are unsure of what a **"unit of measure"** is, see the following:

<https://www.mathsisfun.com/measure/unit.html>

Task 2 Learning Target: I can create a data table and graph that follows a constant scale.

1. Read over the information about a young girl named Sarah in the paragraph below:

At age 1, Sarah was 75 cm tall.
 By the time she turned 2, Sarah had grown by 10 cm.
 By age 3, she had grown another 10 cm.
 When she turned 4, Sarah was exactly 100 cm tall.

- A. Use pencil to make a **data table** to organize the information.
- B. Use pencil to create a **graph** that shows Sarah's change in height.
- C. Use "**Graph Checklist**" to assess your graph:

<u>Line Graph Checklist</u>				
Does/ Is my graph:			Self	Peer
X Axis	X-axis label explains what the numbers represent			
	the correct unit of measure is in parentheses			
	X-axis numbers go from lowest to highest values and correspond to a line			
	The numbers follow a constant scale (they are evenly spaced)			
Y Axis	Y-axis label explains what the numbers represent			
	the correct unit of measure is in parentheses			
	Y-axis numbers go from lowest to highest values and correspond to a line			
	The numbers follow a constant scale (they are evenly spaced)			
Points & Line	Data points match data pairs			
	A clear smooth line is drawn from left to right to connect the points			
Title	The title includes the variables found on the X and Y axes			