

Question(s)

1. Would you use a 'Line graph' for *continuous* or *discrete* data?
 2. For which of these pieces of data would you NOT use a line chart?
Stream flow, traffic flow or categories of land-use

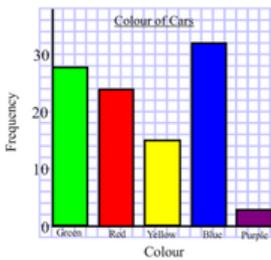
Answer(s)

1. CONTINUOUS – line graphs are better for showing changes over time.
 2. NOT categories of land-use.

Source: ONS UK population change over time

Question(s)

Why are there gaps between the bars in a bar chart?



i) A bar chart compares quantities or frequencies in different categories.
 ii) The gaps make it easier to read the data.
 iii) To stop colours merging

Answer(s)

i) There are gaps between the bars because the bars are comparing different categories.

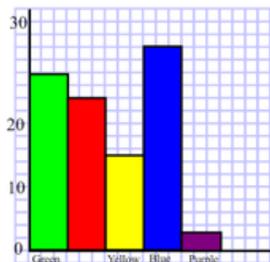
Source: TES.com

Question(s)

Suggest at least 4 errors on this bar chart

KS3 Maths say SALT...

Source: TES.com



Answer(s)

Have you got...?

- there should be a gap between the bars
- Missing a label on x-axis
- Frequency is incorrect on y-axis
- Y axis needs label
- Title of chart is missing

Question(s)

What is missing from this PICTOGRAM?

Colour	Number of Smarties	Frequency
Green		7
Orange		8
Blue		5
Pink		6
Yellow		11
Red		8
Purple		7
Brown		3

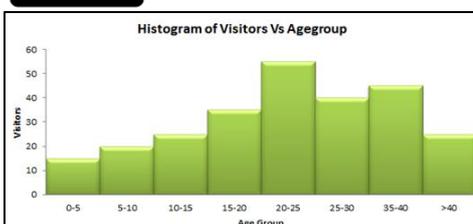
Colour	Number of Smarties	Frequency
Green		7
Orange		8
Blue		5
Pink		6
Yellow		11
Red		8
Purple		7
Brown		3
Key: = 2 smarties		

The key

Answer(s)

Source: <http://www.11plusforparents.co.uk>

Question(s)



Is this chart a BAR CHART or HISTOGRAM?

Answer(s)

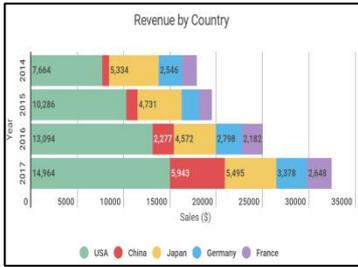
Source: www.whatissixsigma.net

HISTOGRAM

It is a graph that *represents the frequency (count) of items falling into different categories of a given population or sample.*

There are no gaps between the bars to signify that the data is *continuous*.

Question(s) Interpreting a Divided bar graph

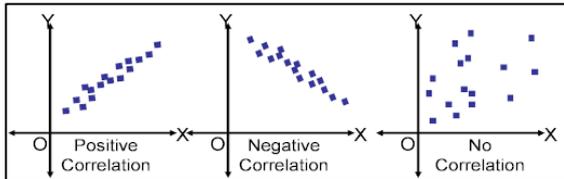


1. Which country had the highest sales revenue in 2017?
2. Which country has seen the biggest increase in its revenue 2014/2017?

Answer(s)

1. USA (The largest share of the bar)
2. China (If you compare China's share 2017 to 2014, their revenue has increased by nearly 10 times)

Source: www.quora.com Please note data may not be accurate. Divided bar charts are also known as 'stacked' bar charts.



Can you think of an example of data that you have used for the correlations shown on these SCATTERGRAPHS?

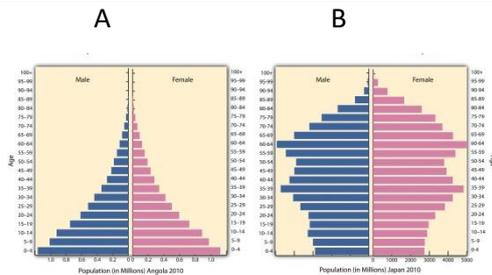
Question(s)

Answer(s)

Positive correlation: e.g. Increased GNI leads to increase in life expectancy
Negative correlation: e.g. as distance increases from the shopping centre, the number of pedestrians declines.
Random: have fun!

Question(s)

Which Population Pyramid belongs to Japan & which to Mozambique?



Answer(s)

A = Mozambique (LIC) – more youthful population
 B = Japan (HIC) - longer life expectancy, particularly for females.

Source: www.flatworldknowledge.com

Question(s)

Explain what is meant by these terms used to describe population pyramids:

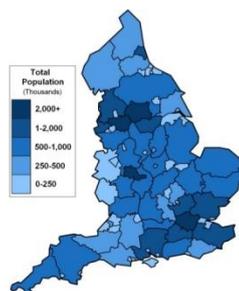
- Elderly dependents
- Economically active
- Young dependents

Answer(s)

Elderly dependents – the proportion of people over 65
Economically Active – the proportion of the population of working age (15-65)
Young dependents – the proportion of the population under the age of 15.
Dependents rely on the working population for support.

Question(s)

This CHOROPLETH MAP shows population density in England. Are darker colours used to show LOWER or HIGHER figures? + can you give one disadvantage of this type of map?



Answer(s)

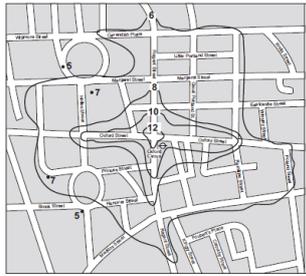
Darker colours are used for HIGHER figures.

+ The colour shows an **average** for the whole area whereas, in reality, there will be wide variations within each area.

Question(s)

In this example, lines on this map connect points of equal units of air pollution. These lines are called...?

+ Give another example of these lines in general use



Answer(s)

Isolines

Other examples include:

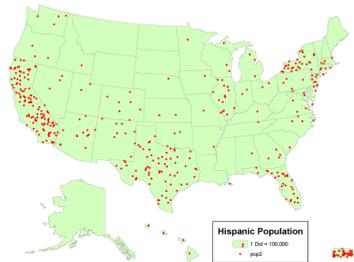
Contours – equal elevation

Isotherms – equal temperature

Isobars – equal pressure

Question(s)

On this DOT MAP, One dot represents 100,000 people of Hispanic origin. Give 2 statements to describe the distribution of Hispanic people in the USA.



Answer(s)

Source:

<http://doratheexploreryadig.blogspot.co.uk>

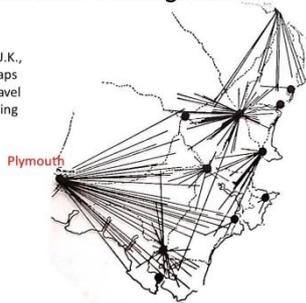
- Highest densities are in California
- Other states with higher numbers are Texas, Florida & New York
- North western states such as Montana & Wyoming do not have significant centres of Hispanic people.

Question(s)

Spatial Pattern of Clothing Purchases

On this DESIRE LINE MAP, we can see where people shop for clothes. Is Plymouth the SOURCE or DESTINATION?

For Devon in the U.K., the desire line maps show extended travel patterns for clothing purchases.



Answer(s)

Source:

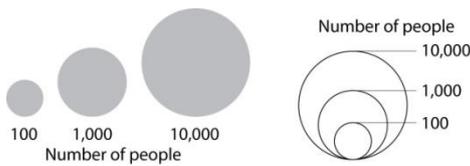
<http://slideplayer.com/slide/4113303/>

DESTINATION

The start of the straight line shows the origin of each customer.

Desire lines can help you work out the Catchment Area or Sphere of Influence.

Question(s)

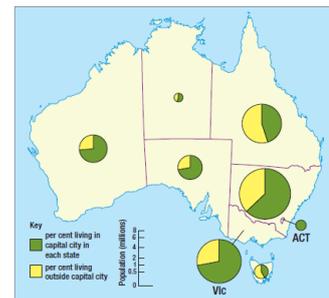


These are examples of KEYS for PROPORTIONAL CIRCLES. How would you use these circles most EFFECTIVELY when presenting data?

Answer(s)

Source: <https://app.wizer.me>

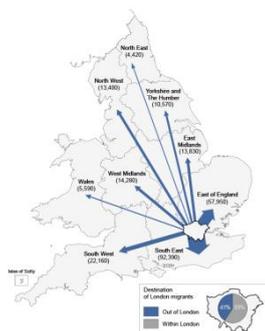
Locate your proportional circles on a MAP.



Question(s)

2011

1. Use the PROPORTIONAL FLOW LINES to say which 2 regions received most people moving out of London?
2. Use the pie chart to find the proportion of migrants who left London
3. This process is called?



Answer(s)

Source: <https://fullfact.org/immigration/londons-booming-population-down-migrants/>

1. South East & East of England
2. 41%
3. Counterurbanisation