

Chapter 1 Module Quiz

Due 7 Jun at 23:59**Points** 15**Questions** 15**Available** until 12 Jun at 23:59**Time limit** None

Instructions

This is a graded quiz worth 1% of your course grade. The quiz covers the key learning objectives of Chapter 1.

Score for this quiz: **15** out of 15

Submitted 31 May at 2:33

This attempt took 4 minutes.

Question 1

1 / 1 pts

Heart rate is an example of which type of variable?

☐ Nominal☐ Ordinal☐ Interval☒ Ratio**Correct!**

Question 2

1 / 1 pts

The Australian tropical cyclone intensity scale is an example of which type of variable?

Correct!☐ Nominal☒ Ordinal☐ Interval☐ Ratio**Question 3****1 / 1 pts**

Blood type is an example of which type of variable?

Correct!☒ Nominal☐ Ordinal☐ Interval☐ Ratio**Question 4****1 / 1 pts**

Which of the following variables is an example of a discrete random variable?

Correct!☒ Number of children in a family☐ Carbon dioxide emissions (CO₂ g/km)☐ Density (kg/m³)☐ Volume (m³)

Question 5**1 / 1 pts**

Which one of the following is NOT a reason that we visualise data?

Correct!

- ☒ To replace formal statistical tests
- ☐ To explore our data
- ☐ To help communicate our findings
- ☐ To check our hypotheses and assumptions

Question 6**1 / 1 pts**

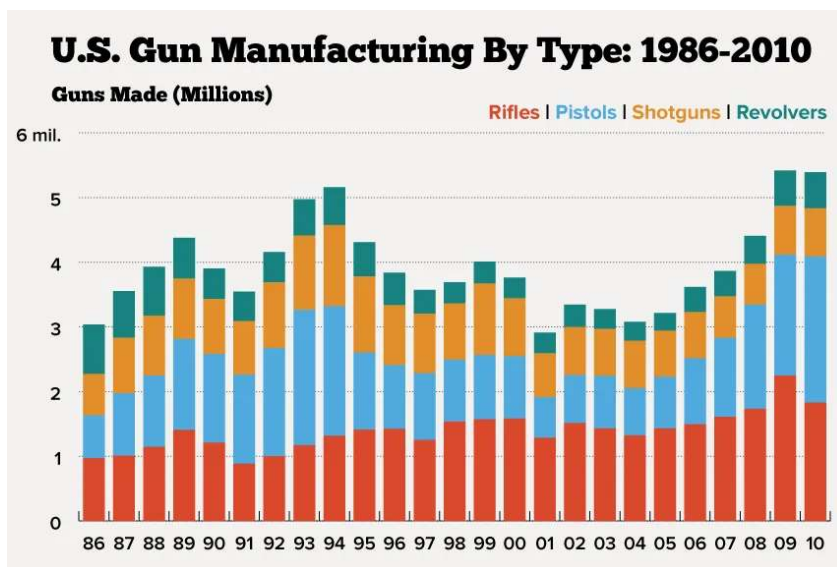
There are many specific advantages to visualising data. Which one of the following is NOT a recognised benefit?

Correct!

- ☐ Detect outliers
- ☐ Detect patterns and interesting trends
- ☒ Highlight the complexity of data
- ☐ Screen vast amounts of data

Question 7**1 / 1 pts**

Consider the following bar chart (taken from [here](http://thedailyviz.com/2012/08/07/charting-u-s-gun-manufacturing/) (<http://thedailyviz.com/2012/08/07/charting-u-s-gun-manufacturing/>)) showing the change in the proportion of different firearm manufacturing in the US. Which of the following issues are present?



☐ Use of a green and red colour scale

☐ Excessive x-axis labels

☐ No data source included.

☒ All of the above

Correct!

Question 8

1 / 1 pts

According to Andy Kirk's structured design process to data visualisation, which task often consumes the most amount of time?

☐ Setting the purpose of the data visualisation

☐ Deciding on an appropriate method to visualise the data

☒ Collecting and processing data

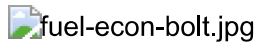
☐ Constructing the data visualisation using visualisation software.

Correct!

Question 9

1 / 1 pts

Consider the following data visualisation taken from [www.caranddriver.com](http://www.caranddriver.com/reviews/2017-chevrolet-bolt-ev-in-depth-model-review-2017-chevrolet-bolt-ev-fuel-economy-review-car-and-driver-page-3) (<http://www.caranddriver.com/reviews/2017-chevrolet-bolt-ev-in-depth-model-review-2017-chevrolet-bolt-ev-fuel-economy-review-car-and-driver-page-3>).



Which primary question does this visualisation fail according to the Trifecta check-up?

☐ Question☐ Data☒ Visuals☐ All three

Correct!

Primarily visuals. The x axis scale is not consistent. Note that the distance between 0 - 30 really large relative to 30 - 80 MPG. This is visually misleading.

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Question 10

1 / 1 pts

Andy Kirk defines four key objectives when designing a data visualisation. Which one of the following objectives is NOT one of Andy's four?

☒ Strive for form over function☐ Justify the selection of everything you do

Correct!

- ☐ Never deceive the receiver
- ☐ Creating accessibility through intuitive design

Question 11**1 / 1 pts**

The Health Star Rating system developed by the Australian government is an example of which type of data?



- ☐ Nominal
- ☒ Ordinal
- ☐ Interval
- ☐ Ratio

Correct!**Question 12****1 / 1 pts**

Which of the following questions is NOT included in Kaiser Fung's trifecta check-up?

- ☐ What is the question?
- ☐ What does the data say?
- ☐ What does the visual say?
- ☒ What was the sample size?

Correct!

Question 13**1 / 1 pts**


Which one of the following is NOT one of the major ethical principles of data visualisation discussed in the text?

- ☐ Beneficence
- ☐ Transparency
- ☒ Data Quality
- ☐ Respect

Correct!**Question 14****1 / 1 pts**

Consider the following data visualisation. There is one major issue. According to the Data Visualisation Checklist, which one of the following sections does this issue fall under?

(Source: <https://www.flickr.com/photos/norbury/25720739157/in/dateposted-public/lightbox/>)

 embellishment.jpg

- ☐ Text
- ☒ Arrangement
- ☐ Colour
- ☐ Overall

Correct!**Question 15****1 / 1 pts**

When is it OK to use data from an external source for the purpose of data visualisation?

- ☐ When you have permission or a licence to use the data
- ☐ When the data have been collected in an ethical way and consent is clear.
- ☐ When the data are of acceptable quality.
- ☒ All of the above conditions must be met.

Correct!

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