

# Year 8 Knowledge Organiser HT5

Knowledge is Power

Name:	

Form:

# Contents Page

Subject	Page
English	I
Maths	2
Science	3
Spanish	4
History	5
Geography	6
PE	7
Computing	9
Art	10
Performing Arts	11
Cooking and Nutrition	12
Music	13
'Thinking' reflection log	14
Reading log	20
Cursive Handwriting Practice	26

# English

	Week I – Word Classes	
Noun	A word that refers to a name. person (teacher), place (home), thing (ball). idea (justice), quality (softness).	
Verb	A word that refers to an action ( <i>to run) or</i> state ( <i>to be, to have</i> ). Can always change by adding '-ing' or being in past tense.	
Adjective	Describes a noun.	
Adverb	Typically an –ly word that describes a verb e.g. slowly, quickly, quietly.	

Week 2 – Key Terms		
Setting	Setting is the place or type of surroundings where something is positioned or where an event takes place.	
Structure	Structure refers to the order of ideas in a piece of writing.	
Tone	Tone is the general character or attitude of a place, piece of writing, situation.	
Imagery	Imagery is visually descriptive or figurative language.	

Week 3 – Descriptive Devices		
Device	Definition	
Personification	Giving human characteristics to a non human object.	
Metaphor	Comparing by referring to one thing as another.	
Simile	A comparison of two different objects using <b>like</b> or <b>as</b> .	
Sensory Language	Words and phrases that refer to the five senses	
Onomatopoeia	A word that imitates the sound it represents.	
Week 4 – Key Terms		
Show, Not Tell	Description through actions, senses, thoughts and feelings rather than explicit description	
Shift in Focus	When a writer changes the focus of the description	
Zooming In	When the writer focuses on a particular area in detail.	
Zooming Out	When a writer moves back from a detailed description to describe the wider scene.	

	Week 5 – Sensory Terms
1. Visual im is seen	agery – description that refers to what
2. Auditory i what is hear	magery – description that refers to d
3. Olfactory smells	imagery – description that refers to
4. Gustatory taste and fla	v imagery – description that refers to avors
Week	6 – Criteria for Creative Writing
1. Use amb thesauru	bitious adjectives (find these in the us)
	ory description (visual, auditory, statory and tactile)
3. Varied se when, simile	ntence openers (adverbs, where, es etc.)
4 Varied se	ntence types (simple, short, complex,
compound)	ntence types (simple, short, complex,

#### Maths

<u>3D Shapes</u>	
Key Word	Definition
Prism	A 3D shape which has a constant cross-section
Cross-section	The two dimensional shape repeated throughout the prism's length
Plan	A plan is a scale drawing showing a 3D shape when it is looked at from above
Elevation	is the view of a 3D shape when it is looked at from the side or from the front
Volume	The amount of space taken up by a 3D shape
Volume formula	Area of cross section x depth
Surface area	Total area of all the faces on a 3D shape

Basic Angle Facts	
Reason	Diagram
Angles on a <b>straight line</b> add up to <b>180°</b>	$\frac{a}{b} = 180^{\circ}$
Angles <b>around a point</b> add up to <b>360°</b>	A + B = 360° B A
Vertically opposite angles are equal.	150° 30° 30° 150°

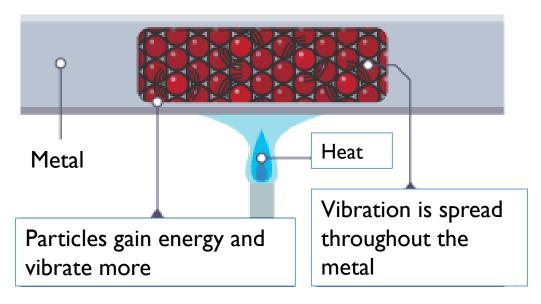
Angles	
Polygon	a closed 2D shape with 3 or more sides
Regular	Equal sides and angles
Irregular	Unequal sides and angles
Interior angle	angle inside a shape
Exterior angle	angle between any side of a shape, and a line extended from the next side.

#### Science

Key Word	Definition
Energy	The ability to do work
Kinetic energy	The energy stored in a material as it is moving
Gravitational Potential Energy	The energy stored in a material as it is held up high
Elastic Potential Energy	The energy stored in a material as it is stretched
Thermal Energy	The energy stored in a material as it is heated
Chemical Energy	The energy stored in the bonds of a substance
Energy transfer	When energy changes from one form to another e.g. electrical to light
Conservation of energy	Energy cannot be created or destroyed, only transferred
Useful energy	The energy transferred that a device is used for
Wasted energy	The energy transferred that a device isn't used for
Efficiency	The useful energy transferred in a device
Temperature	A measure of the thermal energy a material holds
Thermal conductor	A material that transfers thermal energy quickly
Insulator	A material that doesn't transfer thermal energy quickly
Power	The energy transferred per second
Fossil Fuels	Fuels made from the remains of living organisms

Renewable energy resources	Non-renewable energy resources
Wind power	Coal
Solar power	Oil
Hydroelectric power	Natural gas
Tidal power	Nuclear

#### Thermal Conduction



# Spanish

English
rubbish
Climate change
Damage
Сгор
Fire
Freedom
Environment
Environmental
People in need
Danger
Poverty
Chemicals
Recycling
Theft
Violence
Illness
drugs

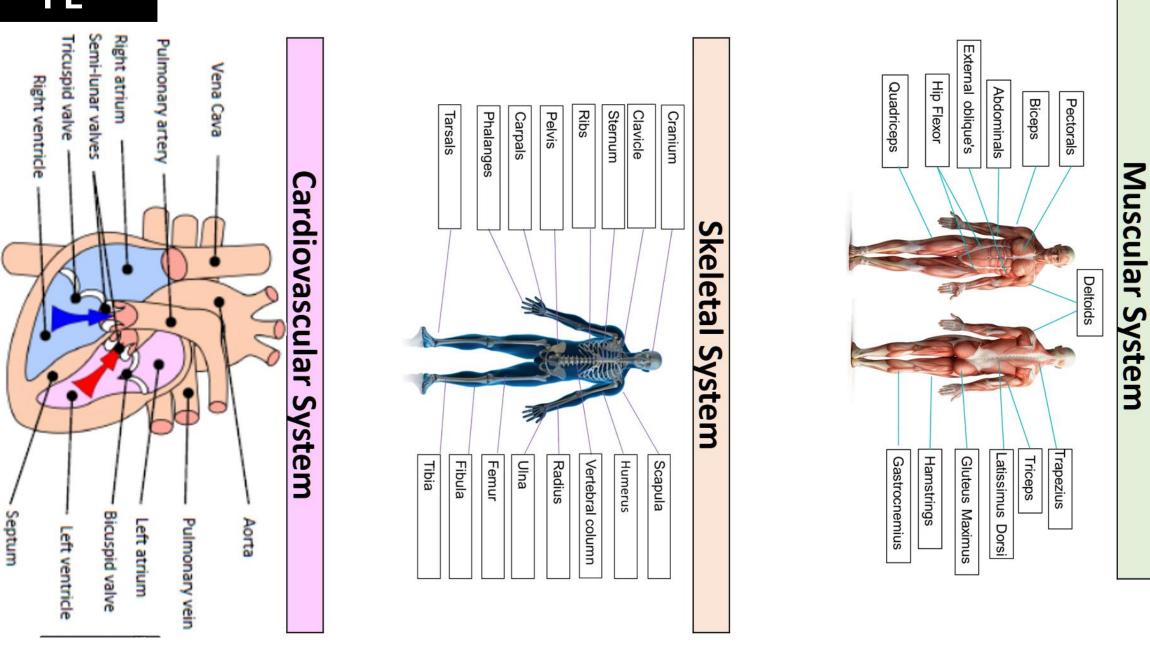
Spanish	English
aumentar	To increase
beneficiar	To benefit
Dañar	To damage
Ducharse	To have a shower
encender	To turn on
apagar	To turn off
reciclar	To recycle
malgastar	To waste
proteger	To protect
reutilizar	To re-use
utilizar	To use
contribuir	To contribute
drogarse	To take drugs
Se debe	One must
Se puede	One can
Si pudiera	If I could
Me preocupa(n)	I am worried about

Key Terms			
Emancipation	Process of being set free from legal, social, or political restrictions (liberation).		
Anglican	A church/faith associated with the Church of England (Is Protestant)		
Unionism	A political belief that wants to keep Britain and Ireland united politically.		
Nationalist	A person who wants political independence for their country.		
Autonomy	The right to self-government.		
Ulster	An area in the North of Ireland.		
Irish Republican Brotherhood (IRB):	A secret oath-bound organisation dedicated to creating an Independent Ireland between 1858 and 1924.		
Royal Irish Constabulary (RIC):	The police force in Ireland from the early 19 <sup>th</sup> C until 1922.		
Guerrilla warfare	Type of combat that often involves surprise attacks such as ambushes, raids, or sabotage of a vulnerable target.		
Republic	A state in which power is held by the people and their elected government.		
The Irish Republican Army (IRA)	A paramilitary group in Ireland that wanted an independent Ireland and believed political violence was necessary to achieve this.		
Sinn Fein	A political slogan by Irish nationalists. Has since become a left-wing political party in Ireland		

Key Events			
1798:The Irish Rebellion	This was a failed attempt to gain complete independence from British rule in Ireland.		
1800:The Acts of Union	This law made Ireland a part of the United Kingdom.		
1912: Home Rule Act	This law was to give Ireland more control and autonomy. However, it divided Ireland into two sides. The unionists (remain) and the nationalists.		
1912:The Ulster Covenant	Signed by 500,000 people in Ulster and created an army of Ulster volunteers, which threatened to resist the act using violence.		
24 <sup>th</sup> -29 <sup>th</sup> April 1916:The Easter Rising	This was an attempt by Irish nationalist rebels to make Ireland a Republic.		
1919-21:The Irish Wars of Independence	Also known as the Anglo-Irish war between the IRA and British forces.		
28 <sup>th</sup> June 1922- 24 <sup>th</sup> May 1923: The Irish Civil War	Broke out due to the Anglo-Irish Treaty which gave Ireland independent status but as a colony of the British Empire.		
1960's and 1970's	The Troubles in Northern Ireland. The status of Northern Ireland caused conflict and violence at times.		
30 <sup>th</sup> January 1972: Bloody Sunday.	13 Irish men were killed by British forces, all aged between seventeen and forty-one.		
2 <sup>nd</sup> December 1999:The Good Friday agreement	Political deal designed to bring an end to the Troubles. Approved by public votes in Northern Ireland and the Republic of Ireland.		

#### Geography

Key Word	Definition
Coniferous	Trees that produce cones and have needles instead of leaves.
Deforestation	The removal of trees on a large scale.
Development	The progress a country makes socially and economically.
Economically active	The age at which you would be working.
Energy security	Uninterrupted availability of energy sources at an affordable price.
Evergreen	Any species of tree which does not lose its leaves in the autumn, but keeps them all year round.
Inaccessibility	Unable to be reached or entered.
Industrial development	The transformation from a largely farming based economy to a manufacturing based economy.
Indigenous people	The original people of the region.
Mineral extraction	The removal of solid mineral resources from the Earth.
Peninsula	A piece of land that is almost entirely surrounded by water but is connected to the mainland on one side.
Permafrost	The layer of frozen soil under the Earth's surface.
Renewable	Energy, which is infinite, sustainable and easily replenished.
Steppe biome	A biome characterised by grasslands.
Taiga forest	Also known as a boreal forest; a cold and dry biome.
Tar sands	Fossil fuel which is thick in consistency and mixed with sands.
Temperate	Climates which are not too hot or too cold.



ΡΕ

PE Health and Fitness			
Muscular Strength	The amount of the force muscles can generate against a resistance		
Muscular Endurance	The ability to use voluntary muscles, over long periods of time without getting tired		
Flexibility	The range of movement at a joint		
Cardiovascular Fitness (Aerobic Endurance)	The ability of the heart and circulatory system to meet the demands of the body for a long period of time		
Body composition	The percentage of a body that is fat, muscle, bone and water		
Coordination	The ability to move two or more body parts at the same time		
Reaction Time	The time taken for a response to occur after a stimulus		
Agility	The ability to change direction at speed		
Balance	The ability to keep the body steady when in a static position or when moving		
Speed	The time taken to cover a set distance/complete a movement		
Power	The ability to combine speed and strength		
	Principles of training		
Progressive Overload	Working the body harder than normal/gradually increasing the amount of exercise you do		
Reversibility	If training is not regular, adaptations will be reversed. This can happen when suffering from illness, injury or after an off season		
Specificity	Training showed be matched to the requirements of the sport or position the performer is in. Training must be specifically designed to develop the right muscles, type of fitness or skills		
Individual needs	All PEP's would differ depending on performers goals/target, strengths /weaknesses, age/gender and current health/fitness levels		
Overtraining	Occurs when you train too hard and do not allow the body enough rest/recovery time Signs include extended muscle soreness, frequent illness & increase injuries		

# Computing

App development				
Event	An action that causes something to happen			
Event-driven program	A program designed to run or executes a blocks of code or functions in response to specified events (e.g. a mouse click)			
Variable	A location that stores data			
Interact	Responding to a users input or action i.e hover on a button, pressing play on a video.			
User Interface	The visual elements of a program through which a user controls or communicates with the application. Often abbreviated UI.			

Key Word	Definition		
Gargoyle	A grotesque carved human or animal face or figure projecting from the gutter of a building, typically acting as a spout to carry water clear of a wall.		
Middle Ages	The period of European history from the fall of the Roman Empire in the West (5th century) to the fall of Constantinople (1453)		
Expression	A look on someone's face that conveys a particular emotion.		
Mood	Depiction that induces or suggests of a particular feeling or state of mind.		
Grotesque	A very ugly or comically distorted figure or image.		
Gothic	A style of architecture prevalent in western Europe in the 12th–16th centuries (and revived in the mid 18th to early 20th centuries), characterized by pointed arches, rib vaults, and flying buttresses, together with large windows and elaborate tracery. English Gothic architecture is divided into Early English, Decorated, and Perpendicular.		
Architecture	The art or practice of designing and constructing buildings.		
Mythology	A collection of myths, especially one belonging to a particular religious or cultural tradition.		
Medieval	Resembling or likened to the Middle Ages, especially in being cruel, uncivilized, or primitive.		
Romanesque	Relating to a style of architecture which prevailed in Europe c. 900–1200, although sometimes dated back to the end of the Roman Empire		
Representation	The description or portrayal of someone or something in a particular way.		
Symbolism	An artistic and poetic movement or style using symbolic images and indirect suggestion to express mystical ideas, emotions, and states of mind.		
Christianity	The religion based on the person and teachings of Jesus Christ, or its beliefs and practices.		
Score & Slip Process	slip and score in pottery is a technique used to join two pieces of clay together. To slip and score clay, a potter scratches marks on the surface of the clay (score). The potter then applies a liquid mixture of clay in water (slip) to the scored surface.		
Firing Clay	Firing clay changes the structure of the clay, bonding the clay particles together making it stronger, a more permanent ware. In the case of stoneware, the higher firing temperature causes the clay to become impervious to water, a useful quality in dinnerware.		

#### Performing Arts

#### Devising Drama

	Devising Drama – Key Words	Developing Ideas	
Stimulus	A resourced used as a starting point to generate ideas for a piece of drama. This may be a poem, story, piece of music, historical event, a	Soundscape	The actors used their bodies to create sound effects for the performance
Direct Address	painting, a piece of artwork, a quote and more. When an actor speaks directly to the audience, e.g. in pantomime.	Transitions	The fluid and focused movement between scenes/images
Tableaux	A 'frozen picture' that tells a story. Costume and props are needed, and physicality used to show emotion.	Proxemics	Proxemics is how close or near you are to others on stage. This can help to communicate meaning e.g. if your character is scared of another character you might stand
Blocking	The staging and use of the space in drama, This may refer to the location of actors on the stage and the movements they make.	Storyboarding	far away. Involves creating a series of images and/or text showing the sequence of the action planned for a devised drama.
Multi-role	When an actor plays more than one role.	Cue to Cue	This involves a rehearsal where the actors remove all of the action and dialogue between cues during a technical
Exits and Entrances	Where a character enters and exits their scene.	Rehearsal	rehearsal.
Thought Tracking	An exercise that allows the inner thoughts of a character or role to be heard out loud. The participant is asked to say their characters thoughts and feelings at specific points during their acting.	Narrative	The narrative is the storyline or plot of a piece of drama. A narrative should be clear for the audience so that the storytelling makes sense - although there are different ways to structure a narrative which will explore in lessons
Technical Rehearsal	Technical equipment and systems for example sound, lighting and computer generated effects.	Semiotics	This refers to how meaning is created and communicated through the systems of signs and symbols of drama.
Rehearsal	A practice or trial performance of a play.	Movement in unison	All actors moves in the same way, at the same time.

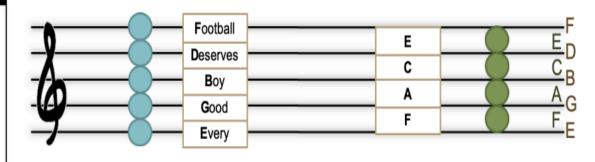
# Cooking and Nutrition

Key Word	Definition	
Nutrition	A study of what people eat and how all the nutrients in foods work together in the body	
Nutrients	Natural chemical substances in foods that are essential for body growth, function and health	
Macro Nutrients	Nutrients needed by the body in large a mounts	
Micro-Nutrients	Nutrients needed in the body in smaller amounts	
Amino acids	Building blocks of protein	
Essential amino acids	The essential amino acids that the body cannot make	
Protein complementation	Eating a combination of LBV proteins to ensure the body gets all the essential amino acids	
Cooks Knife	A large knife with a deep blade used for cutting, chopping, slicing and dicing	
Paring knife/vegetable knife	A small knife mainly used for slicing and dicing	
Bread knife	A large serrated knife-edged knife used to slice bread , cakes and pastry	
Dough	A mixture of dry ingredients and liquid, that is mixed, kneaded, shaped and then baked.	
Yeast	A single-celled plant fungus and a raising agent which needs time, food, warmth and liquid to ferment	
Fermentation	The process in which yeast produces the gas carbon dioxide	
Knead	The process of working a dough mixture to make it smooth and elastic	
gluten	The protein in flour that is developed when water is added to flour and mixed.	
prove	Leaving the dough to rise	
steaming	Cooking in the steam that comes from boiling water	

#### Music

Key Word	Definition
Timbre/sonority	Each instrument own unique 'tone quality' and the voice as an instrument had different Timbre
improvisation	Music made up on the spot
Harmony	is the combination of different musical notes played simultaneously.
Time signature	It tells how many beats are in each measure and which note gets one beat, helping you keep track of the rhythm while playing or singing.
Dynamic	The volume of a sound or piece of music – loud/soft
Beat	a regular, repeating pulse that underlies a musical pattern
Rhythm	Rhythm is the pattern of sounds and beats in music that creates a sense of movement and flow.
leitmotif	A recurring musical idea linked to a character, object or place.
Texture	How many layers the piece has
Structure	the order the different sections of a song or piece of music are played in.
Тетро	Tempo refers to the speed of music. It's how fast or slow a song sounds.

Note	European Name	American Name	Value
0	Semibreve	Whole Note	4 beats
0	Minim	Half Note	2 beats
4	Crotchet	Quarter Note	1 beat
2	Quaver	Eighth Note	1/2 beat
A	Semiquaver	Sixteenth Note	14 beat



W/c 15 <sup>th</sup> April Thinking definition: Thinking is making connections, reasoning and asking questions to make the learning stick				
Reflecting on learning behaviours for thinking	Experience log			
	Successful moment	In hindsight Where you could have done better on reflection?	At home	
I gave an idea and reasoned/justified.				
I reflected on my idea and made it better after discussing with others				
I used a revision strategy to help make the learning stick.				
I made connections between what I am learning and the outside world.				
l asked questions to deepen my understanding.				

W/c 22 <sup>nd</sup> April Thinking definition: Thinking is making connections, reasoning and asking questions to make the learning stick					
		Experience log	<u> </u>		
Reflecting on learning behaviours for thinking	Successful moment	In hindsight Where you could have done better on reflection?	At home		
I gave an idea and reasoned/justified.					
I reflected on my idea and made it better after discussing with others					
I used a revision strategy to help make the learning stick.					
I made connections between what I am learning and the outside world.					
l asked questions to deepen my understanding.					

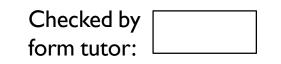
W/c 29 <sup>th</sup> April Thinking definition: Thinking is making connections, reasoning and asking questions to make the learning stick						
Reflecting on learning behaviours		Experience log				
for thinking	Successful moment	In hindsight Where you could have done better on reflection?	At home			
I gave an idea and reasoned/justified.						
I reflected on my idea and made it better after discussing with others						
I used a revision strategy to help make the learning stick.						
I made connections between what I am learning and the outside world.						
l asked questions to deepen my understanding.						

W/c 6 <sup>th</sup> May Thinking definition: Thinking is making connections, reasoning and asking questions to make the learning stick					
Reflecting on learning behaviours		Experience log			
or thinking	Successful moment	In hindsight Where you could have done better on reflection?	At home		
gave an idea and reasoned/justified.					
reflected on my idea and made it better fter discussing with others					
used a revision strategy to help make the earning stick.					
made connections between what I am earning and the outside world.					
l asked questions to deepen my understanding.					

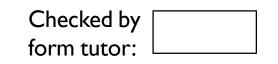
W/c 13 <sup>th</sup> May Thinking definition: Thinking is making connections, reasoning and asking questions to make the learning stick					
Reflecting on learning behaviours		Experience log			
for thinking	Successful moment	In hindsight Where you could have done better on reflection?	At home		
l gave an idea and reasoned/justified.					
l reflected on my idea and made it better after discussing with others					
I used a revision strategy to help make the learning stick.					
I made connections between what I am learning and the outside world.					
l asked questions to deepen my understanding.					

W/c 20 <sup>th</sup> May Thinking definition: Thinking is making connections, reasoning and asking questions to make the learning stick					
Reflecting on learning behaviours		Experience log			
or thinking	Successful moment	In hindsight Where you could have done better on reflection?	At home		
gave an idea and reasoned/justified.					
reflected on my idea and made it better after discussing with others					
used a revision strategy to help make the earning stick.					
made connections between what I am earning and the outside world.					
l asked questions to deepen my understanding.					

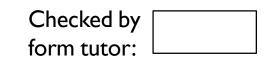
	Reading Log w/c 15 <sup>th</sup> April (20 mins reading per day – all five logs MUST be completed)				
Date	Title of novel	Number of pages read	Summary about what I have read		
			•		
			•		
			•		
			•		
			•		
			•		
			•		



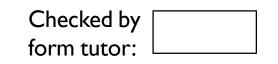
	Reading Log w/c 22 <sup>nd</sup> April (20 mins reading per day – all five logs MUST be completed)				
Date	Date     Title of novel     Number of pages read     Summary about what I have read		Summary about what I have read		
			• • •		
			•		
			•		
			•		
			• • •		
			•		
			•		



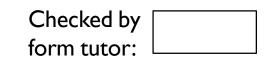
	Reading Log w/c 29 <sup>th</sup> April (20 mins reading per day – all five logs MUST be completed)				
Date	Title of novel	Number of pages read	Summary about what I have read		
			•		
			•		
			•		
			•		
			•		
			•		
			•		



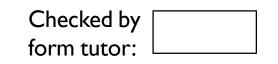
	Reading Log w/c 6 <sup>th</sup> May (20 mins reading per day – all five logs MUST be completed)				
Date	Date     Title of novel     Number of pages read     Summary about what I have read		Summary about what I have read		
			•		
			•		
			•		
			•		
			• • •		
			•		
			•		



	Reading Log w/c 13 <sup>th</sup> May (20 mins reading per day – all five logs MUST be completed)				
Date	Title of novel	Number of pages read	Summary about what I have read		
			• • •		
			•		
			•		
			•		
			• • •		
			•		
			•		



	Reading Log w/c 20 <sup>th</sup> May (20 mins reading per day – all five logs MUST be completed)				
Date	Title of novel	Number of pages read	Summary about what I have read		
			•		
			•		
			•		
			•		
			•		
			•		
			•		



.  $\langle 1 \rangle$ ×  $\sim$  $\sim$ . I -I. I. L I. P Derven 1032an I I. I. I. . . `\\_ I. **`**1 . ~  $\leq$ . . I. ~ ~ ~ . . Ł  $\searrow$ . . . . <u>`</u> . . . . . . 2.1 . . X -0 1.3 I. . . . . . -1 V . Ś . . . . .  $\overline{}$ ~ ~ . . . 6.  $\prec$  $\sim$ . . .  $\prec$ ~ à ~~ . . . . . ~ .  $\sim$ 7/1 I. ~1 . A.  $\sim$ .  $\sim$  $\sim$ . N  $\mathbb{N}$ N 1  $\prec$ .  $\sim$ . -. . . N  $\mathbb{N}$ ~  $\geq 1$ . . ~ -I. à . --1 . . B <u>`</u>1  $\sim$  $\bigcirc$ . 1 . . 200-L. ~ . N  $\sim$ . .  $\prec$ . . I. >.  $\langle 1 \rangle$  $\sim$ . Ľ à  $\sim$  $\sim$  $\sim$ . . . .  $\bigcirc$ . CA1  $\bigcirc$ . . 1 /  $\hat{\mathcal{O}}$ . . . ~ ~ . . . . . I  $\prec$  $\sim$ . Ε. . P I  $\ge 1$ . è,  $\Delta \pm$ . × 1  $\sim$ <u>`</u>1 R  $\frown$ . . <u>, Г</u>  $\sim$ 1 . . . . . g . N 1 . T . . . . . ~1 . . . . . . L. . . . . . . . . . . . . . . . . . 

L I. ğ Ś  $\prec$ l l . L I. L. . -L.  $\geq$ I. DVC-B I. . < F. -4 ł I. ~  $\sim$ I. UV-LINGO . à . . . Tormer . . . . . . I moord I. × 1 . . at . . . . Δì . . . . . . SULLES . . ~1 Ì I. I. . . . ~ ) ł -I. .  $\sim$ . de la . <u>`</u>1 \ i . . m L . . . . . . . I. . . DUU  $\prec$ . ł . . . . . . ~ ģ L . . . ONE.  $^{1}$ . . reade I. . . St. s. 1 . . -. . . . ģ  $\sim$ . . . I. D. I . . . . . . . . . . . . .  $\sim$ . .  $\sim$  $\sim$ . . . .  $\prec$ ~1 . . . . . × 1 . . . . à . <u>\_</u> . . an . . . . . . . . . L . I. . . . . . . . . . . . I. . . I. . L. -. . .

overwhelmed by what's ξ media. You mu akin I. I. L I 1 I I. here are a lot of reasons I. I. L 1 L L 1 1 you mi 1 1 I. I L 1 L L g a break from social I. 1 L 1 I. L 1 1 L I I. 1 1 1 L I 1 I. 1 1 I L 1 I L L L 1 L 1 1 L 1 1 1 1 I L I I I. 1 Ą 1 1 1 I. L L 1 ht -1 1 L I. ght feel 1 I 1 I 1 1 1 I. L 1 1 1 1 I. I. consider 1 1 1 I I 1 I 1 1 I. 1 L I 1 I. I. 1 1 1 L I I 1 I. L L 1 1 I. L 1 1 I L I L I L L I. L 1 I. 1 1 I. 1 1 1 1 L

9 going on in your feeds and want to disconnect for a I I I I 200 L perienci L I. the while. you might be L 1 L L L L 1 I L 1 oad and need time to L I. L L l 1 L I I L I. 1 1 L ng informat L L 1 L L L 1 L 1 I I. L I. 1 L L 1 L L 1 L I. 1 L L L L L I. L l I L I. L L L 1 1 1 L I. I. I. 1 L L 1 I I I 1 I. L L ion L 1 1 L L 1 L L 1 I. 1 1

	distracted.	you don't want to be	coming up at school and	have something important	yourself. Or you might
--	-------------	----------------------	-------------------------	--------------------------	------------------------



it had their happiness levels decrease. rom have who continued to use 1 1 L 1 1 1 1 1 1 out I. 1 L 1 I L 1 I 1 1 1 1 2 L I. 1 1 I out of 10 to 1 1 L 1 L 1 1 1 L 1 I I. I. 1 1 L . unhereas L I 1 L 1 - 1 L I. 1 I 1 I I I. 1 L I I. L I 1 1 I L 1 L 1 1 1 1 L 1

1 I. L. 1 1 1 1 . 0 1 L 1 . 1 . . ଟ I. -4 L. L. 1 . . 1 1 1 . . 1 .  $\prec_i$ 1 L 71 I. 1 ٦., L 0 L L. . 1 1 . I. 1 1  $\sim$ <u>\</u>1 <u>`</u> 1 1 1 1 1 1 1 1 . 0  $\prec$ 0 ~1 1 1 . 1 1 1 1 . 1 . . 2 1 ~~ 1  $\sim$ 1 1 1 1 1 1 1 1 \* 1 . ~ 1 1 1 1 0 1 1 . 1 . 1 ~~ 0 ~ ~ 1 1 1 1 1 1 1 1  $\sim 1$ Ø 1 0 0 1 1 . 1 <u>\</u>1 1 1 1 . 1 1 1 1 / 1 1 1 . I. 1 NL 10 . 1 1 0  $\prec$ 1 1 . 1 1 . 1 1 . 1 . I . -2 . . ~ 2 1 1 . 1 . 1 1 1 - $\sim 1$ 1 N 1 1 1 1 1 1 I. . . × 1 1 1 1 1 1 . . . . . 5 1 1 2 1 1 1 . 1  $\sim$ - 1 .  $\sim$ 0 2 1 1 1 1 1 1 . 1 . . <u>\</u>1 .  $\sim$  $\sim$ I -1 1 1 1 1 1 . ~ 0 1 1 . I. I. 1 L. Ε. 1 L. . . . 1 . 0  $\Gamma$ 1 1 1 ~ 1 <u>`т</u> I. . 1 11 1 . S 1 1 . 1 1 9 I.  $\sim$ 1 ~~~ 1  $\sim$ ğ \ I 1 1 . . 1 . 1 L × 1 1 .  $\sim$ 1 1 1 1 1 I 1 1  $\sim$ 1 1 7 1 1 1 1 1  $\sim$  $\sim$ 1 1 . × 1 1 . . 1 1 . × 1  $\sim$ 1 1 . 1 1 1 . 1 . . .  $\sim$ 21 . I L 1 1 1 . 1 1 . N I. 1 <u>`</u>т 1 1 . 1 . 1 I. . . . P 0 1 L 1 1 1 1 1 1 1 I. 1 1 3 0 1 1 1 1 . . 1 4 . . 9 1 **\**1 1 1 . ~ 1 1 1 1  $\geq$ 1 . 1.1 1 1 1 1 - 1 . 1 1  $\sim$ 2 1 . 1 -1 1 1 1 1 . × 1 1 0 1 1 2.1 1 1 . L . .  $\sim$ 1 9 3 1 1 1 . 1  $\sim$ . . .  $\sim$ 1 1 . I. . 1 1 . 1 2 1 -1 Ε. 1 1 1 1 1 Ø, <u>`т</u> 1 1 1 . 1 I. I. 1 1 1 1 . 1 <u>\_</u> 8 9 1 1 1 1 . 1 1 1 1 1 2 1 1 . 1 1 1 1  $\sim$ 1 . 1 . 1 . ~1 1 1 1 . 1 . . . .  $\sim$ 1 . 1 .  $\sim 1$ . 0 1 / 1 1 1 . . 1 I. 1 1 1 1 - 1 . 1 . 1 1 . . 1 <u>۱</u> 1 . . . . . . 1 1 . 1 1 . 1 1 1 1 1 1 1 . 1 . 1 1 . 1 1 × 1 . . . . . . . . . 1 1 1 1 1 . 1 1 1 1 . 1 1 . . 1 1 1 1 . 1 1 1 . . 1 . . .

Ø, 0 **N** 1  $\sim 1$ L L ∖\_ı Μ -4 ΥÌ 1  $\bigcirc$ 1 1 -1 1 ~1 1 -1 1 0 1 . 6 P ٦. . . 6 0 2 1 1 2 . I. 1 . . 2 . Ø 6 6 1 1 . 1 1 . þ 2 1 . \1 . 1 1 . 1 1  $\sim$ 2 1 .  $\prec$ 1 . Υı 1 . . 11 1 1 1 1 10 . . . . . . .  $\neg$ I. . \ I. 9 . 1 1  $\sim 1$ 1 1 1 I. P 0 1 . 2 9  $\backslash 1$ 1 1 1 . 1 21 -4 1 1 1 1 1 / . . . <u>\</u>1 1 ~ 1 . 0 I. 1 ~1 × 1 -1 1 0  $\sim$ 1 1 1 1 1 1  $\sim$ 1 . . 1 1 1 1 0 1 1 1 1 × 1 1 1 1 1 . . 3 <u>\</u>1 L 1 1 . . 1 . -1 L . . 1 2 1 1 1 1 1 1 1 -1 . . 1 1 . . 0 0 1 1 1 1 1 1 1 . . . . . 1 . 1 1 1 . 1 1 . . 1 . . 1 ×. 1 I. 1 . 1 1 1 . 1  $\sim 1$ . 1 . 1 1 1 1 . × 1 . . 1 1 - 1 1 1 . . . 1 . 1 . . .