

Types of Data - Worksheet

Skill

Group A - Primary and secondary data

For each of the following, state if the data being collected is primary or secondary:

- | | | |
|--|--|--|
| 1) A student interviewing people over the telephone. | 2) A website containing historical data. | 3) A list of plumbers in a local newspaper. |
| 4) A telephone directory. | 5) A scientist conducting an experiment. | 6) Images of animals taken by a motion detecting camera. |
| 7) A pupil conducting a class survey. | 8) An international weather report. | 9) A fitness tracking app on a smartphone. |

Group B - Quantitative and qualitative data

For each of the following, state if the data being collected is qualitative or quantitative:

- | | | |
|-------------------------------------|--|--|
| 1) Eye colour. | 2) The birth weight of newborn lambs. | 3) The number of eggs laid by chickens. |
| 4) The make of cars in a car park. | 5) The names of children in a pre-school. | 6) The distance of the planets from the sun in the solar system. |
| 7) The capacity of a swimming pool. | 8) The smartphones owned by a group of people. | 9) The memory size of a flash drive. |
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Types of Data - Worksheet

Group C - Discrete and Continuous data

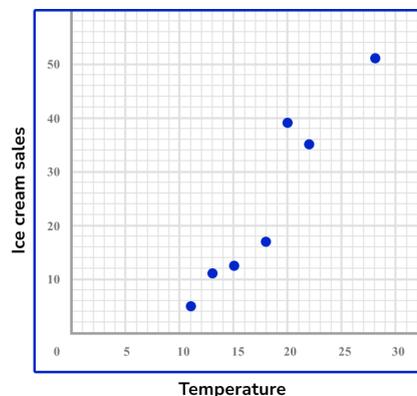
For each of the following, state if the data being collected is discrete or continuous:

- | | | |
|---|--|---|
| 1) The height of the 5 tallest buildings in the world. | 2) The distance travelled on a bus journey. | 3) The number of stops a train makes during a journey. |
| 4) The number of chips in a portion from the canteen. | 5) The amount of water in a bath. | 6) The number of lines in a maths exercise book. |
| 7) The length of a garden hosepipe. | 8) The number of tick marks on a ruler. | 9) The area of the school field. |

Types of Data - Worksheet

Applied

- 1)
 - (a) Fred has a list of the number of goals scored by his local football team over the last 10 matches. What type of data has Fred got?
 - (b) Barney has a grouped table containing the time taken for members of his class to complete a test. What type of data has Barney got?
- 2) This scatter graph shows the number of ice creams sold versus the temperature that day.



- (a) What sort of data is being plotted using the horizontal axis?
 - (b) What sort of data is being plotted using the vertical axis?
- 3) The image is a question from a UK census form:



Household Questionnaire

Person 1 - continued

15 How would you describe your national identity?

☑ Tick all that apply

Welsh

English

Scottish

Northern Irish

British

Other, write in

- (a) What type of data is the question in the image collecting?
 - (b) Given a reason for your answer.

Types of Data - Worksheet

- 4)**
- (a)** Samantha is planning a research project about the temperature of the Atlantic Ocean. Explain why it would be better for her to use secondary data rather than primary data.
 - (b)** Isaac wishes to learn more about his friends' hobbies. Suggest a way he could do this and the type of data he would be collecting.

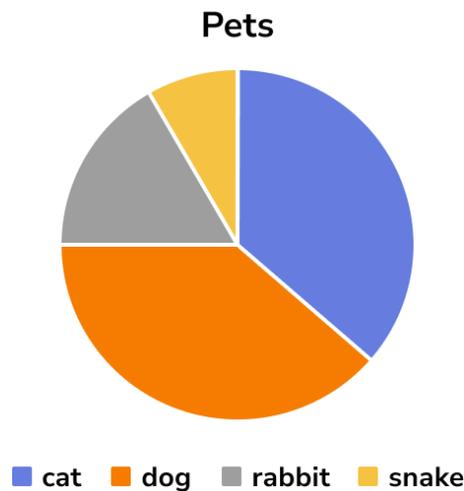
Types of Data - Exam Questions

- 1) The PE staff of a school were recording the times and distances in running and throwing events at the school sports day. Which of the following best describes the type of data collected. Tick all relevant boxes:

Primary	<input type="checkbox"/>
Secondary	<input type="checkbox"/>
Qualitative	<input type="checkbox"/>
Continuous	<input type="checkbox"/>

(2 marks)

- 2) Choose the option which best describes the data shown in the pie chart.



Discrete

Qualitative

Secondary

Continuous

(1 mark)

Types of Data - Worksheet

- 3) Darren is researching the average shoe size in different parts of the world. He finds a few websites with the data he requires.

Choose the option which describes the data he will be collecting.

Primary and discrete

Secondary and qualitative

Secondary and discrete

Primary and continuous

(1 mark)

-
- 4) Aleyna has recorded the different prices of a branded fizzy drink at her local supermarkets.

Choose the option which describes the data she has collected.

Primary and discrete

Secondary and qualitative

Secondary and discrete

Primary and continuous

(1 mark)

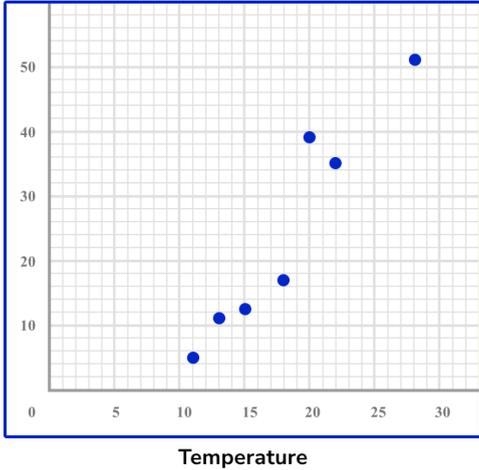
Types of Data - Answers

	Question	Answer
	Skill Questions	
Group A	<p>For each of the following, state if the data being collected is primary or secondary:</p> <ol style="list-style-type: none"> 1) A student interviewing people over the telephone. 2) A website containing historical data. 3) A list of plumbers in a local newspaper. 4) A telephone directory 5) A scientist conducting an experiment. 6) Images of animals taken by a motion detecting camera. 7) A pupil conducting a class survey. 8) An international weather report. 9) A fitness tracking app on a smartphone. 	<ol style="list-style-type: none"> 1) Primary 2) Secondary 3) Secondary 4) Secondary 5) Primary 6) Primary 7) Primary 8) Secondary 9) Primary
Group B	<p>For each of the following, state if the data being collected is qualitative or quantitative:</p> <ol style="list-style-type: none"> 1) Eye colour. 2) The birth weight of newborn lambs. 3) The number of eggs laid by chickens. 4) The make of cars in a car park. 5) The names of children in a pre-school. 6) The distance of the planets from the sun in the solar system. 7) The capacity of a swimming pool. 8) The smartphones owned by a group of people. 9) The memory size of a flash drive. 	<ol style="list-style-type: none"> 1) Qualitative 2) Quantitative 3) Quantitative 4) Qualitative 5) Qualitative 6) Quantitative 7) Quantitative 8) Qualitative 9) Quantitative

Types of Data - Answers

Group C	For each of the following, state if the data being collected is discrete or continuous: 1) The height of the 5 tallest buildings in the world. 2) The distance travelled on a bus journey. 3) The number of stops a train makes during a journey. 4) The number of chips in a portion from the canteen. 5) The amount of water in a bath. 6) The number of lines in a maths exercise book. 7) The length of a garden hosepipe. 8) The number of tick marks on a ruler. 9) The area of the school field.	1) Continuous 2) Continuous 3) Discrete 4) Discrete 5) Continuous 6) Discrete 7) Continuous 8) Discrete 9) Continuous
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Types of Data - Answers

	Question	Answer
	Applied Questions	
1)	<p>a) Fred has a list of the number of goals scored by his local football team over the last 10 matches. What type of data has Fred got?</p> <p>b) Barney has a grouped table containing the time taken for members of his class to complete a test. What type of data has Barney got?</p>	<p>a) Discrete</p> <p>b) Continuous</p>
2)	<p>This scatter graph shows the number of ice creams sold versus the temperature that day.</p>  <p>a) What sort of data is being plotted using the horizontal axis?</p> <p>b) What sort of data is being plotted using the vertical axis?</p>	<p>a) Continuous</p> <p>b) Discrete</p>

Types of Data - Answers

<p>3)</p>	<p>The image is a question from a UK census form:</p>  <p>a) What type of data is the question in the image collecting?</p> <p>b) Given a reason for your answer.</p>	<p>a) Qualitative</p> <p>b) The data is non-numerical</p>
<p>4)</p>	<p>a) Samantha is planning a research project about the temperature of the Atlantic Ocean. Explain why it would be better for her to use secondary data rather than primary data.</p> <p>b) Isaac wishes to learn more about his friends' hobbies. Suggest a way he could do this and the type of data he would be collecting.</p>	<p>a) She could get the data from another source. Collecting the data herself would be difficult, time consuming and expensive.</p> <p>b) Questionnaire Primary qualitative data.</p>

Types of Data - Mark Scheme

	Question	Answer									
	Exam Questions										
1)	<p>The PE staff of a school were recording the times and distances in running and throwing events at the school sports day. Which of the following best describes the type of data collected. Tick all relevant boxes</p> <table border="1" style="margin-left: 20px;"> <tr> <td>Primary</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Secondary</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Qualitative</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Continuous</td> <td><input type="checkbox"/></td> </tr> </table>	Primary	<input type="checkbox"/>	Secondary	<input type="checkbox"/>	Qualitative	<input type="checkbox"/>	Continuous	<input type="checkbox"/>	Primary Continuous	(1) (1)
Primary	<input type="checkbox"/>										
Secondary	<input type="checkbox"/>										
Qualitative	<input type="checkbox"/>										
Continuous	<input type="checkbox"/>										
2)	<p>Choose the option which best describes the data shown in the pie chart.</p> <div style="text-align: center;"> <p>Pets</p>  <p>■ cat ■ dog ■ rabbit ■ snake</p> </div> <p>Discrete Qualitative Secondary Continuous</p>	Qualitative	(1)								
3)	<p>Darren is researching the average shoe size in different parts of the world. He finds a few websites with the data he requires. Choose the option which describes the data he will be collecting.</p> <p>Primary and discrete Secondary and qualitative</p> <p>Secondary and discrete Primary and continuous</p>	Secondary and discrete	(1)								

Types of Data - Mark Scheme

4)	Aleyna has recorded the different prices of a branded fizzy drink at her local supermarkets. Choose the option which describes the data she has collected. Primary and discrete Secondary and qualitative Secondary and discrete Primary and continuous	Primary and discrete	(1)
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