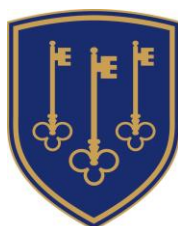


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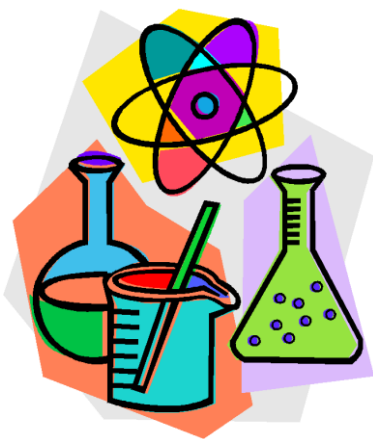
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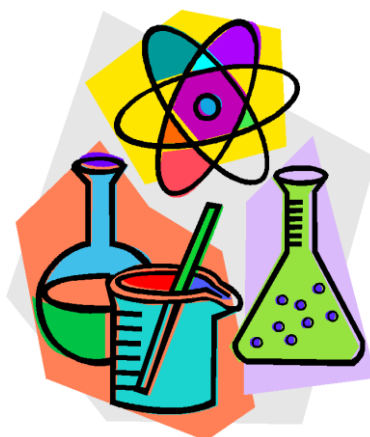
KS3 Science



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10 4 10 Booklet and Guide to Revision



You will find:

- Your revision checklists (biology, chemistry and physics)
- Your **10 4 10** booklet
- A guide to good revision

You need to complete 1 activity from the 10 4 10 booklet (inside) each day for 10 days. We will be marking these in class in your w/c 27th February.

Use this guide to check that you cover all the topics you have studied at key stage 3. It has all the topic headings and some things you should do to help you revise. You can use your revision guides and the internet to help you revise.

Revision top tips

- Complete the 10 4 10 activities
- Start early
- Do a small amount at a time (1/2 hour every day)
- Make revision cards, notes or mind maps.
- Define key terms.
- Use colour and diagrams
- Try some practise questions.

"Fail to prepare.... Prepare to fail"

Biology: Life Processes and Living things

Life processes and cells	
Life Processes	<i>What does "MRS GREN" stand for? e.g. M=Movement</i>
Cells	<i>Draw and label diagrams of the two types of cell. Which parts do they have in common? What does each part do in the cell? Name 3 specialised animal and 3 specialised plant cells. Explain how their structure helps with their job.</i>
Systems	<i>Cell, tissue, organs, system, organism Identify the different organ systems</i>
Humans as organisms	
Reproduction	<i>What is the differences between sexual and asexual reproduction? Label the male and female reproductive organs. What does each part do? Describe fertilisation What are the stages of pregnancy and birth?</i>
Respiration and the Respiratory System	<i>Label the respiratory system and state the job of each part e.g. alveoli State how alveoli are adapted. Write out the equation for aerobic respiration</i>
Circulation	<i>Describe the route of blood around your body. List things carried to cells by the blood. List waste products from cells carried by the blood</i>
Digestion and Diet	<i>Create a flow diagram to summarise digestion Name the 7 main nutrients and why we need them. Name 4 vitamins and minerals and what they are for. What food should you eat to give you the different nutrients? Why do people need different diets?</i>
Drugs and Health	<i>State the effects of drugs on the body. e.g. caffeine; alcohol; nicotine. Describe the effects or smoking, alcohol and lack of exercise on the body? List the harmful substances in cigarettes with the harm they cause.</i>
Microbes and Disease	<i>What three factors can affect your health? What are micro-organisms? How are diseases spread? How can we stop disease spreading? E.g. hygiene; vaccines; antibiotics.</i>

"Fail to prepare.... Prepare to fail"

Plants	
Plants and Photosynthesis	<p><i>Draw and label a diagram of the leaf, explain what processes happen in the leaf.</i></p> <p><i>Write the word equation for photosynthesis</i></p> <p><i>Name and state the function of the other parts of the plant.</i></p>
Variation, Classification and Inheritance	
Variation and inheritance	<p><i>Explain why members of the same species can be different.</i></p> <p><i>Describe what cause variation</i></p> <p><i>Explain natural and artificial selection</i></p>
Classification	<p><i>Name the five vertebrates groups.</i></p> <p><i>Describe the features of different vertebrates</i></p> <p><i>Use a key to identify organisms</i></p>
Living things and their environment	
Habitats and inheritance	<p><i>Name some different habitats and identify the plants and animals found there.</i></p> <p><i>Explain how the organisms are adapted to their environment.</i></p>
Feeding relationships and competition	<p><i>Draw a food chain or a food web.</i></p> <p><i>Explain what happens to the energy available at each stage in the food chain.</i></p> <p><i>Draw pyramids of numbers.</i></p> <p><i>Use key terms correctly. (Predator, prey, producer, consumer, carnivore, herbivore etc)</i></p> <p><i>Describe how organisms are in competition for resources such as light, food & shelter.</i></p> <p><i>Explain why the population of a species may change.</i></p>

"Fail to prepare.... Prepare to fail"

Chemistry: Materials and their properties

States of matter	<p>Name three states of matter and describe how their particles are arranged. List the different properties of the three states of matter.</p> <p>Use key terms correctly, evaporation, sublimation, condensation, freezing etc</p> <p>Explain gas pressure and diffusion in terms of particles.</p>
Atoms and elements	<p>Describe what is meant by an atom and element.</p> <p>Give the chemical symbols of common elements (copper, lead, oxygen, hydrogen etc)</p> <p>Describe some of the properties of common elements e.g. it's a conductor</p> <p>List the properties of metals and non-metals.</p>
Mixtures and compounds	<p>Explain the difference between compound and a mixture.</p> <p>Explain how a mixture can be separated by filtration, distillation etc</p>
Changing materials	
Physical and chemical change	<p>Identify physical and chemical changes.</p> <p>Explain observations made of a chemical change, e.g. if bubble are seen</p> <p>Explain dissolving in terms of particles</p> <p>Define solvent, solute, solution, solubility correctly</p> <p>Explain factors which affect solubility e.g. temperature</p>
Expansion	<p>Describe some uses and problems of expansion.</p> <p>Explain expansion in terms of particles.</p>
Word equations	<p>What are reactants and products?</p> <p>Write the word equations for simple reactions e.g. metal & oxygen, metal & acid, acid & alkali</p>
Environmental chemistry	
Acid rain and the environment	<p>Give the word equation for combustion of fuels.</p> <p>Describe how fossil fuels can be useful, but also can cause problems.</p> <p>Explain how acid rain is formed and what damage it can do.</p> <p>Explain what is meant by the greenhouse effect and what causes it.</p>
Patterns of behaviour	
Metals	<p>Describe how metals react with air, water and acids.</p> <p>Which metals react violently with water?</p> <p>Which don't react with water at all?</p> <p>Put metals in order of reactivity.</p> <p>Use the reactivity series to predict the outcomes of displacement reactions.</p>
Acid and alkali	<p>Name some acids and alkalis</p> <p>Use the pH scale and locate acid, alkali and neutral on it.</p> <p>Describe how acids can be neutralised.</p> <p>Write word equations for acid reactions</p>

"Fail to prepare.... Prepare to fail"

Physics: Physical processes

Forces and motion	
Balanced and unbalanced forces	<i>Explain the effect of forces on an object.</i> <i>Name 3 forces</i> <i>Work out the size of a force from how an object is moving.</i>
Speed	<i>Recall the formula that links speed, distance and time</i> <i>Calculate speed e.g. if an object takes 30 seconds to travel 90 metres what is the average speed?</i>
Friction	<i>Describe two ways of reducing friction</i> <i>Explain how a parachute works.</i>
Pressure	<i>Recall the formula that links pressure, force and area.</i> <i>How do snowshoes help you walk on snow?</i>
Moments	<i>Recall the formula that links turning force with distance and force.</i> <i>State the law of moments.</i> <i>Why do we use a spanner not our fingers to unscrew a nut?</i>
The earth and beyond	
The planets	<i>Name the planets in order</i> <i>Link the planets temperature and orbital time to its distance from the sun.</i>
Day, Night and Seasons	<i>Explain why we have day and night</i> <i>Explain why we get seasons</i>
Satellites	<i>Describe what satellites are used for.</i> <i>Why don't satellites fly off into space?</i>
Sound and light	
Sound	<i>What causes sound?</i> <i>Draw sound waves showing loud or high-pitched sounds.</i> <i>What do amplitude, frequency and wavelength mean?</i> <i>Explain what echoes are.</i>
Light	<i>Describe objects as either opaque, translucent or transparent.</i> <i>Draw ray diagrams showing reflection and refraction.</i> <i>Name the primary and secondary colours of light.</i> <i>What happens when white light shines onto a red filter?</i> <i>Explain why a green cap looks black in blue light.</i>
Electricity and magnetism	
Electricity	<i>Draw circuit symbols and simple series and parallel circuits correctly.</i> <i>Identify materials as conductors and insulators.</i> <i>State some reasons why a circuit wouldn't work.</i>

"Fail to prepare.... Prepare to fail"

Magnetism	<p><i>Explain what happens when you put two north poles together.</i></p> <p><i>Draw a magnetic field.</i></p> <p><i>Describe how to increase the strength of an electromagnet.</i></p> <p><i>Write down three uses of electromagnets.</i></p>
Energy resources and transfers	
Energy resources	<p><i>Where does most of the earth's energy come from?</i></p> <p><i>What are fossil fuels?</i></p> <p><i>Name three renewable energy resources.</i></p> <p><i>Draw a diagram to show how energy is generated from coal.</i></p>
Energy transfers	<p><i>List 5 different forms of energy.</i></p> <p><i>State the energy transformation for a television.</i></p> <p><i>Explain the terms for heat transfer: conduction, convection and radiation.</i></p> <p><i>Describe how energy is lost from a house.</i></p> <p><i>Explain why energy conservation is important</i></p>

"Fail to prepare.... Prepare to fail"

Scientific Investigations

Planning the experiment	<i>Identify factors that could affect the outcome of an experiment.</i> <i>Recognise and make predictions</i> <i>Decide what equipment should be used.</i> <i>Write how to do a practical in simple clear steps.</i>
Doing the experiment	<i>Decide what should be done to make the experiment a fair test.</i> <i>Explain how to get reliable results</i> <i>Describe how to make results accurate.</i>
Looking at the results	<i>Draw a line graph and a bar chart.</i> <i>Read values off a line graph</i> <i>Draw a table to record results.</i> <i>State simply why the results in a table or a graph show.</i> <i>List the units for time, mass, speed and temperature, try to name 3 more.</i>
Evaluating the findings	<i>Decide whether enough evidence has been collected.</i> <i>Explain whether the results collected match the conclusion.</i> <i>Explain whether the experiment done was a fair test and if not why not.</i> <i>Identify errors that have been made when doing a practical.</i>

"Fail to prepare.... Prepare to fail"

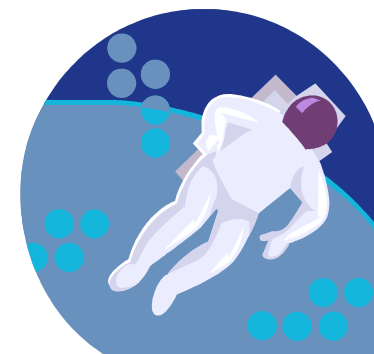


MVC KS3 Science

Revision

10 4 10

Higher

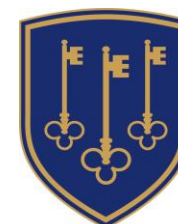


10 minutes a day for 10 days = 10 4 10

You will have been working hard in lessons to prepare for your KS3 exams. This pack has 10 tasks for you to do 1 each day to start over the holiday (weekends are free!). Each task has 2 activities which should take you 10 minutes to complete. The tasks will help you keep science fresh in your mind so that you don't forget what you have been practising in school. When you get back to school, you will be able to check your answers with a friend. If you are really stuck - remember to ask your teacher.

Name:

Form:



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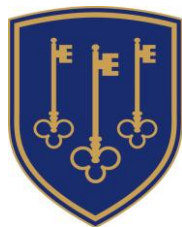
"Fail to prepare.... Prepare to fail"

DAY 1

MVC 10 4 10

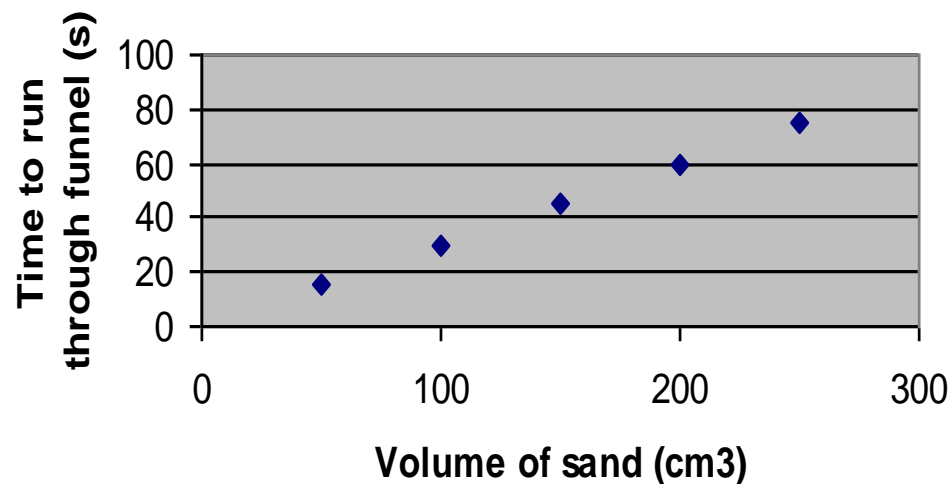
Level 5-8

KS3 Science



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How long do different volumes of sand take to run through a funnel?



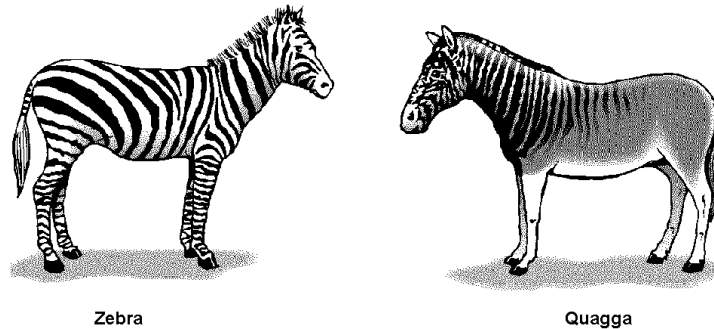
Some pupils did an experiment to see how long it took for different volumes of sand to go through a funnel. The graph shows their results. Complete the graph by drawing the best line through the points then answer these questions!

1. How long does it take for 100cm³ of sand to go through the funnel?
(hint –don't forget the units!)
2. How much sand will go through the funnel in 60 seconds?
3. How long would it take for 125cm³ of sand to go through the funnel?
4. Use this line to estimate how long it would take for 300cm³ of sand to go through the funnel
.....

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QUESTION ON SELECTIVE BREEDING

The quagga is an extinct animal that lived in Africa. Quaggas belonged to the same group as zebras. The drawings below show a zebra and a quagga.



Zebras and quaggas used to breed with each other. The offspring contained a combination of both zebra and quagga genes (genetic information).

How were zebra **and** quagga genes passed on from the parents to their offspring?

.....

These days there are some zebras that still show some quagga features. Scientists are using zebras to try to produce quaggas by selective breeding. Describe the steps in this selective breeding process.

.....

.....

"Fail to prepare.... Prepare to fail"

DAY 2

MVC 10 4 10

Level 5-8

KS3 Science



pH 2 is acidic.

All soils are pH 7.

Acid rain is the only factor which can make soils acidic.

All plants grow healthily in soil of any pH.

Plants always give out carbon dioxide and take in oxygen.

Air contains carbon dioxide naturally. It is vital for food production.

Carbon monoxide is poisonous.

Humans can live in pure oxygen.

Fossil fuels produce nitrogen when they are burned.

Carbon dioxide produced when fossil fuels are burned dissolves in rainwater to make acid rain.

Burning fossil fuels produces oxides of nitrogen and sulfur which dissolve in rainwater to make it acidic.

Sulfur dioxide and carbon dioxide are produced naturally when a volcano erupts. This makes rainwater acidic.

The chemical symbol for sulphur is Su.

Acid rain does not affect sandstone.

Global warming has something to do with carbon dioxide.

Iron is not affected by acid rain.

The ozone layer absorbs harmful ultraviolet light.

We breathe in oxygen and breathe out carbon dioxide.

Acid rain kills animals.

We cannot reduce the amount of acid fumes that enter the air.

SCIENCE TRUE OR FALSE!

T/F

T/F

T/F

T/F

T/F

T/F

T/F

T/F

T/F

T/F

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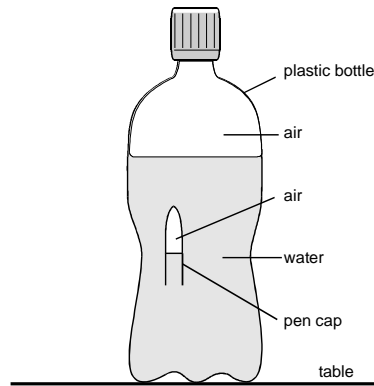
T/F

T/F

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QUESTION ON PARTICLES

A pen cap floats in a plastic lemonade bottle three-quarters full of water. If you squeeze the bottle the pen cap sinks to the bottom. If you then let go of the bottle, the pen cap floats to the surface.



(a) When the bottle is squeezed what, if anything, happens to:

- (i) the distance between the air molecules inside the bottle?.....
- (ii) the distance between the water molecules inside the bottle?.....
- (iii) the pressure of the air trapped inside the pen cap?.....
- (iv) the volume of the air trapped inside the pen cap?.....

Explain why the pen cap sinks when you squeeze the bottle.

.....
.....

"Fail to prepare.... Prepare to fail"

DAY 3

MVC 10 4 10

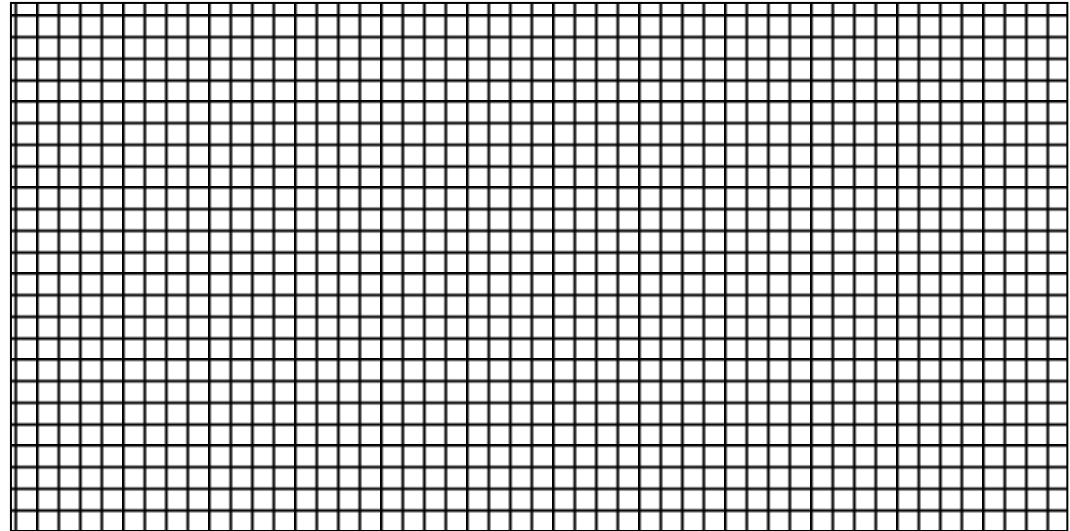
Level 5-8

KS3 Science



Some pupils put a lighted candle under jars of different volumes. They timed how long the candle took to go out under each jar.

These were their results. Use the results to plot a graph



Volume of jar (cm ³)	Time for candle to go out (seconds)
200	9
300	15
400	22
500	25

One of the four sentences below is **best** at describing the **relationship** between the volume of the jar and the time taken for the candle to go out. Tick the correct one.

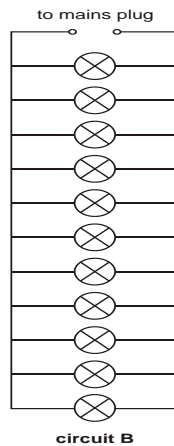
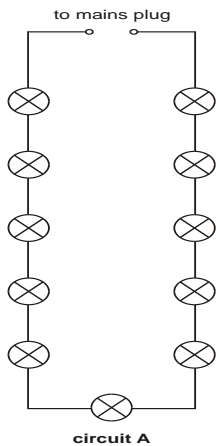
- (a) The greater the volume, the shorter the time for the candle to go out
- (b) The biggest jar kept the candle going longest
- (c) As the volume of the jar increases so the time gets longer
- (d) The candle went out quickest under the smallest jar.

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SERIES AND PARALLEL CIRCUITS.

Electric current flows around a circuit provided it is and that all parts of the circuit are made of in a circuit there is only one path for the current to follow. In a circuit the current can go more than one way around. In a circuit if one component fails then this breaks the circuit and the other components all In a Circuit if one component fails then the others As there is another path for the current to follow.

Complete current insulator metal series work normally parallel stop working broken ammeter conductor



What would happen in each of these circuits if one bulb went out?

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DAY 4

MVC 10 4 10

Level 5-8

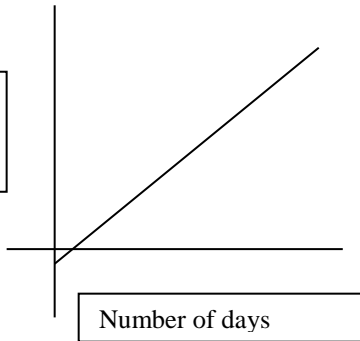
KS3 Science



For each graph explain what is happening – use the correct scientific terminology wherever possible

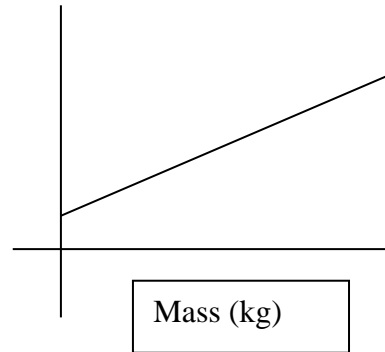
1.

Height of
bean plant
cm



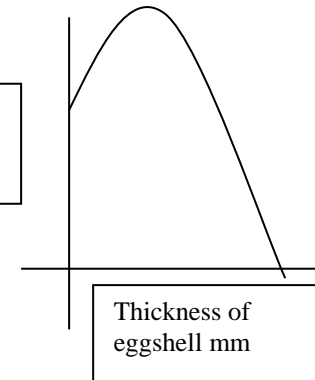
2.

Length
of
spring



3.

Amount
of
pesticide



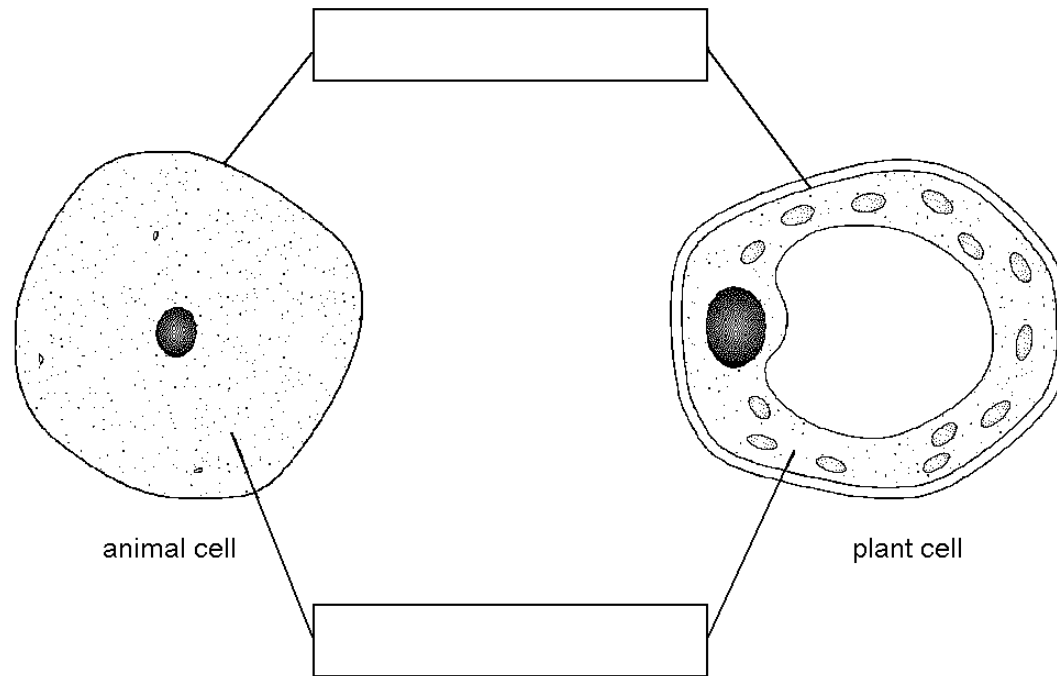
In graph 1 the relationship is

In graph 2 the relationship is

In graph 3 the relationship is

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QUESTION ON CELLS



The diagrams show an animal cell and a plant cell

- (i) The lines from the boxes show the positions of two of the parts that are present in both cells. In the boxes, write the names of these **two** parts.

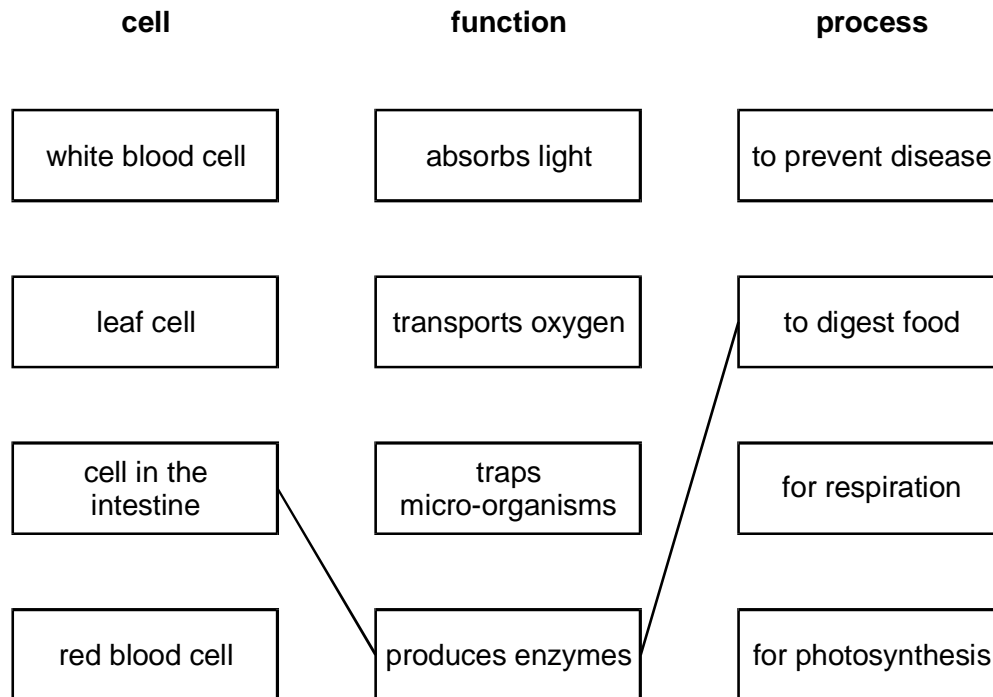
- (ii) Give the names of **two** parts which are present in plant cells but **not** in animal cells.

1. 2.

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(b) Organs can carry out their functions because of the special cells they have.

Draw a straight line from the name of each type of cell to the function of the cell and then to the process it carries out.
One has been done for you.



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DAY 5

MVC 10 4 10

Level 5-8

KS3 Science

Look at these three sets of results which do you think is the most reliable.

Set_____ is most reliable because

SET A		SET B			SET C		
TIME (s)	TEMP (°C)	TIME (s)	TEMP (°C) 1 st try	TEMP (°C) 2 nd try	TIME (s)	TEMP (°C) 1 st try	TEMP (°C) 2 nd try
10	25	10	25	32	10	24	26
20	35	20	34	36	20	37	35
30	50	30	48	60	30	48	47
60	75	60	70	82	60	73	76

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QUESTION ON COMPOUNDS

(a) Magnesium chloride is formed when magnesium reacts with an acid.

(i) Complete the word equation for the reaction between magnesium and this acid.

magnesium + \square magnesium
chloride +

(ii) Suggest why magnesium chloride can be made by mixing magnesium with this acid but copper chloride **cannot** be made by mixing copper with this acid.

.....

.....

(b) Copper sulphate is made by adding copper oxide to a different acid.
Give the name of the acid which is used.

.....

(c) In the table below, write the name of the compound represented by each formula.

formula	name
CuSO_4	
MgCl_2	

"Fail to prepare.... Prepare to fail"

DAY 6

MVC 10 4 10

Level 5-8

KS3 Science

Scientists have to prove their ideas by presenting **EVIDENCE!** Evidence can come from a variety of different sources – but it is important to know what is evidence and what is an opinion. Decide which of these is evidence and put a tick in the box!

Is this evidence?	✓ if you think it is!
An experiment you carry out at school	
What your big sister thinks	
A newspaper article	
A radio interview with a famous scientist	
A graph	
Something written in your science textbook	
A table of results	
The results of a survey	
What you find out on the internet	
What your teacher tells you	
Something you see on a science based TV programme	

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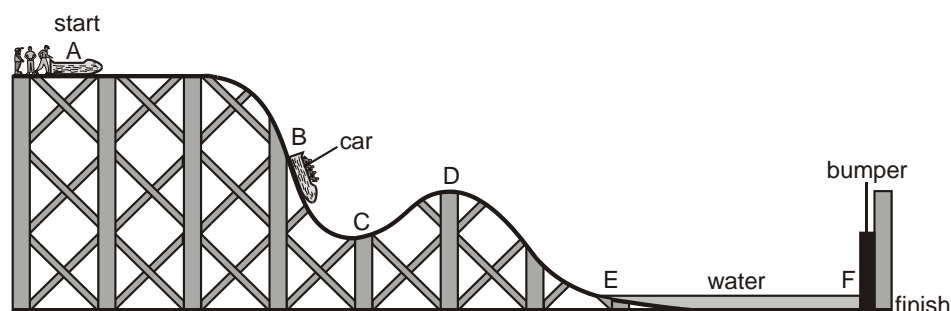
QUESTION ON ENERGY

1. The **photograph** shows some pupils in a log car on a theme-park ride.



The drawing **below** shows the ride.

The letters A, B, C, D, E and F show different points along the track.



The car starts from A and travels to F, where it stops by hitting a bumper. At E the car enters a trench filled with water.

- (a) (i) At which **two** points does the car have **no** kinetic energy?

Give the **two** correct letters..... and

- (ii) At which point does the car have the **most** gravitational potential energy?

Give the correct letter.....

- (iii) At which point does the car have **some** kinetic energy and the **least** gravitational potential energy?

Give the correct letter.

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- (b) (i) The cars are **not** powered by a motor.
What force causes the cars to move along the track from B to C?

.....

- (ii) When a car splashes through the water at E, it slows down.
What force acts on the car to slow it down?

.....

- (c) Complete the sentence below by choosing from the following words.

chemical

gravitational potential

kinetic

light

sound

thermal

When the car hits the bumper at F, its energy

is transferred into energy and energy.

"Fail to prepare.... Prepare to fail"

DAY 7

MVC 10 4 10

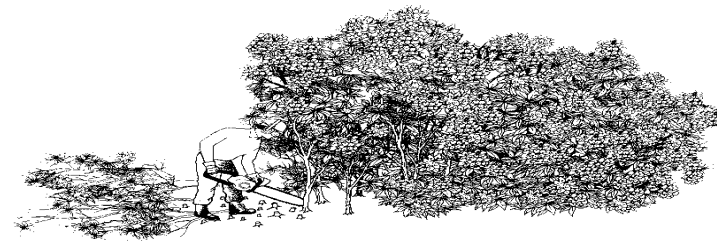
Level 5-8

KS3 Science



Sometimes questions will ask about plants or animals or habitats that you do not know about. You **do know the science** and will be able to answer if you read the question carefully! You might think that you cannot answer this question if you don't know anything about rhododendrons but you can!

Rhododendron plants grow bigger and faster than other plants. The drawing shows a man cutting down rhododendron plants.



- (a) (i) Scientists think the rhododendron roots might produce a chemical that stops other plants growing nearby. Why does this help rhododendrons to grow?

.....

- (ii) Give another reason why hardly any other plants can grow under the rhododendron bushes.

.....

After the rhododendrons and their roots are cleared away there will not be any of the chemical in the soil.

- (b) What will happen to the number of other plants growing there?

.....

"Fail to prepare.... Prepare to fail"

Respiration and photosynthesis

Plants make their own food by photosynthesis - write the word equation for photosynthesis

.....

Living things release energy by respiration - write the word equation for respiration

.....

Use these two equations to explain why a park is sometimes called the 'lungs of a city'

.....

.....

and why green plants are sometimes taken out of hospital wards at night

.....

.....

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DAY 8

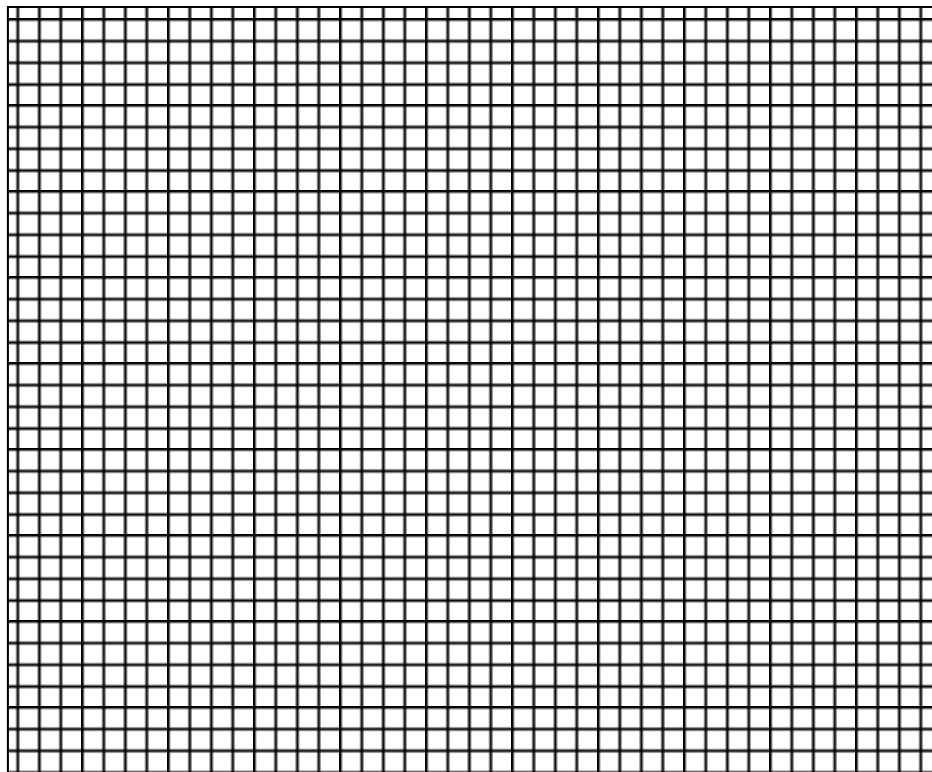
MVC 10 4 10

Level 5-8

KS3 Science

When you plot a graph it is very important to label your axes correctly and choose a suitable scale.
For the set of results shown, label the axes and add the scale, then plot the graph.

Amount of salt (g)	Time to dissolve (sec)
10	32
20	51
30	69
40	123



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QUESTION ON REACTIVITY SERIES

The table contains information about five metals, A, B, C, D and E.

Metal	how it reacts with cold water	how it reacts with hot water
A	no reaction	extremely slowly
B	no reaction	no reaction
C	hardly at all	slowly
D	Slowly	quickly
E	Quickly	very violently

(a) Use the information in the table to arrange the metals in order of reactivity.

most reactive

.....

.....

least reactive

(b) Which metal in the table could be copper?

(c) Which metal in the table could be sodium?

(d) Which metal in the table could be iron?

"Fail to prepare.... Prepare to fail"

DAY 9

MVC 10 4 10

Level 5-8

KS3 Science



Two groups of pupils carried out an experiment to see how much salt would dissolve in water at different temperatures.

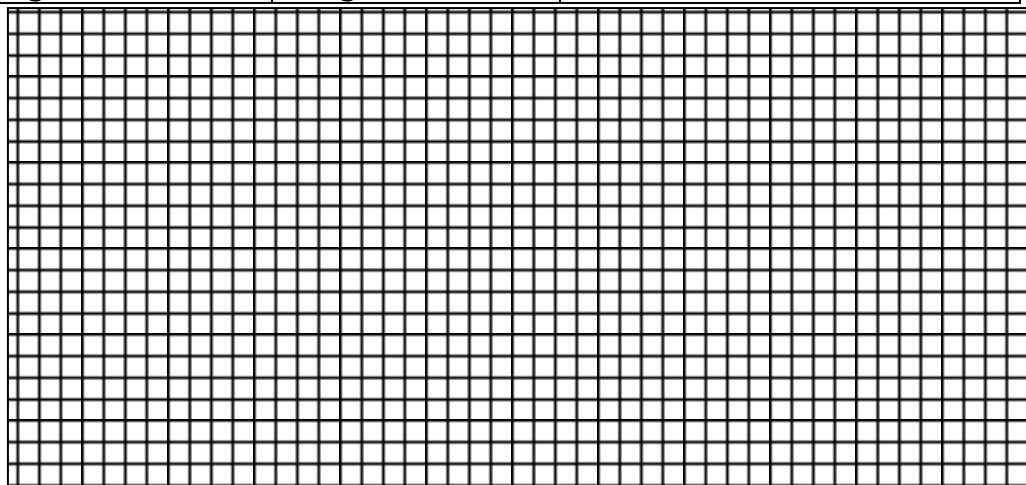
Name one variable they would need to control

The table below shows their results.

Temperature °C	Group 1 (salt in g)	Group 2 (salt in g)	Average grams of salt dissolved
30	1.7g	1.7g	1.7
40	1.9g	2.1g	2.0
50	2.2g	4.0g	3.1
60	3.3g	3.3g	3.3
70	4.7g	4.5g	4.6
80	6.0g	5.8g	5.9

Can you spot the odd (anomalous) result? What do you think would be a more accurate result? If you use this, more accurate result, what happens to the average?

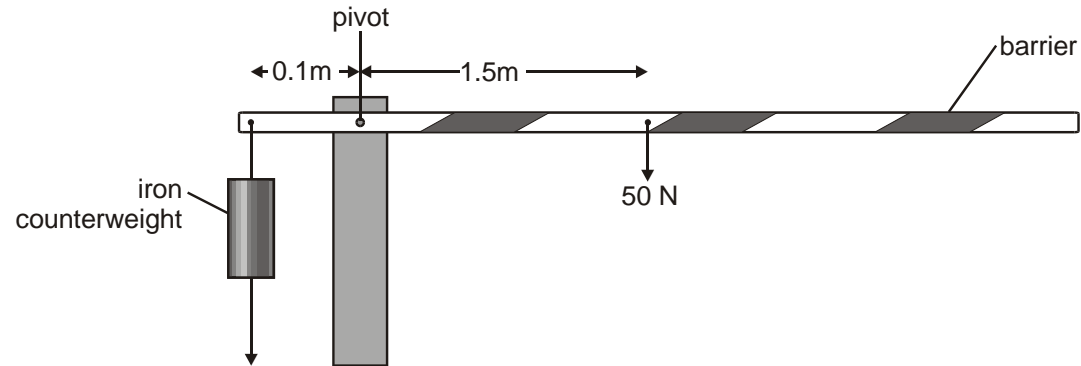
Plot a graph of average amount of salt dissolved against temperature – think carefully about what to do about the anomalous result.



"Fail to prepare.... Prepare to fail"

QUESTION ON SPEED

The diagram below shows a car park barrier.



- (i) Calculate the turning moment produced by the barrier about the pivot. Give the unit.

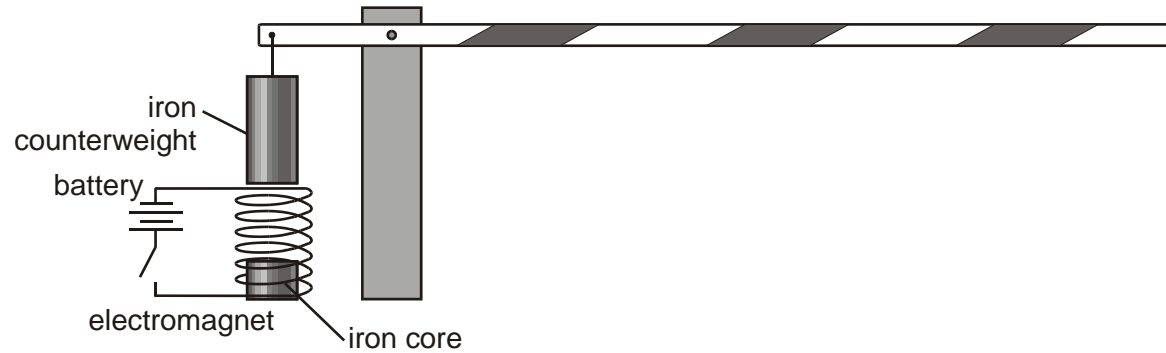
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- (ii) The barrier is horizontal. The weight of the barrier is balanced by an iron counterweight. Calculate the downward force produced by the counterweight.

..... N

"Fail to prepare.... Prepare to fail"

- b) An electromagnet is placed beneath the iron counterweight as shown below.



When the switch is closed the barrier rises.
Explain how the electromagnet can be used to raise the barrier.

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"Fail to prepare.... Prepare to fail"

DAY 10

MVC 10 4 10

Level 5-8

KS3 Science**CHOOSE THE RIGHT VARIABLE**

In any experiment or investigation it is important to choose the right variable. REMEMBER -

the INDEPENDENT VARIABLE is the one you choose to change in some way

the DEPENDANT VARIABLE is the one that changes as a result and you observe or measure

Look at the investigations below, if you do not agree with their choice of variables cross them out and put in a better one.

TITLE OF ENQUIRY	INDEPENDENT VARIABLE	DEPENDANT VARIABLE	TITLE OF ENQUIRY	INDEPENDENT VARIABLE	DEPENDANT VARIABLE
Does the length of the pencil affect the size of the shadow?	Torch used	Length of pencil	Does the type of surface affect the amount of friction?	Size of trainer	Force to move trainer (N)
Does the height a stone is dropped from affect the size of the crater?	Height above ground	Depth of crater	Does the type of exercise affect the pulse rate?	Different exercise	Number of breaths per minute
Does the amount of acid affect the amount of CO ₂ produced?	Temperature of acid	Volume of CO ₂ (cm ³)	Do the number of coils affect the strength of an electromagnet	Number of times the wire is wrapped around the soft iron core	Number of paperclips picked up

"Fail to prepare.... Prepare to fail"

QUESTION ON FOOD CHAINS

Scientists measured the concentration of the insecticide, DDT, in three animals and a microscopic plant called chlamydomonas. The food chain for these four organisms is shown below.

chlamydomonas → daphnia → fish → heron

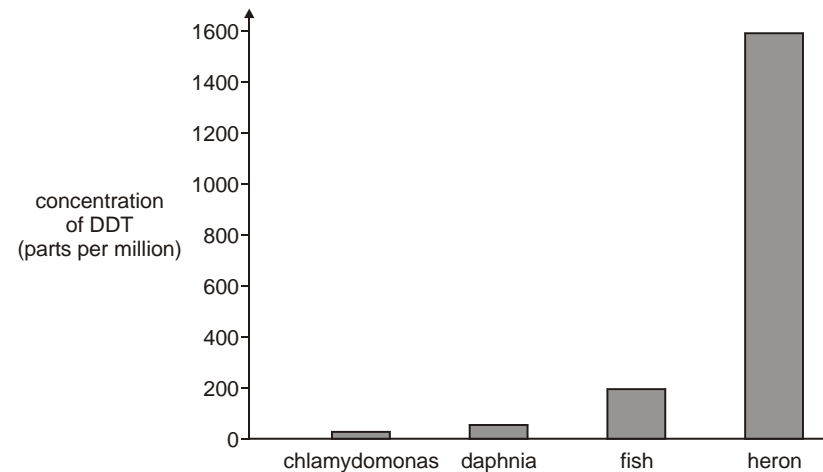


not to scale

In the space below, draw the pyramid of numbers for this food chain. Write the name of the correct organism next to each section of the pyramid.

"Fail to prepare.... Prepare to fail"

The bar chart shows the concentration of DDT in the four organisms.



Give **one** reason for the difference in the concentration of DDT in these organisms

.....
.

In 1970 the average concentration of DDT in the tissues of sea lions in California was 760 parts per million. Nearly half the sea lion pups born in that year died because of high levels of DDT in their tissues.

How does DDT get from the body of a mother sea lion into the body of her pup: before the pup is born

And after the pup is born

.....

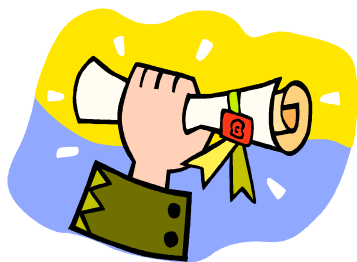


"Fail to prepare.... Prepare to fail"

How to Revise...

WELCOME

Welcome to revision guide for Key Stage Three students.



Unfortunately, there is no easy way to pass tests, but we can give you lots of tips on how to use your study time more effectively. This guide has been written to remind students about how to revise and how to learn. Many of the learning and revision strategies in this booklet are applicable to a vocabulary test in Year Seven and to the final examination of a degree level course.

Although this booklet contains superb advice, great tips and fantastic study skills, the guide isn't as important as the person reading it – YOU! It is you who have to put them into practice and apply them to your work. If you do, we're sure that you will improve your performance and your study skills. But to get better at something, you have to practise!



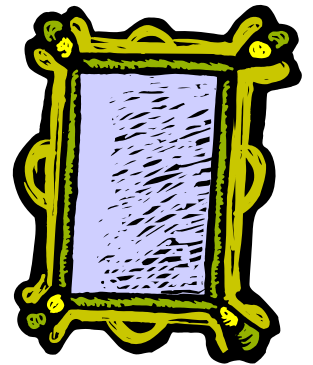
So, over to you – happy studying and good luck!

How to Revise...

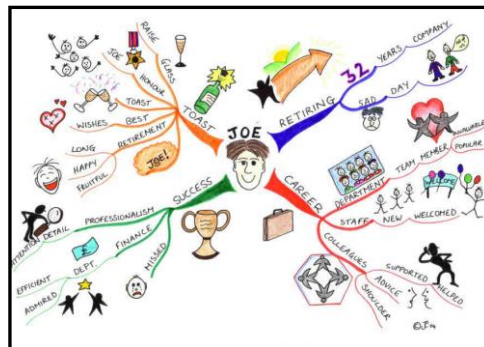


Revision means “to look at again”. You need to look at things again as part of learning as well as in preparation for exams. But we need **active** ways to do this “looking again”.

Revision gives time for reflection and learning. You can start to see the big picture, you can add in more details and examples. You may discover something you still don’t understand and you can ask your teacher about it again.



The idea is to “revise” each major section of your work shortly after you have finished it. For instance, you could draw a Mind Map of each major topic you cover. Keep the Mind Maps because they will be very useful for revising before tests.



HOT TIP: be active and change the way you think

How to Revise...



WHY?



1. Revision helps learning
2. Revision increases your achievement in tests
3. Achievement in tests give you wider choices later on
4. Achievement will make everyone proud of you!
5. You will feel great!



It is important to be positive about yourself because people who think they can do well find it easier to learn. Think about five things which you felt good about doing – scoring a goal, asking someone out ... think about how you felt when you did those things....and get yourself into a positive frame of mind.

HOT TIP: get yourself a vision of success

How to Revise...



WHEN?



Make sure you know when your tests are. Teachers will revise with you and give you advice about how much revision to do, what you should revise and many will give you special notes to help with revising.

Make yourself a **revision timetable**.



- ★ Fill in leisure, relaxation and family commitments
- ★ Put in some sessions that you can devote to revision
- ★ Share out the available revision sessions between your subjects
- ★ Allow extra sessions if you know some subjects will take longer than others
- ★ Vary the subjects – don't do all your Maths revision on day one!
- ★ Here's an example for *one* weekend:

	Morning	Morning	Afternoon	Evening
Saturday	Football	Maths; geography	Science; RE	Video
Sunday	English; tech	Lunch at gran's	Still at gran's	French; history

The ideal length to revise one topic is **25 to 45 minutes**.



You remember more at the beginnings and the ends of sessions, so create more beginnings and ends by stopping for a brief break or doing a brain gym exercise.

HOT TIP: stop and start – create brief breaks

How to Revise...

❓ WHERE? ❓

The ideal study room is light, airy and quiet, with shelves and a desk. Some people are lucky enough to have this and enjoy working in it. Don't worry if you haven't got this. You can still try to get some of the elements.



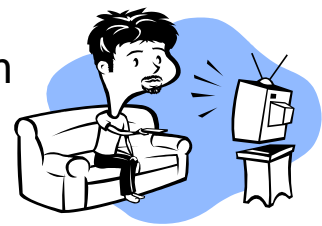
Vary your revision place. It's a good idea to put up posters, lists and post-it notes in other places in the house.



Some students find they revise well with friends and it is a good idea to do this sometimes as a bit of variety and fun.

Ban the television! Television is too distracting, so make sure it is turned off when you are working.

Remember to keep a space in your revision timetable for your favourite programmes.



Lots of students find that some background music helps the revision process. Classical music such as Mozart can help to stimulate your brain waves.

Avoid music with lyrics as you are likely to concentrate on these rather than your work!

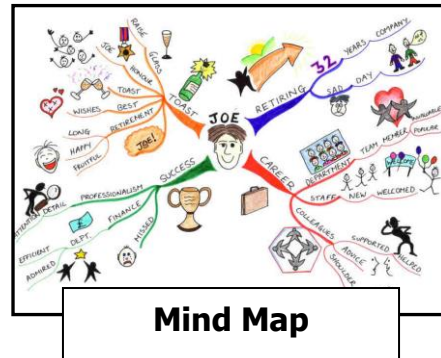
HOT TIP: don't forget the ISC and SSC

How to Revise...



There are three easy steps to doing revision well:

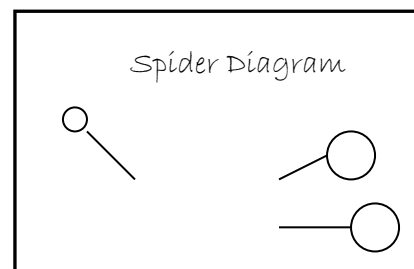
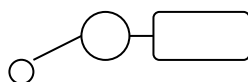
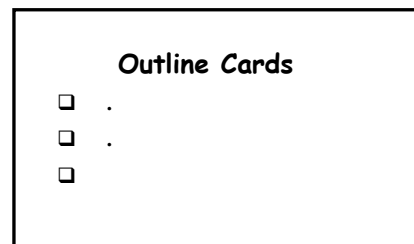
- ★ Change
- ★ Challenge
- ★ Treats



The first step is to try **change**. By changing what is in our exercise books or textbooks into a different form, we kick start our brains into action – we start thinking about new ways of presenting and digesting the information and start learning.

Ways to change things:

- ❑ Make diagrams
- ❑ Labelled drawings
- ❑ Time-lines (for history)
- ❑ Mind maps
- ❑ Charts and flowcharts (for processes)
- ❑ Audio tapes (great for languages)
- ❑ Outline cards
- ❑ Mnemonics
- ❑ Use colours and highlighters



HOT TIP: Flick through outline cards before the test

How to Revise...



We work best when we are faced with a **challenge**.

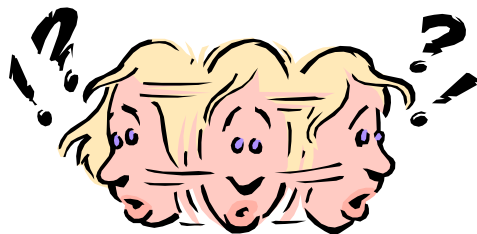
Challenge yourself to really sort out a topic that you have found difficult.

- ❑ Will taking a new approach and turning it into a chart, diagram or Mind Map help?
- ❑ Get someone to test you after you have learned something new.

- ❑ We learn extremely well when we have to teach someone else – why not try teaching one of your parents, a brother or sister, your grandparents or even your friends?



- ❑ Get them to ask you questions about what you have just taught them – can you answer their questions?



HOT TIP: Believe in yourself – you CAN do it!

How to Revise...

Don't forget to allow yourself some **treats**. Break up your revision sessions and plan some treats to look forward to: fruit, chocolate, a drink, ten minutes in the garden, glancing at a magazine, going for a walk...whatever will motivate you.

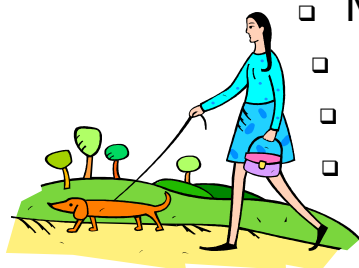


Remember, breaking up your revision gives you more stops and starts and more stops and starts increase your learning.



Relaxation is important to help you stop feeling the pressure of tests and getting stressed. Find a simple technique that works for you and practice using it when you are stressed or can't sleep. Have you tried:

- ❑ A warm bath
- ❑ Visualising yourself passing the test
- ❑ Brain gym exercises
- ❑ Stroking a pet
- ❑ Deep breathing
- ❑ Meditating
- ❑ Going for a walk
- ❑ Asking someone to give you a head massage
- ❑ Yoga
- ❑ Losing yourself in some soft music?



HOT TIP: Feed your brain! Fresh fruit, water, fish and vegetables give you brain power!