

- 100% Book(Part 2) 2022 Year 9 Term 1

NAME	
FORM	
GROUP	

Computer Science

Python 3 cheatsheet (the basics)

GROK LEARNING

interact with the user (input and output)

print('Hello, world!')

Print multiple values (of different types)

year') Ø ıin ndays = 365 print('There are', ndays,

Asking the user for a string

name? your is input('What name

<u>-</u> Asking the user for a whole number (an integer) num = int(input('Enter a number:

Decide between options

Decide to run a block (or not)

x == 3: print('x is 3')

Decide between two blocks

if mark >= 50:
 print('pass')
else: se:
print('fail') 80 mark if ma

Decide between many blocks

mark = 80
if mark >= 65:
 print('credit')
elif mark >= 50:
 print('pass')
else: print('fail') ▶elif can be used without else

Are two values equal? ×

Are two values not equal? Δ two equals signs, not one

Less than another? v ×

Greater than another?

Less than or equal to?

Greater than or equal to?

×

The answer is a Boolean:

ო

×

×

▶elif can be used many times

Convert to uppercase sg = 'hello' f msg == 'hello': print('howdy')

String manipulation

Compare two strings

Count a character in a string also lower and title msg.upper()

('X', Replace a character or string msg.replace('l'

msg.count('l')

Less than another string?

if msg < 'n';
print('a-m')
else;
print('n-z')</pre>

Delete a character or string msg.replace('l','')

strings are compared charact at a time (lexicographic order)

Is a character in a string?

e e

Is the string all lowercase? also isupper and istitle msg.islower()

Is a string in another string?

msg

in

'lla'

Text (strings)

Single quoted 'perfect'

Creating a variable celsius = 25

Variables

Double quoted "credit"

Multi-line

"''Hello, World!'''

Whole numbers (integers)

32

celsius*9/5 Using a variable

Addition and subtraction

365

Add (concatenate) strings 'Hello' + 'World'

Multiply string by integer 'Echo...'*4

Length of a string

Powers (2 to the power of 8)

2**8

Multiplication and division

25*9/5

Convert string to integer len('Hello') int('365')

Convert integer to string

str(365)

Repeat a block (a fixed number of times)

for i in range(10):
 print(i) Repeat a block 10 times

Count from 0 to 9

range(10)

Sum the numbers 0 to 9

range starts from 0 and go up to, but not including, 10

total = 0
for i in range(10):
 total = total + i
 print(total) •••

Count from 1 to 10

11)

range(1,

Repeat a block over a string

Count from 10 down to 1

o,

range(10,

'Hello': or c in 'P print(c) for

Count 2 at a time to 10

range(0, 11, 2)

Keep printing on one line

for c in 'Hello':

print(c, end=''' for c in 'H
 print(c,
 print('!')

Count down 2 at a time

range(10, 0,

Repeat a block over list (or string) indices

sg = 'I grok Python!'
pr i in range(len(msg)):
print(i, msg[i]) msg =

Putting it together: Celsius to Fahrenheit converter

Celsius: Ask the user for a temperature in degrees Celsius celsius = int(input('Temp. in Celsi

32 celsius*9/5 Calculate the conversion fahrenheit

'Fahrenheit') print(fahrenheit, Output the result





Computer Science 2

1.	What is binary?	A number system that has two states 1 (on) and 0 (off)
2.	What is denary?	A number system that uses units of 10 (the number system we use as humans!)
3.	Why do computers use	Because they are made up of lots of switches called transistors that can only be on or off (1 or 0).
	binary?	
4.	What is a bit?	One binary number (a 1 or a 0)
5.	a) Converting binary to	Put the binary number in the table below
	denary	If the column has a 1 in it, add it!
6.	a) Converting denary to	Look at the denary number you need to convert e.g. 30
	binary	Work from left to right on the table
		Start looking at the columns in the table and ask yourself 'Does this column fit into this number?' E.g. does
		128 fit into 30?
		128 – no, 64 – no, 32 – no, 16 – yes
		30-16 = 14
		We are left with 14. Carry on working down
		Does 8 fit into 14 – yes. 14-8 = 6
		Does 4 fit into 6 – yes. 6-4 = 2
		Does 2 fit into 2 – yes. 2-2=0

7. Binary table:

128	64	32	16	8	4	2	1

5b) Converting binary to denary example								6b) Co	nvertin	ng dena	ry to bi	nary (e.	g. 30 to	binary)	
6	4	32	16	8	4	2	1								
		1	0	1	1	1	1	128	64	32	16	8	4	2	1
				'			'	0	0	0	1	1	1	1	0
									•			•	•		
101	111	1 in b	inarı	j is 4 7	7 in de	ecimo	al								

Computer Science 3

8. Binary <u>addition</u> rules	9. Binary <u>subtraction</u> rules
0 + 0 = 0	0 - 0 = 0
0+1=1	1 - 1 = 0
1+1=10	1 - 0 = 1
1+1+1=11	 0 - 1 = 1 (after borrowing)

10. Binary shift right	Shiftir	ng all th	ne bits	to the	e righ	t (divi	ding b	ру 2 (each t	ime	:)								
		* 2 * 2								×2 ×2									
	128	64	32	16	8	4	2	1	12	28	64	32	16	8	4	2	1		
						1	0	0					1	0	0	0	0		
11. Binary shift left	Shiftir Exam	ng all th	ne bits	to the	e left	(multi	plyin	g by	2 each	h tin	ne)								
																6	÷ 2		
	128	64	32	16	8	4	. ;	2	1	1	28	64	32	16	8	4	2	1	
						1		0	0								1	0	

12. Overflow	Overflow occurs when the result of a calculation is too large.
13. Underflow	Underflow occurs when the result of a calculation is too small.

English 1: Animal Farm

	WHO'S WHO? KEY CHARACTERS
1. Mr Jones	The drunk owner of Manor Farm. Does not look after the animals well. Represents Tsar
	Nicholas II
2. Mrs Jones	Mr Jones' wife. She is run out of Manor Farm with her husband when the animals rebel
3. Old Major	A wise and intelligent pig who inspires the rebellion. Represents Karl Marx and Vladimir
	Lenin
4. Napoleon	A menacing and intimidating pig, who takes control of the farm following the rebellion. Represents Joseph Stalin
5. Snowball	A brave and intelligent pig who initially stands beside Napoleon following the rebellion,
	but is eventually chased out of the farm. Represents Leon Trotsky
6. Boxer	A trusting and hardworking horse. Represents the working class within Russia
7. Squealer	A pig who is second-in-command to Napoleon. A clever speaker. Represents Stalin's
	propaganda machine (Pravda), specifically Vyacheslav Molotov
8. Clover	A good-hearted female cart-horse and Boxer's close friend
9. Moses	The tame raven who spreads stories of Sugarcandy Mountain, the paradise to which
	animals supposedly go when they die. Represents religious propaganda
10. Mollie	The vain, flighty mare who pulls Mr. Jones's carriage. Mollie craves the attention of
	human beings and loves being groomed and pampered. Represents the bourgeoisie who
	fled Russia after the revolution
11. Benjamin	The long-lived donkey who refuses to feel inspired by the Rebellion. Benjamin firmly
	believes that life will remain unpleasant no matter who is in charge
12. Muriel	The white goat who reads the Seven Commandments to Clover whenever Clover
	suspects the pigs of violating their prohibitions
13. Mr Frederick	The tough, shrewd operator of Pinchfield, a neighbouring farm. Represents Adolf Hitler
14. Mr Pilkington	The easygoing gentleman farmer who runs Foxwood, a neighbouring farm. Represents
	the capitalist governments of Britain and the United States
15. Mr Whymper	The human solicitor whom Napoleon hires to represent Animal Farm in human society
16. The dogs	Napoleon rears the dogs from puppies to 'protect' the farm. Represent the Russian
	secret police
17. Minimus	The poet pig who writes verse about Napoleon and pens the banal patriotic song
	"Animal Farm, Animal Farm" to replace the earlier idealistic hymn "Beasts of England,"
	which Old Major passes on to the others
18. The hens	they bravely protest about their eggs being taken
19. The young pigs	they speak out against Napoleon and are executed as a result
20. The sheep	they interrupt debate on the farm with chants of "four legs good, two legs bad". They
	play a crucial role in Napoleon's rise to power. Represent the indoctrinated Russian
	working class

	KEY THEMES/CONCEPTS
21. communism	A classless society where all property is owned publicly
22. dictatorship	A country ruled by someone who has complete authority
23. exile	When someone is away from their home country and is refused permission to return
24. propaganda	Information, often biased or misleading, designed to persuade people to adopt a particular point of view
25. rhetorical device	The linguistic techniques used as part of persuasive speaking or writing
26. scapegoating	Irrationally putting the blame for something on a group or individual
27. tyrant	A cruel and oppressive ruler

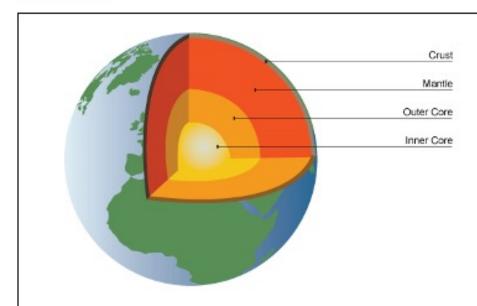
	KEY CONTEXT
28. The Russian	The Russian Revolution was a period of political
Revolution	and social revolution that took place in the
	former Russian Empire which began during the
	First World War. This period saw Russia abolish
	its monarchy and adopt a socialist form of
	government following two successive revolutions
	and a bloody civil war.
29. Stalinism	Stalinism is the means of governing and Marxist-
	Leninist policies implemented in the Soviet Union
	from 1927 to 1953 by Joseph Stalin
30. George Orwell	The writer of the novella. Experienced the
	benefits and fears of a communist society during
	his time spent during the Spanish Civil War
31. Allegory	a story, poem, or picture that can be interpreted
	to reveal a hidden meaning, typically a moral or
	political one

English 2: Animal Farm

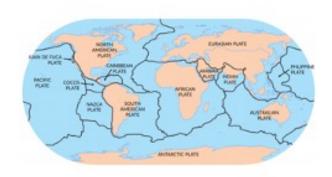
	WHAT HAPPENS?
32. Chapter One	Old Major calls a meeting of all the animals. We meet all the main characters as they enter the barn. Old Major, in his speech, points out that no animal knows the meaning of happiness and that all theirhard work and produce goes to benefit man. If man was removed the animals would not have to work so hard and would have more to eat. He ends the meeting by assuring them that the revolution to remove man would come eventually and teaches them the song 'Beasts of England' which becomes their 'national anthem'.
33. Chapter Two	Old Major dies in his sleep in early March. The pigs are recognised as being the cleverest animals - particularly Snowball, Napoleon and Squealer. We also meet Moses, the tame raven, who says he knows the existence of a place called Sugarcandy Mountain (heaven). The revolution happened more quickly than expected. When Jones and 4 of his farmhands started whipping the animals to get them under control, they turned and butted and kicked, driving Jones off his farm. The animals destroy everything that reminds them of human domination. They celebrate and the pigs, who have learned to read and write, paint the 7 commandments on the wall of the barn. The pigs manage to milk the cows, who are rather uncomfortable by this time, and Napoleon guards it while they all gooff to survey their farm. When they return the milk has disappeared.
34. Chapter Three	The pigs have taken charge of the farm which is now called Animal Farm rather than Manor Farm. The harvest is good and everyone works hard knowing that the produce is theirs. Boxer works harder than anyone. They fly a flag over the farm to symbolise their ownership. Meetings are held every week where the pigs outline their ideas and hold debates. Snowball and Napoleon never agree on what should be done. Snowball organises lots of committees to make everyone feel involved in the running of the farm but really the pigs are in control. 9 puppies are born and Napoleon takes them aside to rear them himself. It is announced that the milk and apples are to be reserved for the pigs alone. Squealer is sent to explain that the reason for this is because the pigs do all the brain work, without which Jones would probably return. This terrifies the animals and is used frequently to keep them from complaining about the preferential treatment for the pigs.
35. Chapter Four	Pigeons start to spread the word about the rebellion to other farms. We meet the owners of the two neighbouring farms - Foxwood owned by Mr. Pilkington and Pinchfield owned by Mr. Frederick. They fear that rebellion will spread to their farms so join with Jones to mount an attack on Animal Farm to regain control. The animals unite to defeat them in the Battle of the Cowshed. All the animals fight except for Mollie who hides. They later make medals to be presented for bravery. Snowball and Boxer receive Animal Hero 1 st Class medals and a sheep who was killed is posthumously awarded an Animal Hero 2nd Class medal. Nobody seems to notice the irony of dividing animals into classes when they are all supposed to be equal.
36. Chapter Five	Mollie disappears. She cannot bear to live without her ribbons and sugar which the other animals regard as being the sweeteners used by man to control them. The winter is a hard one. Snowball puts forward the idea of a windmill to provide electricity to heat their stalls and ease their workload. Napoleon disagrees and trains the sheep to bleat '4 legs good, 2 legs bad.' every time Snowball tries to speak. These two pigs are obviously competing for leadership of the farm and Snowball is certainly the more popular. When he appears to be losing the argument, Napoleon calls up the 9 puppies he had taken away some months earlier. They chase Snowball off the farm and Napoleon assumes complete control. Squealer convinces the animals that Snowball has always been a traitor, that he was not brave in the Battle of the Cowshed and that he stole the idea of the windmill from Napoleon himself
37. Chapter Six	The animals work hard to build the windmill, Boxer being the one who did most of the heavy work. His 2 slogans are introduced - 'I will work harder' and 'Napoleon is always right.' Napoleon decides to start trading with the neighbouring farms, Foxwood and Pinchfield. He uses a middleman Whymper to conduct business with them. When the animals see Napoleon ordering Whymper around, it makes them forget that they are not supposed to deal with humans. The pigs move into the farmhouse and start to sleep in beds. Commandment 4 has 'with sheets' added to it and Squealer convinces the animals that they must have forgotten that bit. Because the other animals never learned to read properly, they believe Squealer and agree that the pigs must have more comforts than they do if they are to prevent Jones coming back. A violent storm destroys the windmill. Napoleon blames Snowball and tells the animals to rebuild it with stronger walls.
38. Chapter Seven	There is a severe food shortage but to convince the outside world that all is well, the food bins are filled with sand and merely topped up with grain. The hens are ordered to give up their eggs for the pigs to sell. When they stage a small protest by dropping their eggs from the rafters, Napoleon starves them until they give in. Napoleon is rarely seen in public any more and announcements are always made by Squealer. The animals are told that Snowball was always in league with Jones and that even now Snowball is plotting with Jones to overthrow the farm. To prove his point, he makes 4 pigs confess to having secret meetings with Snowball. They are immediately slaughtered. Then 3 hens, a goose and 3 sheep also confess to similar crimes and receive a similar fate. 'Beasts of England' is banned and Minimus composes another song in praise of Napoleon to replace it. Napoleon awards himself medals.
39. Chapter Eight	The 6th commandment is changed to 'No animal shall kill any other animal without cause.' The animals work harder than ever for less food though the pigs and dogs always have plenty. Napoleon decides to sell timber to Pilkington. The windmill is finished and called Napoleon Mill. When Napoleon discovers that Pilkington has paid for the timber with forged notes, he becomes friendly with Frederick instead. Pilkington then attacks the farm one night and blows up the windmill with dynamite. When Napoleon is seen in public, he always has a black cockerel walking in front of him like a trumpeter. A gun is fired on his birthday and he eats from the best china dinner service with a food taster to try his food to make sure it is not poisoned. He now behaves like a king or emperor.
40. Chapter Nine	Rations are reduced once again and work on the windmill starts for a third time. Boxer's ambition is to finish it before he retires so he works even harder than usual. A school is built for the piglets and they are encouraged to avoid the other animals who now have to step aside to let them pass. Despite the food shortage, produce is sold to provide machinery for the windmill and whisky for Napoleon's table. The barley is reserved to brew beer for the pigs. Moses returns to the farm with tales of Sugarcandy Mountain. The animals, now starving and desperate, are more inclined to listen - there may be a better world after death. The pigs view him as dangerous Boxer collapses through overwork. Napoleon assures the other animals that he is being taken to a hospital to be cared for but he sells him to a glue manufacturer in return for whisky. When Benjamin points out that the van in which he was taken away said 'Horse Slaughterer' on the side, Squealer replies that it used to belong to the horse slaughterer but now belongs to the vet.
41. Chapter Ten	Years later few of the animals are alive who remember the days before the rebellion. The windmill is finished but is used for milling corn to be sold at a profit rather than for electricity to make the animals' lives easier. Squealer takes away the sheep for a week. On their return, they bleat '4 legs good, 2 legs better' as the pigs appear walking on their back legs and carrying whips. The commandments are scrubbed off the barn wall and replaced with just one - 'All animals are equal but some are more equal than others.' The pigs start to wear clothes and the farm is called Manor Farm once again. One evening the animals look in the farmhouse window where the pigs and local farmers are drinking and playing cards. As they look from pig to man and back, it becomes hard to tell which is which.

Geography 1

Tectonic Hazards

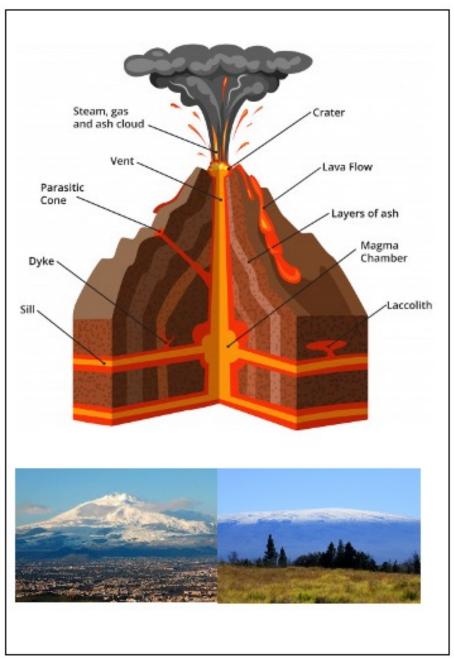


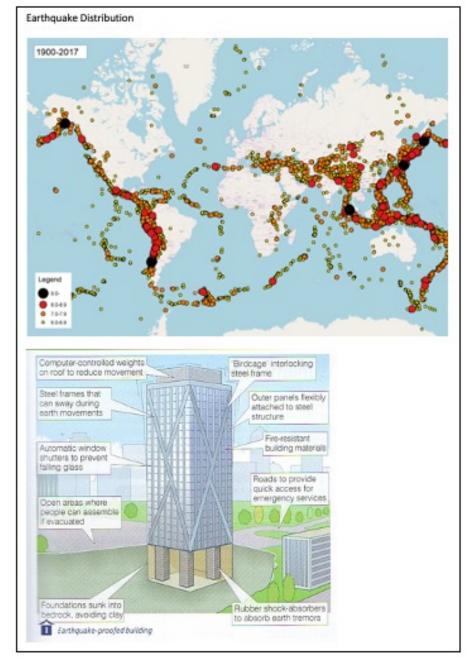
Continental Crust	Oceanic Crust
Located beneath the Earth's continents.	Located beneath the Earth's oceans.
Thick – Average thickness of between 20 and 50 miles.	Thin – Average thickness of between 3 and 5 miles.
Less dense - Air can get into the crust.	Dense - Water can get into the crust.
Made from granite and other sedimentary and metamorphic rocks.	Made of basalt and other igneous rocks.
Older – Millions/billions of years old	New – Always being made. Hours/days old.



1. Inner Core	The inner most layer of the Earth. Hot (6000°C), solid iron, under very high pressure.
2. Outer Core	The layer that surrounds the outer core. Hot (5000°C), liquid iron and nickel.
3. Mantle	The thickest layer at 2000 miles. Hot (1200°C - 4000°C) Silicon Oxide and Magnesium Oxide.
4. Crust	The outer most layer. Cool (30°C on average). Oceanic and continental. Made from basalt and
	granite.
Tectonic Plates	The smaller subdivides of the Earth's crust. There are 14 main tectonic plates.
Convection	The process by which tectonic plates are moved. Hot, less dense magma in the mantle rises
Currents	towards the crust, cools becoming denser, then sinks.
Continental Drift	Alfred Wegener's theory that the tectonic plates moved. Used world map, rock type and fossil
	evidence to prove his theory.
8. Pangea	The supercontinent, where all of the Earth's landmass was joined together.
Conservative	2 tectonic plates, either oceanic or continental, move in opposite directions past each other,
Boundary	or in the same direction but at different speeds.
10.Collision	2 tectonic plates of the same density, usually both continental, move in opposite directions
Boundary	towards each other. Fold mountain form here.
11.Constructive	2 tectonic plates of different densities, though usually 2 oceanic plates, move in opposite
Boundary	directions away from each other. New rock is created. Ocean ridges form here.
12.Destructive	2 tectonic plates of different densities, 1 continental and 1 oceanic move in opposite
Boundary	directions towards each other. The denser, oceanic plate is subducted beneath the less dense
	continental plate. Ocean trenches are formed here.
13. Subduction	The movement of the denser, oceanic plate beneath the less dense, continental plate. Only
	occurs at destructive plate boundaries.
14. Volcano	An opening in the Earth's crust through which magma can be erupted.
Volcanologist	A scientist that studies volcanoes.
16. Composite Volcano	A steep sided, conical volcano that erupts viscous lavas.
17. Shield Volcano	A shallow sided, hill shaped volcano that erupts non-viscous lavas.
18. Viscous	Sticky, less fluid
19. Non-Viscous	Runny. More fluid
20. Pyroclastic Flow	Volcanic material erupted in an eruption column, pulled back down the sides of the volcano
	under gravity.
21. Lahar	A mix of water and volcanic material.
22. Explosive Eruption	A violent eruption caused by viscous lavas trapping gas and blocking the vent of the volcano.
23.Effusive Eruption	An eruption of lava only.
24.Phreatic Eruption	An eruption caused by a build of steam in the volcano.
25. Earthquake	Violent shaking of the Earth's crust, caused by the release of energy at plate boundaries.
26. Focus	The point in the crust where the energy is released.
27. Epicentre	The point on the surface, directly above the focus.
28. P Wave	Primary waves released by earthquakes. Move through solids and liquids. Very fast.
29. S Wave	Secondary waves released by earthquakes. Move on the surface and cause the shaking. Move
	much slower.
30. Hazard Map	Identifying and mapping areas of increased risk and vulnerability to a hazard.
31. Tsunami	Giant waves formed in a large body of water, usually in the sea or ocean.
32. Megathrust	An earthquake caused by the 'bouncing back' of the continental plate at a destructive plate
	boundary.

Geography 2





History 1

Causes of the First World War



Timeline

1882 - Germany made the Triple Alliance with Austria-Hungary and Italy

1894 – France and Russia signed an alliance

1904 - Britain joined the arms race and signed entente [agreement] with France

1907 - France, Britain and Russia formed an alliance: the Triple Entente

1908 - A-H annexed [took over] Bosnia

1914

28 June - Serb nationalists assassinated Archduke Franz Ferdinand in Sarajevo, Bosnia

23 July - A-H declared war on Serbia

29 July - Russia promised to help Serbia and prepared for war against A-H

1 August - GER declared war on RUS 2 August - FR prepared for war with GER

3 August – Germany implemented the Schlieffen Plan by declaring war on France and attacking through Belgium

4 August - Britain declared war on GER

6 August - Austria-Hungary declared war on Russia

Countries and alliances

- 1) Triple Alliance Germany, Austria-Hungary and Italy
- 2) Triple Entente France, Britain and Russia
- Austria-Hungary ruled a large empire in central and eastern Europe; wanted control in the Balkans and access to the Mediterranean
- 4) Russia ruled a large empire in the east and across Asia; wanted access to the Mediterranean from the Black Sea, and influence in the Balkans
- The Balkans south-east Europe: Serbia, Bulgaria, Romania, Greece, Albania, Montenegro
- 6) Germany unified as a state/empire in 1871, wanted to extend power/empire in Europe and beyond; building a powerful navy
- 7) Great Britain ruled a large empire including India, Canada, Australia and parts of Asia and Africa; relied on navy for security through control of sea routes
- France defeated by Germany in 1871 and lost (Alsace-Lorraine); empire in Africa, extended control of Morocco 1905 and 1911

Armies, navies and plans

- Schlieffen Plan Germany's plan to fight and win a war against France and Russia, by defeating France first
- Dreadnought a large and powerful battleship
- Arms race –competition to have the most powerful weapons/largest army
- 12) Naval race competition to have the largest or most powerful navy

People with power

- Emperor Franz Josef emperor of Austria-Hungary
- 14) Kaiser Wilhelm emperor of Germany
- Tsar Nicholas emperor of Russia
- 16) Sir Edward Grey British foreign secretary
- Raymond Poincaré President of France

The assassination

- Archduke Franz Ferdinand heir to the throne of Austria-Hungary
- 19) Gavrilo Princip a Bosnian student, member of the Black Hand, a gang who hated Austrian rule of Bosnia
- 20) Bosnia a small country ruled by Austria-Hungary
- 21) Sarajevo capital of Bosnia
- 22) Serbia wanted control of Bosnia

Ideas and attitudes

- 23) Imperialism pride in empire, a desire to expand
- 24) Nationalism pride in one's country, possibly leading to
 - A desire for independence
 - Hostility to rival countries
 - Competition between 'races' / peoples/nations to survive and thrive
- 25) Militarism Pride in and admiration for the armed forces and military values
- 26) Pacifism a commitment to peace and rejection of war

History 2

Russia under Stalin's rule



Timeline

1848 – the Communist Manifesto published, outlining the principles of Communism

1914-1917 – Russia fought Germany and Austria-Hungary in the First World War

February 1917 – revolution in Russia overthrew the Tsar's government

October 1917 – another revolution, Lenin and the Bolsheviks seized power, intending to introduce Communism in Russia

1921 – Russia renamed the USSR (Union of Soviet Socialist Republics) [Socialist ≈ Communist]

1924 - Lenin died

1927 – Stalin consolidated his position as leader of the USSR

1928 – First Five Year Plan introduced to modernise agriculture and industry in the USSR

1932-3 – a serious famine in the USSR kills millions 1934 – Kirov assassinated

1936-8 - Great Terror - millions arrested and killed

Key people

- Karl Marx philosopher who suggested the idea of Communism
- Tsar Nicholas II emperor of Russia, lost control in the revolution of February 1917
- Vladimir Lenin leader of the Bolshevik group in the Russian Communist party, took power in Russia in October 1917
- Joseph Stalin became leader of the USSR after Lenin's death in 1924

Places

- Moscow capital city of Russia/the USSR after 1917
- 6) Leningrad major city formerly (and now) called St Petersburg
- 7) Siberia remote region of Russia, partly in the Arctic; many gulags were located here
- 8) USSR the Russian empire after 1921
- 9) Soviet Russian/belonging to Russia after 1921

- 16) Great Terror suspected opponents of the regime from the Communist party, the government, writers, musicians, artists, scientists, army officers, and many others were arrested; many were shot without trial; some trials were rigged; some were taken to gulags
- 17) NKVD the secret police, responsible for arresting anyone suspected of opposing the Soviet government
- 18) Gulag prison/slave labour camp system in the USSR; anyone thought to be an opponent or enemy of the government or causing problems was deported to work in these
- 19) Deaths in the famine: estimated between 5m and 9m across the USSR
- 20) Prisoners in the gulags by 1938: 2 million
- 21) Deaths in the gulags: 1-3 million
- 22) Arrests during the Terror: 1.3 million or more
- 10)Bolshevik Revolution Lenin and the Bolsheviks promised 'peace, bread and land'
- Communism the ideal of abolishing private property to create equality and govern in the interests of working people
- 12) Five Year Plan a plan to create large collective farms and build lots of factories to modernise the USSR
- 13) Collectivisation small family farms were grouped together to create one large farm owned by the government and worked by the peasants
- 14) Kulak farmers accused of being 'rich and selfish', anyone who opposed collectivisation
- 15) Kommunalka communal apartments where many families lived together sharing kitchens and bathrooms

Vocabulary 5a – Pets

01 – ¿Tienes mascotas?	Do you have any pets?
02 – Tengo un caballo	I have a horse
03 – Tengo una cobaya	I have a guinea pig
04 – Tengo un conejo	I have a rabbit
05 – Tienes un gato	You have a cat
06 – Tienes un perro	You have a dog
07 – Tienes un pez	You have a fish
08 – Tiene un ratón	He/She has a mouse
09 – Tiene una serpiente	He/She has a snake
10 – No tengo mascotas	I don't have any pets

Vocabulary 5b – Colours

01 – ¿Cómo es? / ¿Cómo son?	What is it like? / What are they like?
02 - Blanco/a	White
03 – Amarillo/a	Yellow
04 – Negro/a	Black
05 – Rojo/a	Red
06 – Verde	Green
07 – Marrón	Brown
08 – Azul	Blue
09 – Rosa	Pink
10 – Naranja	Orange

Vocabulary 6a - Small Words

01 - No	No / Not
02 – Sí	Yes
03 – Mi	My (singular)
04 – Mis	My (plural)
n1 – 50	Your (singular)
sn1 – 90	Your (plural)
07 – Su	His / Her (singular)
08 – Sus	His / Her (plural)
09 – Mi cantante favorita	My favourite singer
10 – Su programa favorito	His / Her favourite programme

Vocabulary 6b – Small Words

My sister	My siblings / My brothers	Your dog	His / Her pets	very	quite	a little / a bit	on the right	on the left	I think that
01 – Mi hermana	02 – Mis hermanos	03 – Tu perro	04 – Sus mascotas	05 – muy	06 – bastante	07 – un poco	08 – a la derecha	09 – a la izquierda	10 – Creo que

Vocabulary 7a - Opinions

01 – ¿Qué te gusta hacer?	What do you like to do?
02 – Me gusta	l like
03 – Me gusta mucho	I really like
04 – No me gusta	I don't like
05 – No me gusta nada	I don't like at all
06 – navegar por Internet	to surf the Internet
07 – chatear	to chat online
08 – escuchar música	to listen to music
09 – jugar a los videojuegos	to play videogames
10 – mandar SMS	to send text messages

/ocabulary 7b – Reasons

to watch TV	to read	to write emails	to go out with my friends	because it's	because it's not	boring	interesting	amusing, fun, funny	stupid
01 – ver la televisión	02 – leer	03 – escribir correos	04 – salir con mis amigos	05 –porque es	06 –porque no es	07 – aburrido/a	08 – interesante	09 – divertido/a	10 – estúpido/a

Vocabulary 8a – Hobbies

01 – ¿Qué haces en tu tiempo libre?	What do you do in your free time?
02 - Bailo	I dance
03 - Bailas	You dance
04 – Canto karaoke	I sing karaoke
05 – Hablo con mis amigos	I talk with my friends
06 – Monto en bici	I ride my bike
07 - Saco fotos	I take photos
08 - Saca fotos	He/She takes photos
09 – Toco la guitarra	I play the guitar
10 – Tocamos la guitarra	We play the guitar

Vocabulary 8b – Frequency

01 – Bailáis	You (plural) dance
02 - Bailan	They dance
03 – Canta karaoke	He/She sings karaoke
04 – Cantamos karaoke	We sing karaoke
05 - Sacamos fotos	We take photos
06 – Toca la guitarra	He/She plays the guitar
07 – A veces	Sometimes
08 – De vez en cuando	From time to time
09 – Nunca	Never
10 – Todos los días	Every day

Vocabulary 9a – Weather

01 – ¿Qué tiempo hace?	What is the weather like?
02 – Hace calor	It is hot
03 – Hace frío	It is cold
04 – Hace sol	It is sunny
05 – Hace buen tiempo	It is good weather
06 – Hace mal tiempo	It is bad weather
07 – Llueve	It is raining
08 – Nieva	It is snowing
09 – Cuando	When
10 – ¿Oué haces cuando llueve?	What do you do when it's raining?

Vocabulary 9b – Seasons

Seasons	In / On / At	Spring	Summer	Autumn	Winter	generally	with	a lot	And you?
01 - Estaciones	02 – En	03 – Primavera	04 – Verano	05 - Otoño	06 – Invierno	07 – generalmente	08 - con	09 – mucho	10 – ¿Y tú?

Vocabulary 10a - Sports

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01 – ¿Que deporte haces?	What sports do you do?
02 – Hago artes marciales	I do martial arts
03 – Hago atletismo	I do athletics
04 – Hago equitación	I do horseriding
05 – Hago gimnasia	I do gymnastics
06 – Hago natación	I do swimming
07 – Juego al baloncesto	I play basketball
08 – Juego al fútbol	I play football
09 – Juego al tenis	I play tennis
10 – Juego al voleibol	I play volleyball

Vocabulary 10b – Days of the Week

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	On Mondays	On Tuesdays	On Wednesdays
01 – Lunes	02 – Martes	03 – Miércoles	04 – Jueves	05 – Viernes	06 – Sábado	07 – Domingo	08 – Los lunes	09 – Los martes	10 – Los miércoles