

Y7 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: **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** – 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	