

Y7 Unit 5 Overview-Data Presentation and Analysis

Test window: 22nd June 2020 – 3rd July 2020

Target grade for tests:

You will learn about:

- Pie charts
- Line graphs
- Averages

You will be able to:

- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
- Use information presented in bar charts, pictograms, tables and other graphs to make comparisons.
- Interpret line graphs and make comparisons between line graphs.
- Interpret and construct pie charts and line graphs and use these to solve problems.
- Calculate and interpret the mean as an average.
- Calculate and interpret the median as an average.
- Calculate and interpret the mode as an average.
- Calculate and interpret the range as a measure of spread.



Lesson Overview

PRESENTATION OF DATA

- Understand that pie charts are used to show proportions
- Make statements about proportions shown in a pie charts
- Make statements to compare proportions in pie charts
- Use additional information to make statements about frequencies in pie charts
- Use a table of frequencies to work out the angle for a slice in a pie chart
- Construct a pie chart by measuring angles
- Identify the scale used on the axes of a graph
- Read values from a line graph involving scaling
- Use scaling when constructing line graphs
- Answer two-step questions about data in line graphs (e.g. 'How much more?')

MEASURING DATA

- Understand the meaning of 'average' as a typicality (or location)
- Understand the mean as a measure of typicality (or location)
- Interpret the mean as a way of levelling the data
- Calculate the mean of a set of data
- Choose an appropriate approximation when required
- Use the mean to find a missing number in a set of data
- Calculate the mode of a set of data and understand the term bimodal.
- Calculate the median of a set of data.
- Calculate and interpret the range of a set of data.

Key Words

Refer to <http://studymaths.co.uk/glossary.php> for definitions of the key words

Data
Scale
Axis, axes
Graph
Frequency
Time graph, Time series
Line graph
Pie chart
Sector
Angle
Protractor
Degrees
Maximum, minimum

Average
Mean
Mode, bimodal
Median
Range
Measure
Data
Statistic
Statistics
Approximate
Round

Suggested reading or support/ challenge available



Support is available from a Maths teacher in 'MORALE' in M1 daily from 1:30pm -1:45pm

www.mymaths.co.uk
login: **penryn**
password: **octagon**

www.hegartymaths.com
Go to student login at the top... find your school, enter your details and then set up your password...

<https://vle.mathswatch.com/vle/>
login: school username followed by **@penryn-college**
password: **Penryn2016**

Use your revision guide
Use the code in the front of your guide to access your free online revision

www.justmaths.co.uk/online
login: **PenrynStudent**
password: **Penryn**

Cross curricular

SMSC:

- 1.1 Exploring, understanding and respecting cultural diversity e.g. exploration of different methods of multiplication (Chinese, Russian).
- 3.1 Developing personal qualities and using social skills (regular paired/ group work communication).
- 3.2 Participating, cooperating and resolving conflicts (paired/group activities).
- 4.2 Experiencing fascination, awe and wonder of mathematics.
- 4.4 Using imagination and creativity in learning.

Literacy:

Verbal communication of understanding using key words in the correct context. Development of written communication of methods and strategies to problem solve.

NAC:

Science – Interpret and draw pie charts. Interpret and draw line graphs. Use averages and ranges to compare two sets of data. Understand and use the mode, the median and the range of a set of data

Technology – Interpret and draw pie charts

Business – Interpret and draw line graphs.

MFL – Interpret and draw pie charts

History – Interpret and draw pie charts

Geography – Interpret and draw pie charts.

Interpret and draw line graphs. Use averages and ranges to compare two sets of data. Understand and use the mode, the median and the range of a set of data

Research	
Note-making	
Group work & discussion	
Memorisation	
Precision & accuracy	
Independence	
Reflection	