

Name:

Base Group:



Year 8 Knowledge Organiser

Autumn Term

Homework at Ipswich Academy

How to use the Knowledge Organiser

You have been provided with an exercise book and a knowledge organiser. Your knowledge organiser contains everything that you need to learn this term. Each week, you will be asked to learn a set of words, along with their definitions. You will talk about these in class.

In order to learn the words you will be expected to use :

'look, cover, write, check'

You have been given an exercise book to practise your homework in. The expectation is that you will write out neatly the words, along with their definitions. A week later, your teacher will check that you have completed your homework and you will be given a test to check that you have remembered everything.

This will be your homework for: Maths, English, Science, History, Geography and French.

You will need to remember:

- to take your exercise book and knowledge organiser to all lessons;
- to take your exercise book and knowledge organiser home each night;
- to write neatly;
- to practise every night.

If you do all of these, you will learn a lot.

Maths

Number					
1	BIDMAS	brackets, indices, divide, multiply, add, subtract	8	highest common factor	largest number that divides into a given number (HCF)
2	integer	whole number	9	index or power	the number of times a number is multiplied by itself
3	multiple	in the times table	10	product	the result of multiplying numbers together
4	factor	divides into a number	11	square number	number multiplied by itself
5	prime number	has exactly two factors	12	square root	inverse of finding the square of a number
6	prime factors	factor that is a prime number	13	cube number	number multiplied by itself three times
7	prime factorisation	expressing a number as a product of its prime factors	14	cube root	inverse of finding the cube of a number
Fractions				lowest common multiple	smallest number that is in the times table of two or more numbers (LCM)
1	LCD	lowest common denominator	3	improper fraction	numerator larger than the denominator

2	to simplify a fraction	divide the numerator and denominator by the highest factor	4	mixed number	whole number and fraction
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Algebra					
1	>	greater than	6	simplify	collect like terms together
2	≥	greater than or equal to	7	substitution	putting numbers where letters are
3	<	less than	8	expand brackets	remove the brackets
4	≤	less than or equal to	9	factorise	take out the common factor
5	rational number	a number that can be written as a simple fraction			
Metric Measures					
1	1cm² 1m²	= 100mm ² = 10 000cm ²	5	area of a trapezium	= $\frac{1}{2} (a + b) h$

2	area of a rectangle	= length x breadth	6	area of a triangle	= $\frac{1}{2}$ base x perpendicular height
3	area of a square	= l^2	7	area of a parallelogram	= base x perpendicular height
4	perimeter	distance around the outside of a shape	8	area of a rhombus	= base x perpendicular height

English Animal Farm- George Orwell						
	Key quote	Key technique	Key theme	Key idea	Connotation	Connotation 2
1	"With their superior knowledge it was natural that they should assume the leadership"	semantic field of power	power	All animals are supposed to be equal but the pigs don't work, instead they direct others	"Superior" conotes authority, suggesting they are not equal	The word "natural" makes it seem like there could be no argument against it
2	"The others said of Squealer that he	metaphor	lies and deceit	Squealer represents propaganda in	The metaphor suggests that he	"The others" means that the animals know he lies

	could turn black into white."			Communist Russia	can change the truth completely	but still believe him
3	"When they had finished their confession, the dogs promptly tore their throats out"	aggressive verbs	violence	Napoleon makes these pigs confessed they had been plotting with Snowball and then kills them	The word "tore" combined with "throats" is very aggressive language that shows the unexpected shock of the event	"Their confessions" suggests that they were at fault but it is clear it was not their choice
4	"Occasionally feeding Moses on crusts of bread soaked in beer. "	allegory	religion	Moses the crow represents Religion, and how it has been used for power	The bread and beer could represent the Catholic "Rite of Communion" where Christians eat the blood and body of Christ	Mr Jones (who represents autocracy) has a close relationship with Moses, suggesting that the Tsars in Russia used religion to control people

English - George Orwell

	Key quote	Key technique	Key theme	Key idea	Connotation	Connotation 2
5	Benjamin: "Fools! Do you not see what is written on the side of that van?"	rhetorical question	naivety	The animals think that Boxer is being taken to a hospital	The repetition of "fools" shows that Benjamin is wiser than the others. It suggests he is angry at their ignorance	The rhetorical question suggests his disbelief that the animals can be so naïve

6	"All that year the animals worked like slaves. But they were happy in their work"	simile	dreams	When they first start Animalism they are excited	The simile "like slaves" suggests they are not much better off than before Mr Jones left	The word "happy" suggests that hope for Old Major's dream means they do not mind the work
7	"The creatures outside looked from pig to man, and from man to pig, and from pig to man again; but already it was impossible to say which was which"	parallelism	corruption	At the end of the book the pigs are playing cards with the men and they are fighting over cheating	The parallelism "from pig to man, and from man to pig" shows that they have become the same thing. This is emphasised by the word "impossible."	This represents Russia where the Communist leaders becoming like autocratic dictators: cruel and oppressive
8	"Some animals are more equal than others"	paradox	hypocrisy	The rules are changed at the end to accommodate the pigs being superior	This is a paradox because you cannot be "more equal", which represents Orwell's message that Communism (equality) cannot exist	The paradox of "more equal" reminds us that the animals are stupid and unable to understand

Literacy: vocabulary							
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	
1	abandon	acceptable	academic	absolute	absence	abroad	Learn the spellings using look, cover, write, check.
2	access	accusation	accurate	accompany	accommodation	accident	
3	acid	anniversary	acre	anxious	anxiety	acknowledge	
4	announcement	application	appal	appropriate	appreciate	antique	
5	appoint	arise	approval	carrier	carbon	appointment	

6	capacity	capable	cancel	cease	cautious	capture	Look up definitions to find out the meaning of each word.
7	Catholic	category	casualty	compose	concentration	Catholicism	
8	concede	compromise	ceasefire	concept	concrete	concentrate	
9	conclude	concession	comprehensive	condemn	courage	conclusion	
10	confrontation	criticism	concert	coverage	cue	crystal	
11	crucial	cutting	criticise	cultural	deadline	dare	Write a sentence for each word. Make sure you use the vocabulary words correctly.
12	cycle	decorate	curious	investment	iron	it'll	
13	interview	international	intend	issue	jail	journal	
14	involve	invite	investor	January	journalist	jump	
15	item	joint	jet	joy	June	kitchen	

Literacy: vocabulary							
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	
1	joke	juice	judge	junior	knowledge	lane	Learn the spellings using look, cover, write, check.
2	July	key	justice	lack	largely	leaf	
3	kilometre	lady	lad	latest	league	library	
4	lake	leadership	launch	lend	lie	loan	

5	leading	lesson	lawyer	lift	Lord	luck	Look up definitions to find out the meaning of each word.
6	liberal	limit	lens	loss	lunch	majority	
7	link	lovely	likely	male	maker	March	
8	lower	magic	loud	marry	marriage	maximum	
9	mail	mainly	magazine	maybe	May	media	
10	maintain	management	manage	medium	medical	message	Write a sentence for each word. Make sure you use the vocabulary words correctly.
11	manager	master	mass	metre	meter	million	
12	manager	master	mass	metre	meter	million	
13	mate	meanwhile	means	midnight	method	missing	
14	meat	mention	memory	ministry	millionth	Monday	
15	mess	military	mild	mistake	mission	mouth	
	mill	mirror	minority	mood	monthly	narrow	

Science - Combustion

1	law of conservation of mass	The mass of all the reactants is equal to the mass of all the products.	11	control variable	A variable other than the independent variable that could affect the dependent variable and so needs to be controlled.
2	metal	Any element that is shiny when polished, conducts heat and electricity well, is malleable and flexible and often has a high melting point.	12	dependent variable	The variable that is measured in an investigation. The values of the dependent variable depend on those of the independent variable.
3	metal oxide	A metal that has combined with oxygen in a chemical reaction.	13	independent variable	The variable that you chose the values of in an investigation.

4	non-metal	Any element that is not shiny and does not conduct heat and electricity well.	14	variable	Anything that can change and be measured.
5	oxidation	Reacting with oxygen. For example, when a fuel combusts or when a metal reacts with oxygen to form a metal oxide.	15	acid rain	Rainwater that is more acidic than usual due to air pollution, usually caused by sulfur dioxide and nitrogen oxides dissolved in it.
6	oxide	A compound of a metal or non-metal with oxygen, such as magnesium oxide or carbon dioxide.	16	catalytic converter	A device fitted to the exhaust pipe of a vehicle to change harmful pollutant gases into less harmful gases.
7	exothermic	A reaction that gives out energy that can be felt as it heats the surroundings, such as combustion.	17	complete combustion	When a substance reacts fully with oxygen.
8	fire extinguisher	Something that is used to put out a fire, such as a canister of carbon dioxide, powder, water or foam.	18	incomplete combustion	When a substance reacts only partially with oxygen, such as when carbon burns in air producing carbon dioxide, carbon monoxide and soot (unburnt carbon).
9	fire triangle	A way of showing in a diagram that heat, fuel and oxygen are needed for fire.	19	pollutant	A substance that can harm the environment or the organisms that live there.
10	hazard symbol	A warning symbol that shows why something is dangerous.	20	soot	A form of carbon, which is produced as very fine particles when hydrocarbon fuels undergo incomplete combustion.

Science – Periodic Table

1	atom	Atoms are small particles from which all substances are made.	11	noble gas	Group of very unreactive non-metal gases. Found in group 0 of the periodic table.
2	chemical reaction	A change in which one or more new substances are formed.	12	periodic table	An ordered list of all known elements.
3	compound	A substance that can be split up into simpler substances, since it contains the atoms of two	13	boiling point	The temperature at which a liquid boils.

		or more elements joined together.			
4	element	A simple substance, made up of only one type of atom.	14	melting point	The temperature at which a solid turns into a liquid.
5	matter	All things are made of matter. There are three states of matter: solid, liquid, gas.	15	freezing point	The temperature at which a liquid turns into a solid. It is the same temperature as the melting point of the substance.
6	oxidiser	A substance that supplies oxygen for a reaction.	16	period (chemistry)	A horizontal row in the periodic table.
7	physical change	A change in which no new substances are formed (e.g. changes of state).	17	transition metal	One of a central group of elements in the periodic table.
8	alkali metal	A group of very reactive metals. Found in group 1 of the periodic table.	18	acid	A substance that reacts with alkalis, turns litmus red and has a pH of less than 7 is acidic.
9	group (chemistry)	A vertical column of elements in the periodic table. Elements in the same group generally have similar properties.	19	alkali	A substance that reacts with acids, turns litmus blue and has a pH of more than 7 is alkaline.
10	halogen	An element in group 7 of the periodic table, such as fluorine and chlorine.	20	reactivity	A description of how quickly or vigorously something reacts.

HISTORY

Glossary

1	archaeologist	A person who studies the past by digging up objects from the past.
2	AD	'Anno domini'; used for date after the birth of Jesus Christ.
3	BC	'Before Christ'; used for dates before the birth of Jesus Christ.
4	chronology	The arrangements of dates or events in the order they happened, starting with the earliest.
5	timeline	A diagram showing events or dates in chronological order.
6	revolution	A change in the way a country is governed, usually to a different political system and often using violence or war.
7	massacre	An act of killing a lot of people
8	boston tea party	In 1771, a group of colonists protest thirteen years of increasing British oppression, by attacking merchant ships in Boston Harbour and throwing the cargo of tea overboard.
9	colonists	Someone who lives in or goes to live in a country or area that is a colony.
10	taxes	Money paid to the government that is based on your income or the cost of goods or services you have bought.
11	independence	Freedom from being governed or ruled by another country.
12	home rule	The government of a colony, dependent country, or region by its own citizens, in particular as advocated for Ireland 1870–1914.
13	convict colony	A part of an empire where criminals are sent to serve their sentence.

HISTORY

Glossary

14	slave	A person who is the legal property of another and is forced to obey them.
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15	protest	A statement or action expressing disapproval of or objection to something.
16	American War of Independence	A war in 1755: British people who lived in settlements in America decided they wanted to be 'Americans' and fought against troops from Great Britain for their independence; the British surrendered in 1781 and the Americans were granted their independence.
17	French Revolution	A period of rebellion in France, starting in 1789, whereby poor French people rebelled against the king and his rich follower.
18	British Empire	The collection of countries and colonies (areas) that Britain ruled over; at its height, Britain ruled over 450 million people of different nationalities, living in 56 countries around the world.
19	Declaration of the Rights of Man	A list made during the French Revolution which stated 'rights' that every man should have.
20	Fenian	A member of an Irish group, the Fenians, who vigorously campaigned for Ireland's independence from Britain.
21	guillotine	A machine with a blade, used to cut off a person's head.
22	native american	The tribespeople who have lived on the continent of North America for thousands of years.
23	Peterloo Massacre	A violent event in 1819; British soldiers were sent by the government to St Peter's Field, Manchester, to break up a big meeting of people who were campaigning for votes for all; eleven members of the crowd were killed and 400 were injured.
24	transportation	A punishment, guilty criminals could be sent to a far away land for a period of five, seven or fourteen years.

Geography : Tourism and Rivers

1	abrasion	Rocks carried along by the river wear down the river bed and banks.
2	attrition	Erosion caused when rocks and boulders transported by rivers bump into each other and break into smaller pieces.
3	channel straightening	Removing meanders from a river to make a river straighter. Straightening a river (also called

		channelizing) allows it to carry more water quickly downstream, so it doesn't build up and is less likely to flood.
4	cross-profile	The side to side cross-section of a river channel and/or valley.
5	dam and reservoir	A barrier (made of earth, concrete or stone) built across a valley to interrupt river flow and create a manmade lake (reservoir) which stores water and controls the discharge of a river.
6	discharge	The quantity of water that passes a given point on a stream or river-bank within a given period of time.
7	economic impact	The effect of an event on the wealth of an area of community.
8	economic opportunities	Chances for people to improve their living standards through employment.
9	ecotourism	Responsible travel to natural areas that conserves the environment, sustains the well being of local people, and may involve education. It is usually carried out in small groups and had a minimal impact on the local ecosystem.
10	embankments	Raised banks constructed along the river; they effectively make the river deeper so that it can hold more water. They are expensive and do not look natural but they protect the land around them.
11	erosion	The wearing away and removal of material by a moving force such as water in a flowing river.
12	estuary	The tidal mouth of a river where it meets the sea; wide banks and deposited mud are exposed at high tide.
13	flood	Occurs when river discharge exceeds river channel capacity and water spills out of the channel onto the floodplain and other areas.
14	flood plain	The relatively flat area forming the valley floor on either side of a river channel, which is sometimes flooded.
15	floodplain zoning	This attempts to organise the flood defences in such a way that land that is near the river is not built upon. This land could be used for animal grazing or playing fields. Areas that rarely get flooded can be used for houses and industry.
16	flood relief channels	Building new artificial channels which are used when a river is close to maximum discharge. They take the pressure off the main channels when they are likely, therefore reducing flood risk.
17	flood risk	The predicted frequency of floods in an area.
Geography : Tourism and Rivers		
18	flood warning	Providing reliable information about possible flooding. Flood warning systems give people time to remove possessions and evacuate areas.
19	fluvial processes	Processes relating to erosion, transport and deposition by a river.

20	globalisation	The process that has created more connections in the world, with increases in movement of goods (trade) and people (migration and tourism) worldwide.
21	gorge	A narrow, steep sided valley, often formed as a waterfall retreats upstream.
22	hydraulic action	The force of the river against the banks can cause air to be trapped in cracks and crevices. The pressure weakens the bank and gradually wears it away.
23	hydro power	Electricity generated by turbines that are driven by moving water.
24	hydrograph	A graph which shows the discharge of a river, related to rainfall, over a period of time.
25	informal economy	This type of employment comprises work done without the official knowledge of the government and therefore without paying taxes. It is common in many lower income countries.
26	interlocking spurs	A series of ridges projecting out on alternate sides of a valley and around which a river winds its course.
27	lateral erosion	Sideways erosion by a river on the outside of a meander channel. It eventually leads to the widening of the valley and contributes the formation of a flood plain.
28	leisure	Non-work time that people spend on their hobbies and recreation.
29	levees	Embankment of sediment along the bank of a river. It may be formed naturally by regular flooding or be built up by people to protect from flooding.
30	long profile	The gradient of the river from its sources to its mouth.
31	meander	A pronounced bend in a river.
32	national park	An area of outstanding natural beauty, preserved for people to enjoy.
33	oxbow lake	An arc-shaped lake which has been cut off from a meander.
34	suspension	Fine, solid material held in water while the water is moving.
35	sustainability	Actions and forms of progress that meet the needs of the present without reducing the ability of future generations to meet their own needs.
36	traction	The rolling of boulders and pebbles along the river bed.
37	transportation	The movement of eroded materials.
38	vertical erosion	Downward erosion of a river bed.
39	waterfall	A sudden descent of a river or stream over a vertical or very steep slope in the river bed. It often forms where the river meets a band of slower rock after flowing over an area of more resistant rock.

French- Module 1

À la télé - On TV

je regarde ...	I watch ...	les émissions de télé-réalité	reality TV shows	les jeux télévisés	game shows	les séries policières	police series
les documentaires	documentaries	les infos	news	les séries	series	les séries américaines	American series

les émissions de sport	sports programmes						
Les adjectifs - Adjectives							
grand	grande	intelligent	intelligente	amusant	amusante	gentil	gentille
petit	petite	beau	belle	pauvre	pauvre	riche	riche
Les loisirs- Leisure activities							
on fait du VTT	we do mountain biking	on regarde des DVD	we watch DVDs	au cinéma	to the cinema	au foot	football
on fait du skate	we do skateboarding	on va ...	we go ...	au parc	to the park	au basket	basketball
on fait du bowling	we go bowling	au café	to the café	on joue ...	we play ...	on surfe sur Internet	we surf the internet
avec mes copains	with my friends						
Est-ce que tu aimes...?							
Oui, j'aime ça.	Yes, I like that.	génial	great	j'adore	I love	je ne regarde pas	I don't watch
Non, je n'aime pas ça.	No, I don't like that.	intéressant	interesting	j'aime bien	I like	J'ai une passion pour ...	I have a passion for ...
c'est ...	it's ...	ennuyeux	boring	je n'aime pas	I don't like	Je suis fan de ...	I am a fan of ...
amusant	funny	nul	rubbish	je déteste	I hate	Je ne suis pas fan de ...	I am not a fan of
Les films- Films							
J'aime ...	I like ...	les films fantastiques	fantasy films	les dessins animés	cartoons	Mon actrice préférée, c'est.	My favourite actress is ...
les comédies	comedies	les films d'horreur	horror films	Qui est ton acteur préféré?	Who is your favourite actor?	Quel est ton film préféré?	What is your favourite film?
les films d'action	action films	les films de science-fiction	science-fiction films	Mon acteur préféré, c'est ...	My favourite actor is ...	Mon film préféré, c'est ...	My favourite film is ...
les films d'arts martiaux	martial-arts films	les westerns	westerns	Qui est ton actrice préférée?	Who is your favourite actress?		
Les mots essentiels- High frequency words							
assez	quite	et	and	parce que	because	surtout	above all
aussi	also	mais	but	par exemple	for example	très	very
comme	as	normalement	normally	quand	when		
La lecture- Reading							
Je lis ...	I am reading ...	un livre	a horror story	un roman	a thriller	assez bien	quite good

		d'épouvante		policier			
une BD	a comic book	un magazine sur les célébrités	a magazine about celebrities	C'est bien?	Is it good?	passionnant	exciting
un livre sur les animaux	a book about animals	un roman fantastique	a fantasy novel	À mon avis, c'est ...	In my opinion it's ...	Qui est ton auteur préféré?	Who is your favourite author?
						Mon auteur préféré, c'est...	My favourite author is ...

Sur Internet- On the internet

J'envoie des e-mails.	I send emails.	Je fais des achats.	I buy things.	Je lis des blogs.	I read blogs.	pratique	practical
Je fais beaucoup de choses.	I do lots of things.	Je fais des quiz.	I do quizzes.	Je trouve ça ...	I find it ...	stupide	stupid
Je fais des recherches pour	I do research for my homework.	Je joue à des jeux en ligne.	I play games online.	chouette	great	barbant	boring

Qu'est-ce qu'on peut faire?- What can you do?

On peut ...	You can ...	aller au théâtre	go to the theatre	faire un tour en segway	go on a tour by segway	manger au restaurant	eat in a restaurant
aller à un concert	go to a concert	faire les magasins	go shopping	faire une balade en bateau-mouche	go on a boat trip	visiter les monuments	visit the monuments
						visiter les musées	visit the museums

D'accord?- Do you agree?

À mon avis ...	In my opinion ...	c'est vrai	it's true	c'est faux	it's false	Je suis d'accord.	I agree.
Je ne suis pas d'accord.	I disagree.						

Le temps- The weather

Quand ...	When ...	il fait beau	it's nice	il fait froid	it's cold	il fait chaud	it's hot
il pleut	it's raining						

Expressions of time and frequency

d'habitude	usually	quelquefois	sometimes	tous les soirs	every evening		
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en ce moment	at the moment	souvent	often	une fois par semaine	once a week		
Les activités en ville- Activities in town							
aller au cinéma (avec mes amis)	going to the cinema (with my friends)	aller aux concerts (rock)	going to (rock) concerts	aller voir des matchs	going to watch matches		
Qu'est-ce qu'on peut faire? What can you do?							
On peut ...	You can ...	faire les magasins	go shopping			manger au restaurant	eat in a restaurant
aller à un concert	go to a concert	faire un tour en segway	go on a tour by segway			visiter les monuments	visit the monuments
aller au théâtre	go to the theatre	faire une balade en bateau-mouche	go on a boat trip			visiter les musées	visit the museums
J'aime...I like...							
J'adore ...	I love ...	aller au cinéma (avec mes amis)	going to the cinema (with my friends)	faire du roller (au Trocadéro)	roller-blading (at the Trocadéro)	prendre des photos	taking photos
Je n'aime pas ...	I don't like ...	aller aux concerts (rock)	going to (rock) concerts	faire les magasins	going shopping	retrouver mes copains	meeting up with my mates
Je déteste ...	I hate ...	aller voir des matchs (au Parc des Princes)	going to watch matches (at the Parc des Princes)				
Des informations touristiques- Tourist information							
horaires d'ouverture	opening times	ouvert du (mardi) au (dimanche)	open from (Tuesday) to (Sunday)	tarifs d'entrée	admission prices	enfants	children
ouvert tous les jours	open every day	fermé	closed	adultes	adults	gratuit	free
sauf le lundi	except Mondays	de 10h00 à 17h00	from 10 a.m. to 5 p.m.	jeunes	young people	Il y a (une cafétéria).	There is (a cafeteria).
D'accord?- Do you agree?							
À mon avis ...	In my opinion ...	c'est faux	it's false	Je ne suis pas d'accord.	I disagree.		
c'est vrai	it's true	Je suis d'accord.	I agree.	visiter les musées	visit the museums		
À Paris- In Paris							

J'ai passé le 14 juillet à Paris.	I spent the 14th July in Paris.	J'ai (beaucoup) dansé.	I danced (a lot).	J'ai mangé au restaurant.	I ate in a restaurant.	J'ai rencontré un beau garçon/une jolie fille	I met a good-looking boy/a pretty girl
J'ai acheté des souvenirs.	I bought some souvenirs.	J'ai envoyé des cartes postales.	I sent postcards.	J'ai regardé le défilé/le feu d'artifice.	I watched the parade/the fireworks.	J'ai visité la Tour Eiffel	I visited the Eiffel Tower

Des questions touristiques- Tourist questions

C'est où, le musée?	Where is the museum?	C'est ouvert à quelle heure?	At what time is it open?	Est-ce qu'il y a ...	Is there ...		
C'est ouvert quand?	When is it open? (day or date)	C'est combien, l'entrée?	How much does it cost to get in?	une cafétéria/une boutique de souvenirs?	a cafeteria/a souvenir shop?		

C'était comment? - What was it like?

C'était ...	It was ...	bizarre	weird	génial	great	marrant	funny/a laugh
beau	beautiful	ennuyeux	boring	intéressant	interesting	Ce n'était pas mal	It wasn't bad

Les mots essentiels- High frequency words

à quelle heure?	when?/at what time?	où?	where?	d'abord	first of all	finalemtent	finally, lastly
quand?	when? (for day, month, year, etc.)	un peu	a bit	puis	then	puis	then
combien?	how much?/how many?	beaucoup (de)	a lot (of)	après	afterwards		