

Y8 Unit 6 Overview- Data Presentation and Analysis. Time

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

Target grade for tests:

You will learn about:

- Calculate with time
- Draw and interpret bar charts, pictograms and line graphs
- Calculate and interpret averages

You will be able to:

- Solve problems involving converting between units of time
- Complete, read and interpret information in tables, including timetables
- 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.
- Calculate and interpret the mean as an average



Lesson Overview

EXPLORING TIME

- Solve a problem involving converting between different units of time
- Read and interpret information given in a table
- Read and interpret information given in a timetable
- Solve problems that involve interpreting timetables

PRESENTATION OF DATA

- Interpret a pictogram where the symbol represents multiple items
- Interpret bar charts with different scales on the frequency axis
- Create a bar chart with different scales on the frequency axis
- Interpret and draw a time graph
- Solve problems involving the data in tables, charts and graphs
- Understand the difference between a line graph and a bar-line chart
- Identify when a line graph is an appropriate way to show data
- Read values from a line graph
- Answer one-step questions about data in line graphs (e.g. 'How much?')
- Answer two-step questions about data in line graphs (e.g. 'How much more?')
- Solve problems using information presented in a line graph
- Use scaling when constructing line graphs

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
- Calculate the median of a set of data

Key Words

Refer to

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

Millennium, Century, Decade
Year, Month, Week
Day, Hour, Minute, Second
Timetable

Notation

12- and 24-hour clock notation
24-hour clock notation can be with or
without a colon separating hours and
minutes
Analogue clocks with Arabic or Roman
numerals

Data
Pictogram
Symbol
Key
Tally
Bar chart
Time graph, Time series
Scale
Axis
Graph
Frequency
Line graph
Bar-line graph, vertical line chart
Maximum, minimum

Average
Mean, Mode, Median
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:

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 – Solve problems involving time or timetables. Draw and interpret pictograms. Draw and interpret bar graphs. Draw and interpret line graphs. Use averages and ranges to compare two sets of data.

Creative Arts – Solve problems involving time or timetables

History – Draw and interpret bar graphs.

Geography – Draw and interpret pictograms. Draw and interpret bar graphs. Draw and interpret line graphs. Use averages and ranges to compare two sets of data.

English – Interpret pictograms. Draw and interpret bar graphs.

Business – Draw and interpret bar graphs. Draw and interpret line graphs.

MFL – Solve problems involving time or timetables. Draw and interpret bar graphs.

Technology- Draw and interpret pictograms. Draw and interpret bar graphs.

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