LIGHTHOUSE SCHOOL

Name:

Class: Dover

Teacher: Miss Harper

<u>Knowledge Organiser</u>

Term 4

"The mind once enlightened cannot again become dark."

— **Thomas Paine**

How to use your Knowledge Organiser

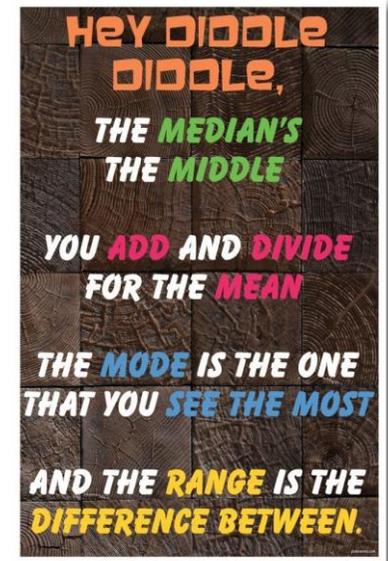| Using in Class	
Quiz your neighbour	Your teacher will give you a topic and you can create questions to test your neighbour's knowledge and understanding
Multiple choice quiz	A quick quiz based on the knowledge organiser
Key words	Tell your teacher if any key words from your knowledge organiser come up in lessons
Spelling Tests	Using the key words, your teacher might give you some spelling tests
Extended Writing	Using this key information, create longer pieces of writing showing your specialist knowledge
Knowledge test	At the end of the unit, your teacher might give you a test based on your knowledge organiser

Using at Home	
Catching up	Use the knowledge organiser to catch up on any lessons you have missed
Quiz yourself	Read through the information, repeat it to yourself, cover and test your knowledge
Create Flashcards	Turn the information in to revision cards
Application	Use this information to add to any homework or classwork, including longer pieces of writing
Revise	Use the information to revise for any assessments or end of topic tests

Data types

Discrete	Values that cannot be divided e.g. colours, shoe sizes, flavours, children, ...
Continuous	Values that can continually be divided e.g. measurements including time
Primary	Values that you collect personally e.g. the opinions of your friends
Secondary	Values that someone else collects e.g. national surveys

Term 4 – KS4 PEARSON EDEXCEL MATHEMATICS

Charts, tables and averages

HEY DIDDLE DIDDLE,

THE MEDIAN'S THE MIDDLE

YOU ADD AND DIVIDE FOR THE MEAN

THE MODE IS THE ONE THAT YOU SEE THE MOST

AND THE RANGE IS THE DIFFERENCE BETWEEN.

Hypothesis
This is a statement used in statistics that can be tested.

Survey
A survey is the collection of data which can use primary or secondary data.

Experiment
An experiment is where one variable (explanatory variable) is controlled to see its impact on another variable (response variable).

Types of graph

| Bar chart (continuous data) | Title of data and axis labelled Bars joined Labels for bars not under bars |
| Frequency polygon | A line replaces the bars joining the midpoint of the top of each bar. |

Hours spent doing homework

| Scatter graph | Plots two variables against one another |
| Lines of best fit | A line is drawn through the points on a scatter graph. It attempts to represent the relationship between the two variables |

| Correlation | How two variables are related either positive, negative or no correlation. |

Cumulative Frequency

Often used with grouped frequency and continuous data, which helps to find estimates of median and inter quartile range.
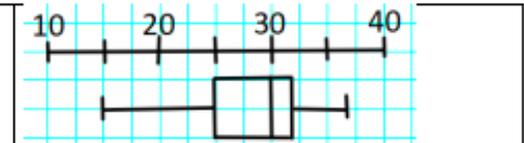
May also be shown on a graph
n.b. points are plotted on the end of a class.

Length (n) in cm	Frequency	Cumulative frequency
0 ≤ n < 5	3	3
5 ≤ n < 10	10	13
10 ≤ n < 15	23	36
15 ≤ n < 20	17	53
20 ≤ n < 25	6	59

Cumulative frequency
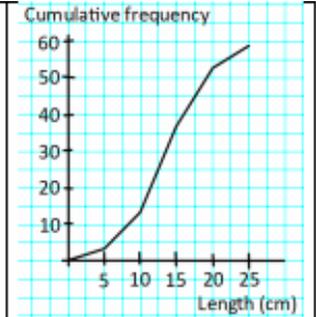
Box plots

A box plot shows the minimum (e.g. 15), lower quartile (e.g. 25), median (e.g. 30) upper quartile (e.g. 32) and maximum (e.g. 37) for a data set.
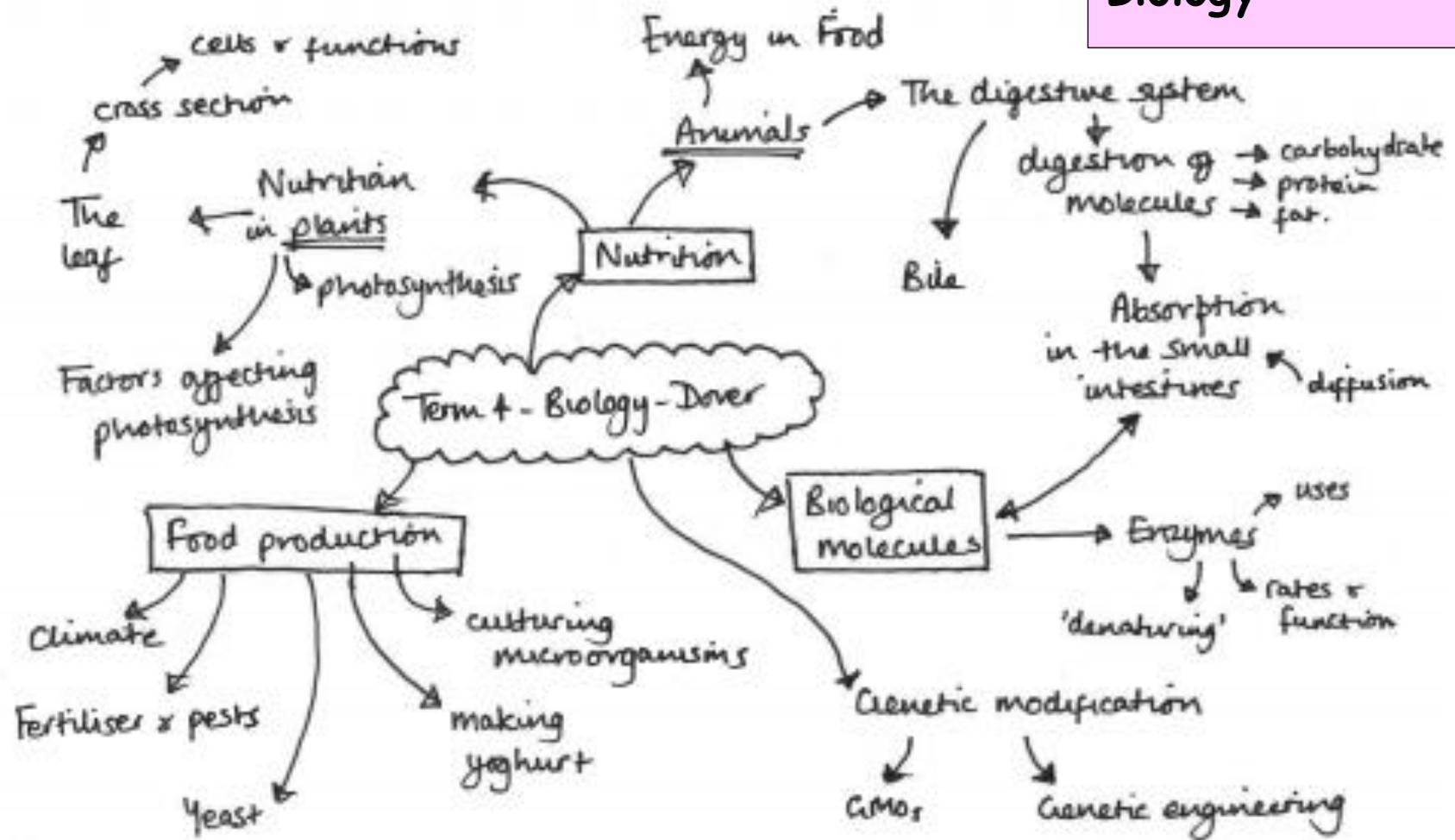

Distribution

How data is spread out and often what it looks like. This might include statistical measures.

Statistical measures

Range	The gap between the smallest and largest number
Mean	The average found by adding all the data pieces together and dividing by the number of pieces of data
Mode	The average identified as the most common number
Median	The average identified as the middle number when the data pieces are aligned in order
Lower quartile	The bottom 25% of the data is below this point
Upper quartile	The top 25% of the data is above this point
Inter quartile range	The gap between the lower and upper quartiles

cells & functions

cross section

P

The leaf

Nutrition in plants

photosynthesis

Factors affecting photosynthesis

Energy in Food

Animals

Nutrition

The digestive system

digestion of molecules → carbohydrate → protein → fat.

Bile

Absorption in the small intestines

diffusion

Term 4 - Biology - Dover

Biological molecules

Enzymes → uses

'denaturing'

rates & function

Food production

Climate

Fertiliser & pests

Yeast

culturing microorganisms

making yoghurt

Genetic modification

GMOs

Genetic engineering

Term 4 – English

GCSE and Entry Level

Entry Level Writing:

- ✓ Structure and using paragraphs.
- ✓ Writing using appropriate sentence lengths.
- ✓ Simple and compound sentences.
- ✓ Spelling, punctuation and grammar (SPaG) -suffixes.
- ✓ Audience and purpose of texts.
- ✓ Writing emails, letters, reviews and articles.
- ✓ Informal and informal language.
- ✓ Identify correct layout and tone.
- ✓ Proofreading.

Common

word spellings (homophones):

There; their; they're.

Here; hear.

One; won.

Two; to; too.

Punctuation

' Apostrophe • Full Stop

( ) Brackets - Hyphen

: Colon ? Question Mark

, Comma ; Semi-colon

! Exclamation Mark " Speech Mark

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Question 3 – Structure (8 marks)

You need to think about the **whole** source.

Refer to the **structure** used in the text to support your answer.

Look for the following features:

Foreshadowing; backflash; tension building; zoom in/out; dialogue; setting; character; sequence (chronological/non-chronological); exposition; climax; resolution.

<u>Always</u> mention the beginning, middle and end of the text.

Question 4 – Personal opinion (20 marks). Focus this part of your answer on the end of the text.

To what extent do you agree? What is your perspective on the quote given?

Without using previous examples of language and structure give your own opinion to the statement, using PEED. You are expected to provide **5 PEED's** in order to gain full marks.
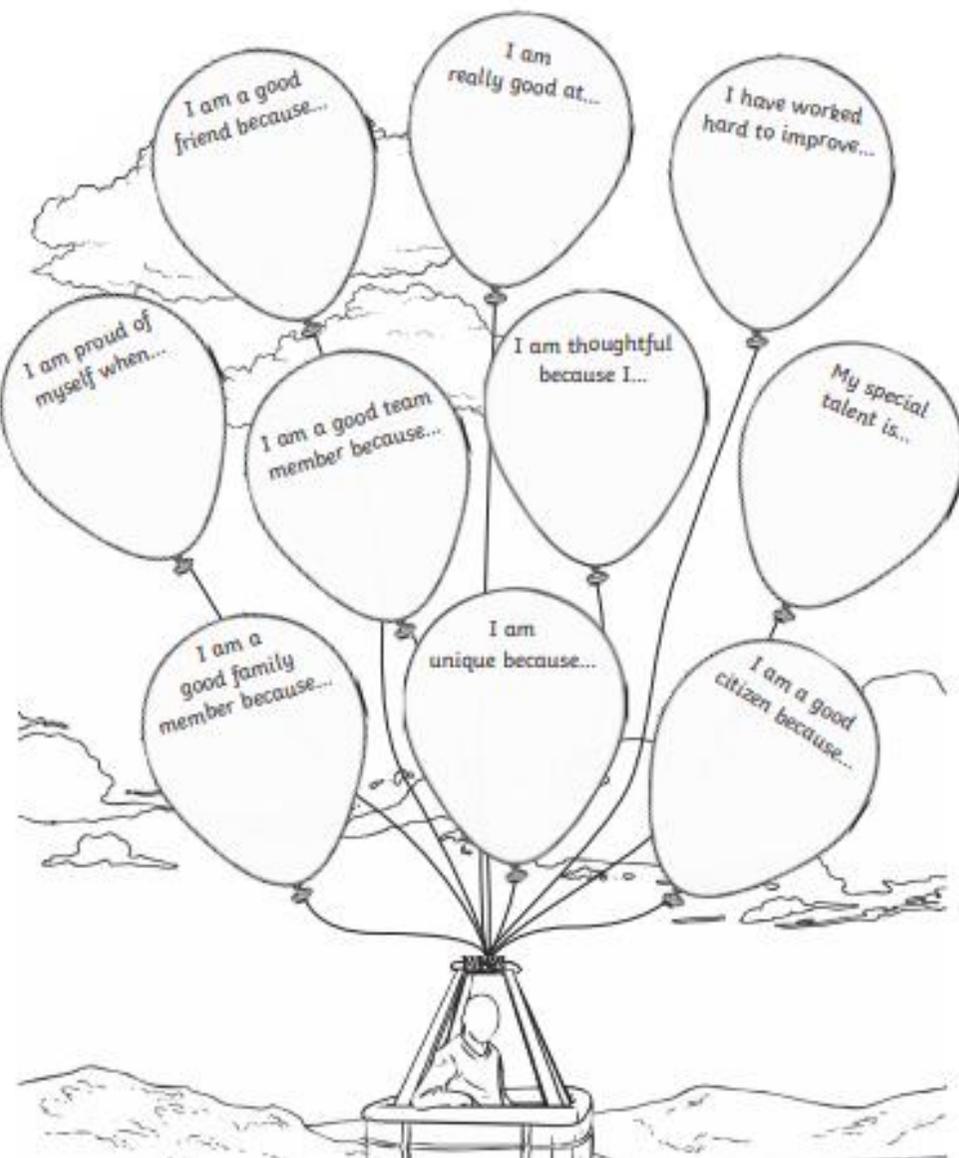
Spelling is not critical, but attempt higher level words, even if you are not sure of the correct spellings.

I Am an Amazing Person!

Read and finish the sentences in the balloons below.

I am a good friend because...

I am really good at...

I have worked hard to improve...

I am proud of myself when...

I am thoughtful because I...

My special talent is...

I am a good team member because...

I am a good family member because...

I am unique because...

I am a good citizen because...

How Can You Be Kind to Yourself?

We often think about how we can be kind to others and what effect our behaviour has on other people.

Have you ever thought about how you can be kind to **yourself**? Using the hearts below, write your own ideas about how you can be kind to yourself. Some ideas have been given to start you off.

Once you have recorded these ideas, start to think about how you can carry out these ideas to be kind to yourself.

Be brave.

Be positive.

Eat healthily.

Choose kind friends.

Try something new.

Make good choices.

Get enough sleep.

Take time to relax and have fun.

Drink plenty of water.

Remember to laugh.