



HOUSTONE
SCHOOL

Year 7 – 100% Book Term 1 - 2022

NAME	
FORM GROUP	



The Science of Learning

How to do Retrieval Practice

1. Study the material you are trying to learn first. Take about 20 minutes the first time BUT this will get less and less each time as you get to know the material.

You can study the material by;

- Reading it again, over and over
- Look/cover/write/check
- Creating flashcards that you test yourself on

2. Pick up and use a **black pen**.

Put away all the answers and test yourself writing everything you remember in the blank spaces provided. Do not cheat!

3. Now pick up and use a **green pen**.

Check your answers:-

- Tick all of your correct answers
- Amend any incorrect answers (even if they are slightly wrong)
- Fill in any blank spaces with the correct answer copying the answer word for word
- Check all spellings are correct

4. Repeat the process as many times as you need to, pay special attention to your previous green pen answers (as these are the bits you need to learn!)

5. *Tip:- Lay blank pieces of paper over the answers in order to re-use the quiz again and again*

Tip: - Even if you think you know it test yourself a week or so later to check you do.

Tip: - Do not leave it until the last minute – do some every week in the summer holidays (this is called Spaced Practice)

Tip: - Once you think you know it test yourself on everything AGAIN

Retrieval practice feels hard but it is a really effective way to learn and commit knowledge to long term memory!



KNOWLEDGE ORGANISER

Art & Design

Year 7 – 2D Studies (Half Term 1)

Topic: Food

Key Knowledge

DEVELOP ideas: AO1

You will learn to:

- Describe artworks using the Formal Elements
- Identify key facts about Islamic Art and the work of MC Escher
- To use symmetry to create patterns/designs informed by your research
- How to explain connections between artist research and your own work.

EXPLORE ideas: AO2

You will learn to:

- Use tools and materials to convey different linear qualities
- Use tools and materials to convey different and textural qualities
- Collage: Tracing, cutting, and assembling.

RECORD ideas: AO3

You will study approaches to drawing which focus on:

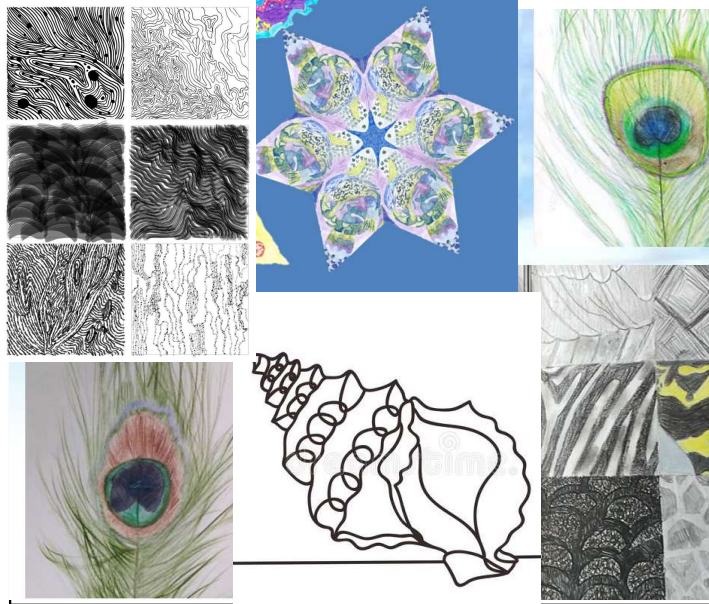
- How to observe
- How to use line in a varied way for descriptive effect
- How to analyse shape and proportion
- How to see positive and negative space and use this to check accuracy
- How to suggest form and texture through mark-making such as cross-hatch.
- How to record thoughts/observations in annotation

PRESENT ideas: AO4

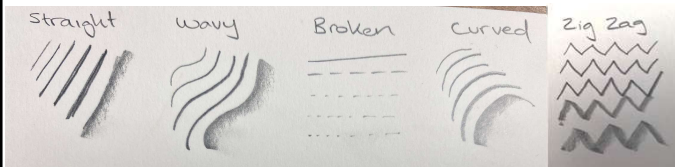
You will learn to:

- Use a sketchbook to layout work in a coherent way
- To compose imagery using pattern/ tessellation

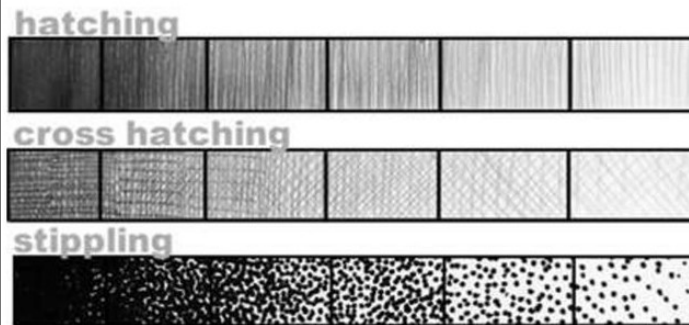
POSSIBLE OUTCOMES: examples of excellence



Motor Skills 1: Line Qualities



Motor Skills 2: Mark Making



1. Medium	The materials and methods used to make a piece of art or design e.g paint (Plural = media)
2. Line	Line is the path left by a moving point. Lines can vary in thickness, length and direction to convey different qualities.
3. Shape	A line which meets itself. A shape is flat and has no depth (2D). It can be regular like a circle, square or triangle, or irregular
4. Texture	The way something feels or looks like it feels.
5. Observation	The power to see clearly or take notice of something
6. Scale	The physical size of an artwork or objects in the artwork.
7. Proportion	the different sizes of the individual parts that make up one object and how they relate to each other
8. Tessellation	an arrangement of shapes closely fitted together in a repeated pattern without gaps or overlapping
9. Composition	How the formal elements are laid out to create a visually pleasing artwork
10. Tone	The lightness or darkness of colour. This can be used to suggest 3D form.

COMPUTER SCIENCE 1

What is a computer?	
1. Computer	A computer is a device that takes an input does something with it (a process) and produces an output .
2. Input	Data sent to a computer for processing
3. Output	Data that a computer sends out normally through a screen or speakers.
4. Hardware	The physical components of a computer e.g. monitor, hard drive, mouse
5. Software	Installed on computer hardware. Something that cannot be touched. E.g. Chrome, Word, video games
6. Application software	Software that helps the user complete a specific task e.g. write a letter
7. System software	System software: software that helps the computer to run e.g. antivirus

Main memory	
19. Memory	Used to store instructions for the CPU to execute (<i>it is not the same as storage!</i>)
20. RAM	Random Access Memory. Stores currently running instructions and data ready for a CPU to execute.
21. ROM	Read Only Memory. Stores permanent instructions that tell a computer how to 'boot up'.
22. Volatile	Data is lost when the power is switched off.
23. Non-volatile	Does not lose memory when the power is switched off.
24. Cache	Memory located close to the CPU. Saves frequently used instructions and data, so they are quickly available for the CPU.

CPU	
8. CPU	Central processing unit. Where processes such as calculating, sorting and searching take place.
9. Von Neumann architecture	Data and instructions are both stored together in primary memory.
10. Control unit	The control unit runs the show. It understands the instructions and tells the other components what each instruction needs from them.
11. Arithmetic logic unit (ALU)	The ALU is the calculator of the CPU. It handles mathematical and logical operations that are required as part of an instruction.
12. Clock	Used to regulate the number of cycles carried out per second, and synchronise the other components.
13. Registers	Very small, very fast memory locations located inside the CPU.
14. Buses	A CPU bus is a set of parallel wires that transport data between the components inside the processor and memory.
15. FDE cycle	The Fetch-Decode-Execute cycle is how the CPU processes instructions.
16. Fetch	Each instruction is the fetched in order from main memory.
17. Decode	This is the process the control unit uses to work out what the other components need to do.
18. Execute	The instruction will be carried out.


COMPUTER SCIENCE 2

Secondary storage	
25. Capacity	The amount of data that can be stored e.g. measured in bits, bytes, megabytes, gigabytes
26. Storage vs memory	Storage has higher capacity, is more robust, cheaper and more portable
27. Storage units	Bit: smallest unit. A single 1 or 0 Byte: 8 bits Kilobyte (Kb): 1000 bytes Megabyte (Mb): 1000 kb Gigabyte (Gb): 1000 mb Terabyte (Tb): 1000 gb

Examples of how large files are:

File type	Typical size	Quantity a 1 gigabyte USB memory stick could hold
Word processed document	50 kilobytes	1 gigabyte = 1,000 megabytes, 1000 megabytes = 1,000,000 kilobytes, $1,000,000 / 50 = 20,000$ word processed files
Image file	100 kilobytes	1 gigabyte = 1,000 megabytes, 1000 megabytes = 1,000,000 kilobytes, $1,000,000 / 100 = 10,000$ image files
Video file	100 megabytes	1 gigabyte = 1,000 megabytes, $1,000 / 100 = 10$ video files

Secondary storage types:

Type of storage	What does it look like?	Capacity	Read/write speed	Cost	Robust and portable?
<p>Solid state (also known as flash storage).</p> <p>Most commonly used in portable devices, but now more frequently in desktop PCs.</p>	 <p>Solid-state drive (SSD) Inside a solid-state drive (SSD). USB memory stick</p>	Smaller than magnetic. E.g. solid-state drive: 120gb-1tb	Fast	Expensive	Yes, no moving parts

COMPUTER SCIENCE 3

<p>Magnetic storage.</p> <p>Most commonly used inside desktop PCs.</p>		<p>Large e.g. 1-10tb</p>	<p>Slower</p>	<p>Cheap</p>	<p>No, there are moving parts</p>
<p>Optical storage</p> <p>Most commonly used to distribute media e.g. video, games, music. Used less nowadays.</p>	 <p>Compact Disc (CD). DVD. Blu-Ray</p>	<p>Small.</p> <p>CD: 700mb</p> <p>DVD: 4.7gb</p> <p>Blu-Ray: 25-50gb</p>	<p>Faster than magnetic, slower than solid-state</p>	<p>Cheap</p>	<p>No, there are moving parts</p>

ENGLISH 1

Key Stage 3 English Terms

Term	Definition
1. Alliteration	The repetition of the same consonant sound, especially at the beginning of words.
2. Allusion	A reference to another event, person, place or work.
3. Ambiguity	Use of language where the meaning is unclear or has two or more possible meanings or interpretations.
4. Anaphora	Repetition at the start of a sentence or statement (Shylock's "Hath not a Jew...").
5. Antithesis	Opposites - direct contrast: "I had sworn thee fair and thought thee bright/ Who art as black as Hell as dark as night".
6. Aposiopesis	"***** is when..." Cutting off before a line is finished. Greek for 'becoming silent'. Eric cuts himself off in An Inspector Calls. ERIC: (eagerly) Yes I remember...(but he checks himself)
7. Assonance	Similar vowel sounds occurring together: Spoon the fool's food.
8. Caesura	A break in a line of verse, usually following enjambment (think of 'caesarean' or cut)
9. Chiasmus	a rhetorical or literary figure in which words, grammatical constructions, or concepts are repeated in reverse order. (Fair is foul and foul is fair)
10. Colloquial	Ordinary everyday speech and language (slang or dialect)
11. Connotation	An implied meaning
12. Dramatic Irony	When the audience knows something the characters on stage do not (Birling saying how great The Titanic is in An Inspector Calls)
13. Dactylic Metre	(In poetry) One stressed followed by two unstressed syllables. Used by Tennyson in "Charge of the Light Brigade": "On with- the Light Brig-ade/ For-ward the Light Brig-ade". Here it sounds like horses galloping. (Note: This is the only poem in our anthology to use this form of metre.)
14. Direct Address	When the writer speaks directly to the reader.
15. Enjambment	(in verse only) A line of verse that flows on into the next line without a pause. . "One summer evening (led by her) I found / A little boat..."
16. Foreshadowing	A hint of what is to come - Marley's face on the door knocker in A Christmas Carol.
17. Hamartia	The fatal flaw in a character
18. Hyperbole	Exaggeration (usually for comic effect)
19. Iambic Pentameter	10 syllables - Unstressed followed by stressed TeDUM TeDUM TeDUM TeDUM TeDUM
20. Imagery	The use of words to create a picture or "image" in your head. "The ***** in Blake's 'London' is dark".
21. Internal rhyme	Rhyming words within a line (rather than at the end of lines).
22. Irony	At its simplest level, it means saying one thing while meaning another, usually for humour. Not as harsh as sarcasm.
23. Juxtaposition	Placing two contrasting ideas/statements/things near each other in order to compare and contrast. It is different to oxymoron.
24. Metaphor	Direct comparison saying one thing IS another (not 'like').
25. Metonymy	refers to using one thing to describe something related to it, such as referring to the monarchy as simply "the crown," or religious institutions as "the church".
26. Metre (or Meter)	The regular use of unstressed and stressed syllables in poetry (iambic pentameter and dactylic for example).
27. Narrative	A piece of writing that tells a story.
28. Onomatopoeia	Words which sound like the things they are describing: "bang", "crash", "squelch" etc.
29. Oxymoron	Two things which are generally incompatible put together, like "bitter sweet". Not to be confused with juxtaposition.
30. Pathetic fallacy	When surroundings or weather reflect the inner mood of a character or event (Frankenstein's stormy night)
31. Pathos	The effect in literature which makes the reader feel sadness or pity.
32. Personification	Giving living (not necessarily 'human') attributes to inanimate or non-human things - is a type of metaphor. "Time must untie this knot".
33. Plot	The sequence of events in a poem, play, novel or short story that make up the main storyline.
34. Point of View	perspective from which we hear what is happening.

ENGLISH 2

35. Protagonist	The main character.
36. Pun	A play on words: "Time must untie this knot, not I..." (Shakespeare's Twelfth Night).
37. Rhyme scheme	The pattern of rhymes in a poem.
38. Rhythm	The beat as created through the meter
39. Satire	The highlighting of human foolishness making fun of them. Satire can range from being gentle and light to extremely biting and bitter in tone.
40. Simile	Direct comparison using like or as.
41. Soliloquy	Speech delivered directly to the audience (particularly in Shakespeare) in which the character says they are thinking and feeling.
42. Sonnet	A fourteen-line poem, usually with 10 syllables in each line ("Ozymandias").
43. Stanza	The blocks of lines into which a poem is divided - a 'verse'
44. Statistics	(in non-fiction) facts and figures
45. Structure	The way a poem or play or other piece of writing has been put together
46. Symbol	Like the use of images, symbols present things which represent something else.
47. Synecdoche	Replacing a whole of a thing by a part. "All hands' on deck"
48. Syntax	Refers to the way in which words are placed together in writing.
49. Volta	(Italian: "turn") the turn in thought in a sonnet that is often indicated by such initial words as But, Yet, or And yet. the **** occurs between the octet and sestet in a Petrarchan sonnet and sometimes between the 8th and 9th or between the 12th and 13th lines of a Shakespearean sonnet

Sentences Types and Parts of Speech

Term	Definition
50. Simple sentences	A simple sentence is one main clause with a full stop.
51. Compound sentences	A compound sentence consists of at least two main clauses joined together by a conjunction.
52. Complex sentences	A complex sentence consists of a main clause plus one or more subordinate clauses.
53. Interrogative sentences	Essentially, a question (think of interrogate). Can be a Sentence or a word. "What?"
54. Declarative sentences	Simply statements that relay information.
55. Imperative sentences	Used to issue a command or instruction, make a request, or offer advice.
56. Adverb	Adds information to a verb.
57. Determiner	A word placed in front of a noun to specify quantity (e.g., "one dog," "many dogs") or to clarify what the noun refers to (e.g., "my dog," "that dog," "the dog")
58. Verb	A doing word (ran), or a state of being (is, was)
59. Noun	Labels person, place or thing
60. Adjective	Describes a noun
61. Preposition	Shows relation of one thing to another - on, at, in, by
62. Conjunction	Joins word and clauses: 'and' 'so' 'where' etc.
63. Present Participle	Verb ending in 'ing': Walking, talking and jumping and so on
64. A concrete noun	a noun you can experience physically with your senses.
65. An abstract noun	an idea of something. You cannot experience it physically with your senses.
66. A proper noun	the specific name of something, and always needs a capital letter.
67. A common noun	a noun that is not a proper noun (all the rest). It does not need a capital letter.
68. Active verb	A doing verb expresses an action
69. Stative verb	A being verb expresses states of being, thoughts and feeling;
70. An auxiliary verb	a helping word that the main verb needs to be complete.
71. An adjective	a word that describes a noun.
72. A preposition	a word that is used before a noun, a noun phrase, or a pronoun, showing relationship.
73. A prepositional phrase	the combination of a preposition followed by a noun or pronoun "...on the table."

GEOGRAPHY 1

UNIT 1 – Geography of Great Britain – KNOWLEDGE MAP

- The world is split into 7 continents, **Africa, Asia, Antarctica, Europe, North America, South America** and **Oceania**. Each continent contains a number of countries. In the UK the country is split into smaller counties.
- They're 4 major oceans on the planet. **Atlantic, Arctic, Indian** and **Pacific Oceans**.
- Great Britain** is comprised of England, Scotland and Wales. The **United Kingdom** is comprised of England, Scotland, Wales and Northern Ireland.
- The **British Isles** is comprised of all of the territories of Great Britain and the British Isles, plus the Republic of Ireland and all of the surrounding islands.
- 83% of the UK population lives in an **urban** environment. 17% of the UK population live in a rural environment.
- London is an example of an urban environment, it has many job opportunities, as well as good transport links and good education and healthcare.
- Snowdonia in Wales is an example of a **rural** environment, it has fewer job opportunities, is more isolated, with less public transport and less choice in education and healthcare.
- Population density** is particularly high in towns and cities. London has the highest population density in the UK with 1510 people per km².
- Population density is lower in rural, countryside communities. Snowdonia has a population density of 2 people per km².
- National anthems are patriotic songs sung during special occasions.
- In the UK national anthems are sung during royal events, but also during sport events and other events of great national importance. The national anthems of countries in the UK are,

England (God Save the Queen) Scotland (Flower of Scotland)

Wales (Land of my Fathers) Northern Ireland (God Save the Queen)

KEY WORDS

1. Continent	A large and continuous area of land.
2. Country	A nation with its own government.
3. County	The name given to smaller sub-districts of a country.
4. Ocean	A very large expanse of open water.
5. British Isles	All territories of the UK and Great Britain with the addition of the Republic of Ireland and all smaller islands.
6. The United Kingdom (UK)	England, Scotland, Wales and Northern Ireland.
7. Great Britain	England, Scotland and Wales.
8. Human Geography	The study of people and their impact on the world around us.
9. Physical Geography	The study of nature and its impact on the world around us.
10. Rural	A countryside community, with very few services.
11. Urban	Towns & cities, with a wide range of services.
12. Population Density	The number of people that live in 1km ² .
13. The European Union (EU)	A trade bloc of 28 (27 after the UK left) countries. Formed after World War 2 to stop another global war from starting in Europe.

- The **European Union** was set up in 1952 and was made up of only 6 countries, Belgium, France, Germany, Italy, Luxembourg and the Netherlands. These countries agreed to work together to prevent another war in Europe.
- Over time more and more European countries joined, the UK and the Republic of Ireland joined the EU in 1973. Today there are 28 countries in the EU. In June 2016 the UK voted to leave the EU, leaving 27 countries.
- Today there are 6 aims of the EU, they are:

Peace & Stability

Economic & social stability.

Bring Europe together

Identity & diversity

Ensure Safety & Security

Values

GEOGRAPHY 2

Retrieval Practice Quiz 1	Retrieval Practice Quiz 2	Retrieval Practice Quiz 3
1. Name the 7 continents.	1. Name the line of latitude at 23° north.	1. Name the 7 continents.
2. Name the 4 oceans.	2. Name the line of latitude at 23° south.	2. Name the 4 oceans.
3. Name the line of latitude at 0°.	3. What name is given to the line of longitude at 0°.	3. Name countries that make up the United Kingdom.
4. Name the line of latitude at 23° north.	4. The Republic of Ireland is part of the United Kingdom. True or False?	4. Name the countries that make up Great Britain.
5. Name the line of latitude at 23° south.	5. Name the countries that make up the United Kingdom.	5. Name 2 human features found in England.
6. Name the line of longitude at 0°.	6. Name the countries that make up Great Britain.	6. Name 1 human feature found in Wales.
7. Name the countries that make up the United Kingdom.	7. Name 2 physical features found in Wales.	7. Give 2 reasons why older people leave urban areas.
8. Name the countries that make up Great Britain.	8. Name 2 physical features found in Scotland.	8. Give 2 reasons why younger people move into urban areas.
9. Name the country that is in the British Isles but not in either the United Kingdom or British Isles.	9. Name the 3 counties that surround Bedfordshire.	9. Name 1 area of the United Kingdom that has a high population density.
10. How many English counties are there?	10. How high above sea level is Mt Snowdon?	10. Name 1 area of the United Kingdom that has a low population density.
11. Name the largest county.	11. How many people visit Mt Snowdon every year?	11. Name the national anthem of England.
12. Name the smallest county.	12. Give 2 reasons why these visitors are a positive for the local area.	12. Name the national anthem of Scotland.
13. Name the 4 counties that surround Bedfordshire.	13. Give 2 reasons why these visitors are a negative for the local area.	13. Name the national anthem of Wales.
14. Define the term 'physical geography'	14. Define the term 'urban'.	14. Name the national anthem of Northern Ireland.
15. Define the term 'human geography'	15. Define the term 'rural'.	15. How many countries are currently in the European Union?
16. Name 2 physical features found in England.	16. Which group of people are most likely to live in urban environments?	16. In which year did the United Kingdom join the European Union?
17. Name 2 human features found in England.	17. Which group of people are most likely to live in rural environments?	17. Give 1 reason why the European Union was formed.
18. Name 1 physical feature found in Northern Ireland.	18. Give 1 pull factor in urban environments.	18. What is the term given to the United Kingdom's exit from the European Union?
19.	19. Give 1 push factor out of rural environments.	19. Which parts of the United Kingdom voted to remain?
20.	20. How do you calculate population density?	20. Which parts of the United Kingdom voted to leave?

GEOGRAPHY 3

Retrieval Practice – Complete the tables below. I have given the 1st letter of each answer to help you.

Name the regions and countries that make up the **British Isles**.

U	K
G	B
E	
S	
W	
N	I
R	of I
S	I
O	H
O	I
I	of M
I	of W

Name the countries that make up the **United Kingdom**.

E	
S	
W	
N	I

Name the countries that make up the **Great Britain**.

E
S
W

History Year 7 Knowledge organiser: Who lived in and around Houghton Regis?

Learn this timeline of the history of Britain

Before 2500BC	Stone Age (Paleolithic, Mesolithic, Neolithic)
2500- 800BC	Bronze Age Britain
800BC- 43AD	Iron Age Britain
43- 410AD	Roman Britain
410- 1066	Early medieval (Anglo-Saxon and Viking) Britain
1066— 1500	Medieval Britain
1500- 1714	Early modern Britain
1714- 1900	Industrial (Georgian and Victorian) Britain
1900- 2000	Twentieth-century Britain

Key words and people

1. **BC:** Before Christ (before the year 0)
2. **AD:** Anno Domini ('in the year of our Lord', after the year 0)
3. **Migration:** The movement of people
4. **Settlement:** A place (usually unoccupied) that people move to and set up a community
5. **Archeology:** The study of human history and prehistory through the excavation of sites

HISTORY 1

HISTORY 2

Constantinople and Baghdad knowledge organizer

Map of key locations



Names

- 1) **al-Mansur** – Caliph who built Baghdad
- 2) **Caliph** – Islamic emperor, ruler of the Caliphate (empire)
- 3) **empire** – territories ruled over by an emperor
- 4) **Abbasid dynasty** – ruling family; al-Mansur was the first Abbasid caliph
- 5) **Arabs** – people from Arabia, the first Muslims, who conquered an extensive empire outside Arabia after 650
- 6) **Makkah** – holy city of Muslims, in Arabia; Muslims pray facing the direction of Makkah, five times a day

Empires

- 7) **Constantinople** – capital of the Byzantine Empire
- 8) **Emperor Constantine** – Roman emperor who founded Constantinople in 324 and introduced toleration for Christians in the Roman Empire
- 9) **Byzantine Empire** – developed from the former eastern Roman Empire, which preserved much Ancient Greek language and culture
- 10) **Roman Empire** – territories in Europe, the Mediterranean and North Africa, ruled by the city of Rome between c.750BC and 450AD
- 11) **Ancient Greece** – civilisation in Greece and the eastern Mediterranean between c.800BC and 400AD

Routes

- 12) **River Tigris and River Euphrates** – Baghdad was built between these two rivers, in a region known as Mesopotamia
- 13) **Silk Roads** – trade routes across Asia connecting Europe/Africa and the Islamic empire to China

Knowledge

- 14) **Euclid** – ancient Greek mathematician
- 15) **Ptolemy** – ancient Greek astronomer
- 16) **Galen** – ancient Greek doctor
- 17) **al-Razi (Rhazes)** – Baghdad doctor
- 18) **geometry** – mathematics of shapes
- 19) **astronomy** – study of the stars and planets
- 20) **astrology** – making predictions using the stars and planets

Dates

- 324- Constantinople founded by Emperor Constantine
- 532-7- Emperor Justinian built Hagia Sofia in Constantinople
- 762- Baghdad founded by al-Mansur
- 1028-1050 -Zoe was empress of Constantinople

Religion

- 21) **Islam** – religion of followers of the prophet Muhammed
- 22) **Muslim** – follower of Islam
- 23) **mosque** – place of worship for Muslims
- 24) **Christianity** – religion of followers of Jesus
- 25) **Christian** – follower of Christianity
- 26) **church** – place of worship for Christians
- 27) **Hinduism** – ancient religion of India
- 28) **Hindu** – follower of Hinduism

Other:

- House of Wisdom – a building housing books and scholars in Baghdad
- madrasa – a place of education in Baghdad
- architect – designer of buildings
- engineer – uses mathematical and scientific knowledge to work out how to construct buildings
- irrigation – system for watering crops

MUSIC

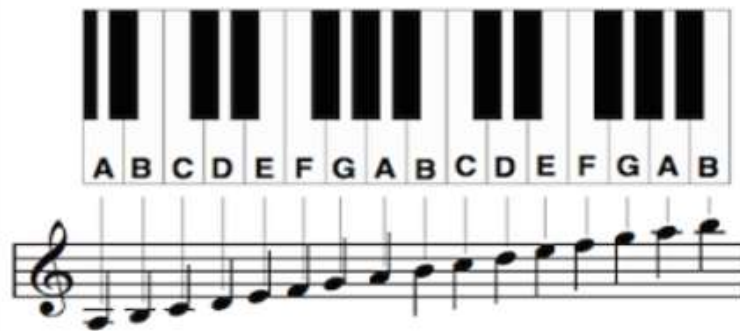
Year 7 Music: Sound of Music

Keywords

1. Soprano – high female singer
2. Alto – medium female singer
3. Tenor – medium male singer
4. Bass – low male singer
5. A Cappella – voice with no instrumental accompaniment
6. Orchestra – a group of musicians playing varied instruments
7. Percussion - instruments that make a sound by hitting part of it, often with a beater, mallet or hand.
8. Strings - instruments that make sound when strings are plucked, strummed or stroked with a bow.
9. Woodwind - instruments often made from wood, that make a sound by blowing into a mouthpiece or against a reed.
10. Brass - instruments made exclusively out of brass metal, that make sound by vibrating your lips and blowing into a mouthpiece
11. Solo – one musician performing
12. Choir – a group of singers
13. Unison – all play the same thing at the same time
14. Harmony – the combination of different pitches at the same time
15. Call and Response – one musical phrase followed by another in response. The response can be the same as or different to the call.

Theory

Treble Clef Chart



Listening

1. Homeless by Ladysmith Black Mambazo
2. *The Young Person's Guide to the Orchestra* by Benjamin Britten
3. *Who Will Buy?* From "Oliver" by Lionel Bart

SCIENCE 1

Key Stage 3 Science 7B1

1. Cell	The basic unit of all life. All organisms are made of cells.
2. Tissue	A part of an organ that does an important job. Each tissue is made up of a group of the same type of cells all doing the same job.
3. Red blood cell	A blood cell that carries oxygen.
4. Organ	A large part of a plant or animal that does an important job. They are made up of various tissues.
5. Root hair cell	Cell found in roots. It has a large surface area to help the cell absorb water quickly.
6. Xylem tissue	Tissue that carries water in plants.
7. Blood vessel	A tube that carries blood around the body.
8. Circulatory system	Carries oxygen and nutrients (from food) in the blood around the body.
9. Urinary system	Gets rid of waste materials produced in the body.
10. Digestive system	Breaks down food and takes nutrients from it into the blood.
11. Nervous system	Allows you to sense things.
12. Locomotor system	Muscles and bones in your body.
13. Water transport system	Takes water from the ground in plants to the leaves
14. Nucleus	Controls the cell's activities
15. Cell surface membrane	Membrane that control what goes into and out of the cell.
16. Cell wall	Tough wall around plant cells. Helps support and protect the cell.
17. Vacuole	Storage space in plant cells.
18. Cytoplasm	Watery jelly inside a cell where the cell's reactions take place
19. Chloroplast	Green disc containing chlorophyll.

20. Chlorophyll	Green substance found inside chloroplasts, traps light energy for photosynthesis
21. Slide	Glass sheet that a specimen is put on.
22. Objective lens	Part of the microscope that is closest to the specimen. Magnifies the image.
23. Stage	Part of a microscope. You put a slide on it.
24. Fine focussing wheel	Wheel on a microscope that moves parts of the microscope a small amount to get the image into focus.
25. Eyepiece lens	Part of the microscope you look down. Magnifies the image.
26. Coarse focusing wheel	Wheel on a microscope that moves parts of the microscope a large amount to get the image into focus.
27. Coverslip	Thin piece of glass used to hold a specimen in place on a slide. It also keeps the specimen flat and stops it drying out.
28. Image	What you see when looking down a microscope.
29. Magnification	The number of times larger an image is than the initial object that produced it.
30. Stain	Dye used to colour parts of a cell to make them easier to see.
31. Organelle	The small structures which make up a cell.
32. Mitochondrion	Small structure (organelle) in the cytoplasm of cells where aerobic respiration occurs.
33. Ribosome	An organelle which produces proteins
34. Cellulose	A strong plant material used to make cell walls.
35. Palisade cell	Tall cell found in leaves that contains many chloroplasts
36. Glucose	An important sugar that is used as a reactant in respiration.
37. Limiting factor	A variable that prevents the rate (speed) of a process from becoming any faster.

SCIENCE 2

Key Stage 3 Science 7B1

38. Word equation	An equation in which the names of the reactant(s) are written on the left side, there is an arrow pointing from left to right, and the names of the product(s) are written on the right side: reactant(s) → product(s).
39. Surface area	The total area of all the surfaces of a three-dimensional object
40. Adaptation	The features that something has to enable it to do a certain job or survive in a particular place.
41. Xylem vessel	A thick dead tube found in plants that carries water
42. Epidermis	The outer layer of tissue in a plant.
43. Phloem vessel	A living tissue that carries sugars around the plant.
44. Starch	A type of insoluble carbohydrate found in plants. The glucose made in photosynthesis is used to make starch.
45. Polymer	A substance made up of very long molecules containing repeating groups of atoms.
46. Diffusion	When particles spread and mix with each other without anything moving them.
47. Diaphragm	An organ containing a lot of muscle tissue, the diaphragm contracts and moves downwards to increase the volume of the chest when inhaling.
48. Ventilation	The movement of air in and out of your lungs.
49. Gas exchange	When one gas is swapped for another. In the lungs, oxygen leaves the air and goes into the blood. At the same time, carbon dioxide leaves the blood and goes into the air in the lungs.
50. Alveoli	Small pockets in the lungs in which gases are exchanged between the air and the blood.
51. Capillaries	Small blood vessels that are involved in gas exchange.
52. Breathing rate	The number of times you inhale and exhale in one minute.
53. Intervals	The spacing between numbers on a graph. Eg. are you going to go up in tens or hundreds etc.?

54. Scale	How large or small you need to present your data so you can read it clearly
55. X axis	The horizontal line on a graph
56. Line of best fit	The line you draw on the graph to connect most of the data. This can be straight or curved.
57. Y axis	The vertical line on a graph
58. Reliability	When an experiment can be repeated and similar results are gained.
59. Dependent variable	A variable that you measure after changing the independent variable.
60. Independent variable	The variable that you change each time.
61. Control variable	The variables that you keep the same in an experiment.
62. Validity	When all other variables are controlled and you are testing what you are supposed to test. Another word for 'fair test'
63. Particle theory model	This is a diagram to show what is happening to particles in a solid, liquid or gas.
64. Small Intestine	Breaks up food and diffuses it into the blood stream.
65. Rate	The rate at which something happens is its speed.

SPANISH 1

Vocabulary 1a – Greetings

01 – Saludos	Greetings
02 – ¡Hola!	Hello!
03 – ¡Buenos días!	Good morning!
04 – ¡Buenas tardes!	Good afternoon! / evening!
05 – ¡Buenas noches!	Good night!
06 – ¿Qué tal?	How are you?
07 – ¿Cómo estás?	How are you?
08 – Bien, gracias	Good, thanks
09 – Muy bien	Very good
10 – Fenomenal	Great

Vocabulary 1b – Greetings

01 – Regular	Not bad
02 – Fatal	Awful
03 – ¿Cómo te llamas?	What's your name?
04 – Me llamo...	My name is...
05 – Mi nombre es...	My name is...
06 – ¿Dónde vives?	Where do you live?
07 – Vivo en...	I live in...
08 – ¡Hasta luego!	See you later!
09 – ¡Hasta mañana!	See you tomorrow!
10 – ¡Adiós!	Goodbye!

Vocabulary 2a – Personality

01 – Soy generoso/a	I am generous
02 – Soy genial	I am great
03 – Soy guay	I am cool
04 – Soy listo/a	I am smart
05 – Eres serio/a	You are serious
06 – Eres simpático/a	You are nice / kind
07 – Eres sincero/a	You are sincere
08 – Es tímido/a	He / She is shy
09 – Es tonto/a	He / She is silly
10 – Es tranquilo/a	He / She is calm / peaceful / quiet

SPANISH 2

Vocabulary 2b – Passions

01 – Mi pasión	My passion
02 – Mi pasión es...	My passion is...
03 – Mi héroe es...	My hero is...
04 – el deporte	sport
05 – el fútbol	football
06 – la música	music
07 – el tenis	tennis
08 – y	and
09 – también	also
10 – pero	but

Vocabulary 3a – Siblings

01 – ¿Tienes hermanos ?	Do you have any siblings?
02 – Tengo una hermana	I have a sister
03 – Tengo un hermano	I have a brother
04 – Tienes una hermanastra	You have a step-sister
05 – Tiene un hermanoastro	He/She has a step-brother
06 – No tengo hermanos	I don't have any siblings
07 – Soy hijo/a único/a	I am an only child
08 – ¿Cuántos años tienes ?	How old are you?
09 – Tengo cuatro años	I am four years old
10 – Tengo cinco años	I am five years old

Vocabulary 3b – Numbers

01 – Seis	Six
02 – Siete	Seven
03 – Ocho	Eight
04 – Nueve	Nine
05 – Diez	Ten
06 – Once	Eleven
07 – Doce	Twelve
08 – Trece	Thirteen
09 – Catorce	Fourteen
10 – Quince	Fifteen

SPANISH 3

Vocabulary 4a – Birthdays

01 – Dieciséis	Sixteen
02 – Diecisiete	Seventeen
03 – Dieciocho	Eighteen
04 – Diecinueve	Nineteen
05 – Veinte	Twenty
06 – Veintiuno	Twenty-one
07 – Treinta y uno	Thirty-one
08 – ¿Cuándo es tu cumpleaños?	When is your birthday?
09 – Mi cumpleaños es el uno de enero	My birthday is on the 1 st of January
10 – Mi cumpleaños es el dos de febrero	My birthday is on the 2 nd of February

Vocabulary 4b – Months

01 – Marzo	March
02 – Abril	April
03 – Mayo	May
04 – Junio	June
05 – Julio	July
06 – Agosto	August
07 – Septiembre	September
08 – Octubre	October
09 – Noviembre	November
10 – Diciembre	December

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

SPANISH 4

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)
05 – Tu	Your (singular)
06 – Tus	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

01 – Mi hermana	My sister
02 – Mis hermanos	My siblings / My brothers
03 – Tu perro	Your dog
04 – Sus mascotas	His / Her pets
05 – muy	very
06 – bastante	quite
07 – un poco	a little / a bit
08 – y	and
09 – pero	but
10 – también	also

RE1

Who are the Jews?

A person is Jewish because they are born Jewish. There are approximately 15 million Jews worldwide. King David established Jerusalem as the capital of Israel, with the Jewish temple at the centre. In the UK today there are about 300,000 Jews. The religion goes back 4000 years and was founded by Abraham. Jews who live very strict lives and follow their religious rules as closely as possible are known as Orthodox Jews. Progressive Jews believe that their religion needs to move with the times and that some religious practices need to be reformed in order to fit in with the modern world.

The symbol of Judaism is the Star of David.

- **Abraham** – founder of Judaism
- **Star of David** – symbol of the Jewish faith
- **Progressive Jews** – believe that their religion needs to move with the times and reform the way it does things
- **Orthodox Jews** – choose to live very strict lives and follow their religious rules as closely as possible
- **Monotheism** – believing in one God

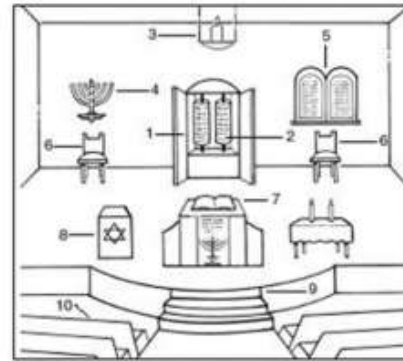
What are the Jewish holy books?

The Torah is the first part of the Jewish bible. It is the central and most important document of Judaism and has been used by Jews through the ages. All Jews believe it contains the words of God. The Torah reminds Jews of the special covenant God made with Abraham. It makes clear that they should only worship this one God. During difficult times in their history, faithful Jews have trusted in God's promises in the Torah and this has given them strength and hope. For example, Jews may look at the account in Exodus about how God rescued the Jews from slavery in Egypt. Orthodox Jews believe that God **dictated** the Torah to Moses on **Mount Sinai 50 days** after their exodus from Egyptian slavery. They believe that the Torah shows how God wants Jews to live. It contains **613 mitzvots (= God-given commandments)** - the ten best known of these as the Ten Commandments. Progressive Jews think the words are from inspired men of God several thousand years ago, not God's actual words.

- **Torah** – the Holy Book of the Jews
- **Hebrew** – the language that the Torah is written in
- **Covenant** – a promise made between God and Abraham – God would give his people a land of their own in return for Abraham and his descendants obeying God's rules
- **Shema** – the most important prayer in Judaism, starting 'Hear, O Israel: The Lord is our God, the Lord is one.'
- **Mezuzah** – a small box that contains a scroll with the words of the Shema written on it - found on the right hand doorpost of each door (except the toilet) in a Jewish home

- **Tefillin** – two black leather boxes with straps to hold them on, worn by some Jews for prayers. They have the words of the Shema inside – and are worn on the forehead and arm as a reminder of God's laws.
- **Tallits** – prayer shawls
- **Tenakh** – the Jewish holy writings, which are Torah, Talmud, Nevi'im and Ketuvim
- **Torah** – the Jewish Books of Law (Genesis, Exodus, Leviticus, Numbers, Deuteronomy)

How do Jews worship in the synagogue?



Label the key features using notes in your booklet

- **Yad** – a pointer that is used to protect the sacred Torah scrolls when reading from them
- **Mantle** – a special cover for the scrolls
- **Ark** – a special cupboard that the scrolls are kept in
- **Sofer** – a highly trained Jewish scribe who hand writes the Torah
- **Mitzvot** – God-given commandments – the Torah has 613 of them, that Orthodox Jews try and follow

How do Jews keep the Shabbat Mitzvot?

In the Torah Jews are told to keep one day a week aside as a holy day. In the fourth commandment, or mitzvah (plural mitzvot), God tells the Jews not to work on the Sabbath. They are to keep this one day holy, as a day of rest dedicated to God.

The Shabbat is kept as a special day to spend time with the family and to worship God. **The Torah lists 39 jobs that cannot be done once Shabbat begins at Friday sunset.** For example, Jews are commanded not to use a hammer, start a fire or bake on the Shabbat. All housework and preparations for Shabbat have to be completed before the sunset. Shabbat is then kept until Saturday sunset.

- **Shabbat** – the holy day that Jews set aside for family time and worship
- **Shabbat Mitzvot** – the Torah lists 39 jobs that mustn't be carried out during Shabbat
- **Challah** – the two loaves of bread that Jewish families have at the Shabbat meal
- **Kiddush** – the prayer spoken by a Jewish mother at the start of Shabbat (just before sunset on Friday) – two candles are lit
- **Havdalah** – the prayer that ends Shabbat at sunset on Saturday – a plaited candle is lit

RE2

How do Jews keep kosher?

1. A Jewish butcher must slaughter an animal using the kosher method, by cutting the animal's throat. It must not be an animal that has died naturally or been killed by another animal.
2. Meat and dairy products cannot be eaten in the same meal, because the Torah states three times **not to 'boil a kid in its mother's milk'**.
3. Blood must be removed from all meat, because the life of the animal is contained in the blood.
4. Any fish with fins and scales is allowed but shellfish and eels are not.
5. Only meat from permitted animals can be eaten – **any animal that has cloven hoofs and chews its cud**. Pigs are forbidden.

What happens when Jews are born?

In order to fulfil the covenant with God that was first made by Abraham, Jewish boys are circumcised eight days after their birth. This is known as the **Brit Milah**, which means 'the covenant of the cutting'.

Circumcision is a small operation to remove the flap of skin at the end of the penis. This can be done by a doctor or by a **mohel**. A mohel is a Jew who is specially trained in Jewish circumcision.

- **Circumcision** – a small operation to remove the flap of skin at the end of the penis
- **Brit Milah** - 'the covenant of the cutting' in which baby boys are circumcised at 8 days
- **Mohel** – a Jew who is specially trained in circumcision

How do Jews celebrate Bat or Bar Mitzvah?

In Judaism boys and girls have separate ceremonies to mark the age at which they are considered old enough to take on their religious and moral responsibilities for themselves. Up until this time the parents are expected to make sure that their children perform their religious duties, for example attending the synagogue.

- A boy will go through his ceremony, when he becomes Bar Mitzvah, at the age of thirteen. Bar Mitzvah means 'son of the commandment.'
- Girls are believed to mature earlier than boys and so they take on their religious responsibilities at the age of twelve. The girls become Bat Mitzvah and this means 'daughter of the commandment'.
- In Progressive synagogues Bar and Bat Mitzvah ceremonies are the same. In an Orthodox synagogue Bar Mitzvah is usually held on the first Shabbat after a boy's thirteenth birthday, and he will read a portion from the Torah. The Bat Mitzvah is usually on a Sunday and, in a Progressive synagogue, the girl will read from the Torah during the service.
- **Bar Mitzvah** – son of the commandment
- **Bat Mitzvah** – daughter of the commandment
- **Kippah** – a small cap used to cover the head

What festivals do Jews celebrate?

Rosh Hashanah is the Jewish New Year celebration. The festival celebrates God's creation of the world and the end of the world when the Day of Judgement will come. It takes place in late September or early October each year. The Jewish calendar starts 3761 years before the Christian calendar. So 2017 is 5778. It is a time for fresh starts. Jews spend ten days reflecting on what they have done wrong and repenting. Jews also accept apologies from each other and end any bad grudges that are being held. Jews hope that God will forgive them during this time. During Rosh Hashanah the **shofar** (a ram's horn) is sounded in the synagogue. It has a deep and solemn sound and it reminds Jews that God is almighty and that they must listen to him.

- **Seder** – the Passover meal
- **Shofar** – the horn blown in the synagogue at Rosh Hashanah
- **Purim** – a jolly festival that celebrates the rescue of Jews from destruction
- **Rosh Hashanah** – the Jewish New Year celebration
- **Pesach** – the festival of Passover
- **Hagadah** – the booklet that helps everyone know what is going on during Pesach
- **Prophet Elijah** – an extra glass of wine is left for him at the Pesach table to show belief that he will one day return from Heaven and announce the Jewish saviour



THE FOUR QUESTIONS ASKED AT PASSOVER

1. On all other nights we eat bread or matza, while on this night we eat only matza.
2. On all other nights we eat all kinds of vegetables and herbs, but on this night we have to eat bitter herbs.
3. On all other nights we don't dip our vegetables in salt water, but on this night we dip them twice.
4. On all other nights we eat while sitting upright, but on this night we eat reclining.

What is the history of Judaism?

Judaism came from God's promise to Abraham that his descendants would become the holy nation of Israel. Through Abraham's son Isaac, the prophet and leader of the Jewish people, Moses, was born. The Jews were to be holy, to serve God and follow his commands. Jews believe that God brought them through many troubled times, including freeing them from Egypt. God promised the Jews a land of their own; this land was to be Israel, and at its centre was the holy city of **Jerusalem**.

Jerusalem

The Jewish nation became strong and was led by many kings, including Solomon, who was the first to build the Temple in Jerusalem for God. The Temple was the focus for all Jewish worship and it was a reminder of God's presence among them. However, in 586BCE the Temple was destroyed by the Babylonians and many Jews were taken into exile in Babylon (present-day Iraq). In 538BCE work on rebuilding the Temple began and many Jews returned from exile. The Jews who chose not to return were the start of the **Diaspora**. Eventually in 63BCE the Romans took over Jerusalem and the influence of the Jews was weakened. Over time the Jews became more spread out and the Temple became less of a focus for worship; many synagogues had been set up. After Jesus' birth, life and death some Jews believed he rose from the dead and was the **Messiah**. 'Messiah' is the word used to describe the person who Jews believed God was going to send to save them and lead them. Those who followed Jesus as the Messiah later became known as Christians.

In 70CE and again in 132CE the Jews revolted against the Romans. Both times the Temple was destroyed. The Temple has never been rebuilt; all that remains is the Wailing Wall.

After the second revolt the Jews were banned from Jerusalem by the Romans and many were killed. Jews became scattered throughout the Middle East and across Europe. For many years the Jews faced terrible treatment because they had a different set of religious beliefs and practices. This can be seen most terribly through the events of the Holocaust.

After the Second World War many countries agreed that the Jews should be given a land of their own. In 1948 the official State of Israel was established in the land known as Palestine. Many Jews believe this to be the land God promised to Abraham thousands of years before. Not everyone was happy with this: Arabs had been living in Palestine for several thousand years and they did not want to give their land over to the Jews.

RE3

This has caused ongoing conflict between Jews and Palestinians and the problem still has not been solved.

What do Jews believe about God?

God's name is considered absolutely holy by Jews.

- Jews say God (it is not a name) but write G_d.
- YHWH is the name of God used in the Tenakh. It is usually pronounced Yahweh. This name means 'I am'. This is a reminder that to the Jews that God is **eternal**, and it is he who creates all living things. Jews do not say the name Yahweh, but replace it with Adonai (Lord) in speech and LORD (upper case letters) when written.
- Much of God's character is also revealed by the titles that he is given throughout the books of the Tenakh (see table).

Who was Abraham?

This is the story of **Abraham** as told in the Torah. Abraham was originally called Abram. He lived in Ur, which is now part of Iraq, before travelling to Haran with his family. His father was called Terah.

At this time people believed in many gods. This is known as **polytheism**. Abram's father sold **idols** too (sculptures of gods). In the **Midrash** there are stories about Abraham smashing his father's idols when he realises there can be only one God of heaven and earth. It is this one God whom Abram begins to worship.

This is the start of Judaism as a monotheistic religion.

God calls Abram to leave his home and follow him. In Genesis 12, God promises Abram that he will be his God, that Abram will have many descendants and that he will deliver God and his people into a promised land. God promised to set apart the Hebrews as his chosen people. This is the start of the **covenant** between God and the Jewish people.

How do Jews decide how they should live their lives?

A **halakhic** life means a life of walking with God. This is the kind of life Jews seek to live. Walking with God means following his ways and obeying his commands so that in all they do Jews are aiming to behave as God wants them to. The main guidance for living is found in the ten statements, given to God by Moses and in the 613 mitzvot. These commands are there to guide Jews in their journey through life and to help them walk with God. Generally, Jews follow the law of the country that they are living in. If they have concerns about a matter, for example, Jewish divorce or food rules, they can go to a Bet Din. The Bet Din is a special Jewish court made up of three rabbis. The only country in the world that is governed by Jewish law code, the Halakhah (= Jewish law), is Israel.

ADDITIONAL NOTES:

