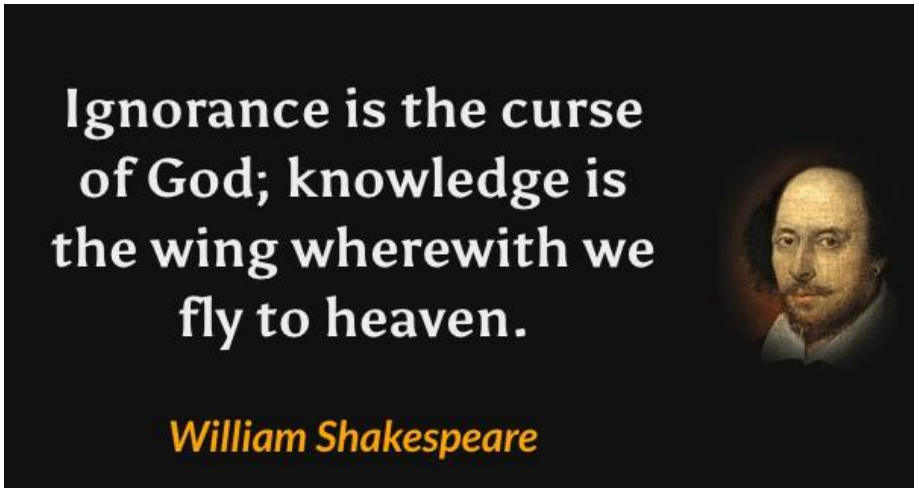
Dorset Studio School
LAND & ENVIRONMENT

7

Knowledge Organiser Booklet

Year 7 Spring Half Term 1



Name:_____ Teaching groups:____

Contents

Education Endowment Foundation

+5 months

Research carried out by the Education Endowment Foundation proved that: Homework has a positive impact on average of + 5 months, particularly with pupils in secondary schools.

Home learning timetable

The table below details which days each subject will set home learning on each week. Students will have one week to complete home learning tasks for each subject.

	Monday	Tuesday	Wednesday	Thursday	Friday
All students			Maths	Science Reading +	English Music
7K	Art	Humanities			
7M	Humanities		Art		
7C	Humanities	Art			
Land & Environment		7E	7N		7W

These knowledge organisers have been created by your teachers to support your learning both in class and for home learning. They are also a valuable revision tool for you to use independently when preparing for assessments. It is important that you make good use of your knowledge organisers by learning how to use them in different ways.

How to use a knowledge organiser – step by step guide

	Look, Cover, Write, Check	Definitions of Key Words	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
Step 1	Look at and study a specific area of your KO. 	Write down the key words and definitions. 	Use your KO to condense and write down key facts or information onto flash cards. 	Use your KO to create a mini quiz. Write down your questions using your KO. 	Create a mind map with all the information you can remember from your KO. 	Ask a friend or family member to have the KO or flash cards in their hands. 
Step 2	Cover or flip the KO over and write down everything you can remember. 	Try not to use your KO to help you. 	Add pictures to help support. Then self-quiz using the flash cards. You could write questions on one side, and answers on the other! 	Answer the questions and remember to use full sentences. 	Check your KO to see if there are any mistakes on your mind map. 	They can test you by asking you questions on different sections of your KO. 
Step 3	Check what you have written down. Correct any mistakes in green pen and add anything you have missed. Repeat. 	Use your green pen to check your work. 	Ask a friend or family member to quiz you on the knowledge. 	Ask a friend or family member to quiz you using the questions. 	Try to make connections, linking the information together. 	Write down your answers, 

3.1 – Poetic Devices

	Key Methods	Meaning
1	Personification	*Giving human qualities to non-human things.*
2	Onomatopoeia	*Words that represent the sound that they describe e.g.: hiss.*
3	Emphasis	*Making something stand out or seem more important.*
4	Tone	The mood or feeling of the poem.
5	Imagery	*Descriptive language that creates pictures or appeals to the senses.*
6	Contrast	Placing opposite ideas or words next to each other for effect.
7	Metaphor	Comparing one thing to another by saying it is something else.
8	Alliteration	Repeating the same consonant sound at the beginning of words.
9	Simile	Comparing things using like or as.
10	Theme	The main idea or message the poet is trying to convey.
11	Enjambment	When a line runs on to the next without punctuation.
12	Rhyme	Words that sound the same, often at the end of lines.

3.2 – Poetic Forms

1. **Ballad** – Story poems. Often these are structure in 4-line stanzas.
Examples: Ballad of Reading Gaol (Wilde); Ballad of Lefty and Ned (Wilson)

2. **Epic** – Tragic/heroic story poems. These are frequently longer form poems telling narratives over a period of several years from on perspective.
Examples: The Iliad (Homer); Rime of the Ancient Mariner (Coleridge)

3. **Haiku** – 3 lines, syllables 5/7/5. Frequently, these poems are about the subject of nature and its relationship with human beings.
Examples: The Old Pond (Bashō); The Light of a Candle (Buson)

4. **Ode** – Lyrical poem often addressed to one person and based on a powerful (often unrequited) love
Examples: Ode to a Grecian Urn (Keats); Ode to the West Wind (Shelley)

5. **Sonnet** – 14-lined love poem with a rigorous structure and ending in a rhyming couplet. Sonnets are often about love or hate.
Examples: Ozymandias (Shelley); Sonnet 43 (Elizabeth Barrett Browning)

6. **Elegy** - A sad or thoughtful poem, usually about death or loss.
Examples: On My First Sonne (Jonson); In Memoriam (Tennyson)

7. **Dramatic Monologue** –A poem where a single speaker talks to the reader or another character, revealing their thoughts, feelings, or personality (often this is an adopted character – not the poet)
Examples: My Last Duchess (Browning); The Runaway Slave at Pilgrim's Point (Elizabeth Barrett Browning; Medusa (Duffy)

3.3 – Poetic Structure

1. **Stanza** - A group of lines in a poem, like a paragraph.
2. **Line Length** – The length of each line within the poem's structure.
3. **Rhyme Scheme** - The pattern of the lines that rhyme in a poem.
4. **Enjambment** - When a line runs on to the next without punctuation.
5. **Repetition** - When words, phrases, or lines are repeated for emphasis or effect.
6. **Caesura** - A pause or break in the middle of a line, often shown by punctuation like a comma or dash.
7. **Volta** - A turning point or shift in a poem's meaning or mood.
8. **Free Verse** - Poetry that doesn't have a regular rhyme or rhythm.
9. **Rhythm** - The beat or pattern of sounds in a poem.
10. **Rhyming Couplet** - Two lines next to each other that rhyme.

3.4 – Analytical (Essay) Writing About Poetry

Point • What is your paragraph going to be about? • Top tip: Finish your point with an adjective. *E.g., 'The speaker is presented as nervous'*	'The speaker is presented as…' 'In the poem, the poet…' 'The poet is trying to present the idea that…'
Evidence • Use the exact words from the poem • Make sure your quotes are short	'For example…' 'This is indicated in the quotation…' 'The use of…'
Explanation • What is the effect of the words on the reader? How does it make them feel? • What are the connotations of the words?	'This implies…' 'This suggests…' 'This shows…'
Link Link your comments back to the essay topic/title or to the CONTEXT surrounding the poem.	'This attitude was common in the Victorian era, since…' 'Elizabethans believed…'

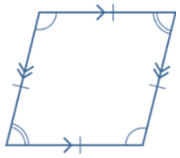
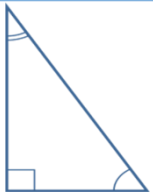
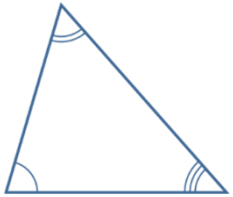
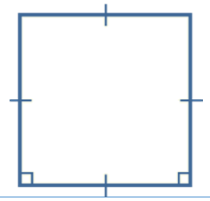
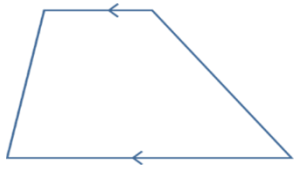
3.5 – Words Describing Tone in Poetry

Here are some words to describe the tone of a poem. The tone is the feeling or attitude created by the poet's choice of words.

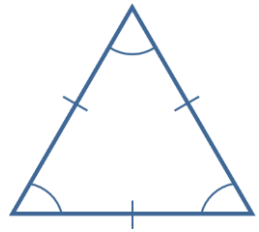
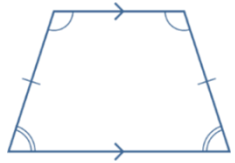
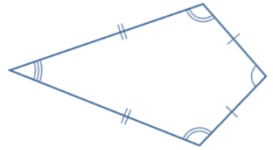
1. **Joyful:** Cheerful, uplifting, playful, hopeful, excited.
2. **Sad:** Melancholic, sorrowful, mournful, gloomy, despairing.
3. **Angry:** Bitter, furious, frustrated, aggressive, vengeful.
4. **Peaceful:** Calm, serene, gentle, soothing, tranquil.
5. **Ominous:** Threatening, eerie, dark, sinister, foreboding.
6. **Reflective:** Thoughtful, nostalgic, contemplative, regretful, introspective.
7. **Powerful:** Commanding, forceful, assertive, authoritative, bold.
8. **Lonely:** Isolated, abandoned, neglected, solitary, desolate.

"Poetry is the rhythmical creation of beauty in words." **– Edgar Allan Poe**

Year 7 Maths: 2D Shapes

Key Term	Definition	Diagram
Rectangle	A quadrilateral with two pairs of parallel sides and opposite sides of equal length.	
Rhombus	A quadrilateral with four equal sides and two pairs of parallel sides.	
Right-angled Triangle	A triangle, one of whose angles is 90°.	
Scalene Triangle	A triangle, having all sides unequal.	
Square	A regular quadrilateral, having four equal sides and angles.	
Trapezium	A quadrilateral with one pair of parallel sides.	

Year 7 Maths: Spring 1

Key Term	Definition	Diagram
Equilateral Triangle	A triangle with all sides the same length and angles of 60^0.	
Isosceles Triangle	A triangle with two sides and two base angles of equal size.	
Isosceles Trapezium	A trapezium with two sides of equal length and 2 pairs of equal angles.	
Kite	A quadrilateral with two pairs of equal sides and adjacent sides equal.	
Parallelogram	A quadrilateral with two pairs of parallel sides and opposite sides equal.	

Year 7 Maths: Perimeter and Area

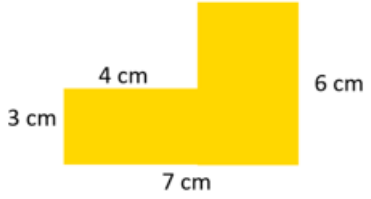
Year 7 Maths: Spring 1

Key Term	Definition
Area	A measure of the space inside a closed two-dimensional shape.
Centimetre (cm)	A metric unit of length equal to one hundredth of a metre. 100cm = 1m
Compound Shape	A shape made up of two or more geometric shapes.
Irregular Polygon	A polygon with unequal length sides and angles.
Line of Symmetry	A line that can divide a shape into identical halves, which are mirror images of each other.
Metre (m)	The base unit of length in the international system of units.
Millimetre (mm)	A metric unit of length equal to one thousandth of a metre. 10mm = 1cm
Order of Rotation	The number of times that a shape appears identical during a turn of 360°.
Parallel	Two lines that will never cross and that will remain the same distance apart.

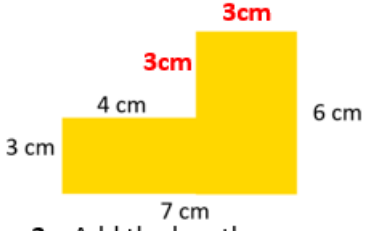
Key term	Definition
Perpendicular	Two lines that meet at an angle of 90°.
Perimeter	The total distance around the outside of a closed two-dimensional shape.
Polygon	A closed two-dimensional shape made up of all straight edges.
Quadrilateral	A two-dimensional shape with four sides.
Regular Polygon	A polygon with sides of equal length and angles of equal size.
Right-angle	A 90° angle.
Rotational Symmetry	A symmetry in which a shape may be rotated about a central point and appears identical after a turn of less than 360°.
Square Units	Units used to measure area.
Triangle	A two-dimensional shape with three sides.

Perimeter Example

Find the perimeter



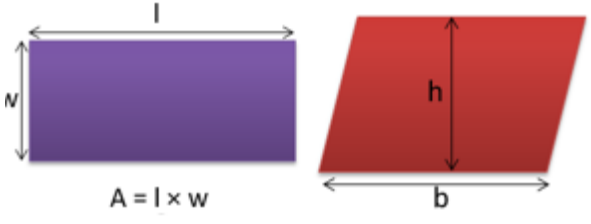
Step 1 – Find the missing lengths.

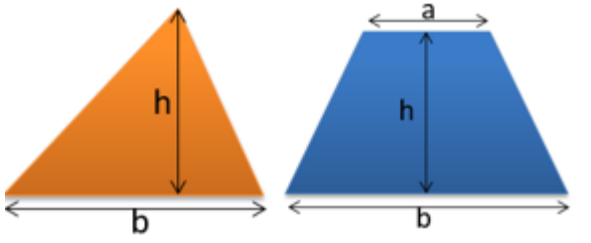


Step 2 – Add the lengths

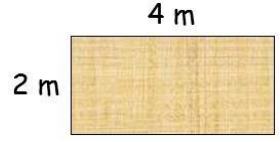
3 + 4 + 3 + 3 + 6 + 7 = **26 cm**

Key Formula - Area

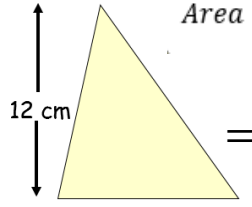




Area Example

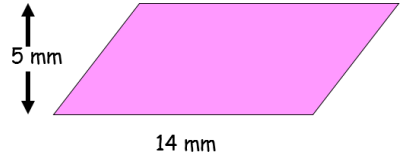


$$Area = 2 \times 4 = 8m^2$$

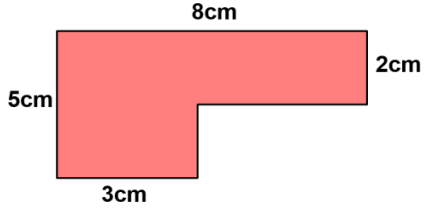


$$Area = \frac{1}{2}(10 \times 12)$$

$$= 60cm^2$$



$$Area = 5 \times 14$$
$$= 70mm^2$$



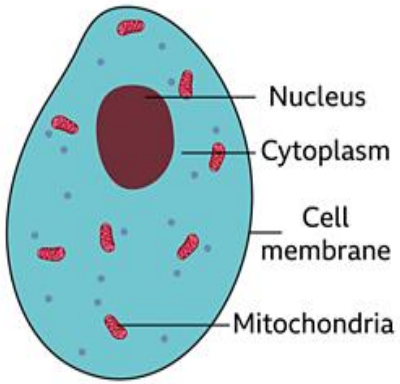
$$Area = (5 \times 3) + (2 \times 5)$$
$$= 25cm^2$$

Health is the state of physical, mental and social well-being.

Three main types of health:
1. Physical health
2. Mental health
3. Social health

Symptoms of dehydration
Poor concentration
Lack of energy
Dark yellow coloured urine

Learn the parts of the animal cell.



The role of different organs in the body

Kidneys – filters blood to remove waste products urine.
Small intestine – absorb nutrients into the blood stream.
Muscles – allow movement by contracting and relaxing.

What does the body use water for?

Major component of blood.
Temperature regulation.
Chemical reactions.
Removing waste from the body.

A **hazard** is something that can cause harm.
A **risk** is a chance that a hazard will cause anybody harm.
Hazard symbols give information about chemicals and materials.

What are the main food groups used for?

Carbohydrates are the main source of energy.

Protein is used for growth and repair.

Fats are an energy store and important for cell growth.

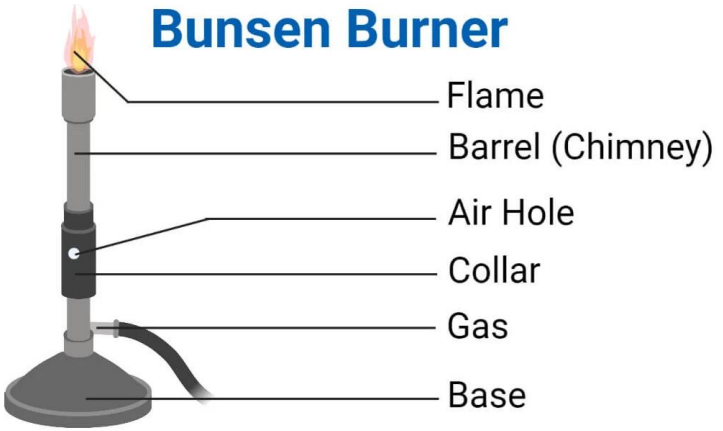
Fruit and vegetables provide vitamins, minerals and fibres.

Is the symbol for **corrosive** chemicals which can chemically burn skin.

Is the symbol for **harmful the environment** therefore disposed of carefully.

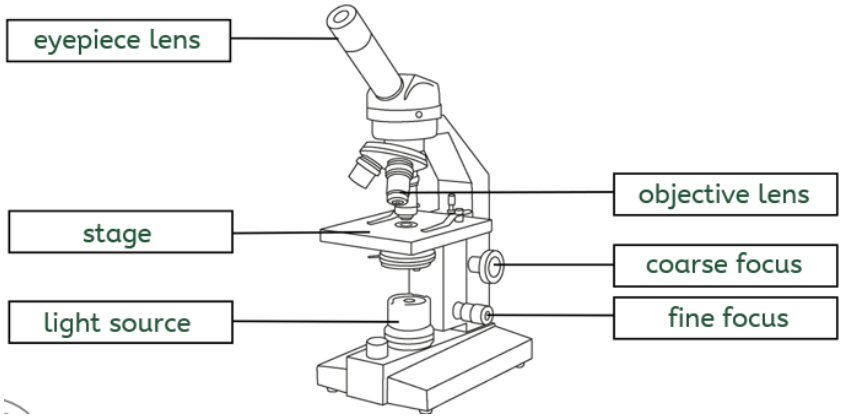
Learn the steps involved in lighting a Bunsen burner:

1. Place Bunsen burner on a heat-resistant mat.
2. Check the collar has closed the air hole.
3. Hold a lit splint above the chimney.
4. Ask your partner to turn the gas tap on.



Learn the steps needed to use the microscope:

1. Place the slide on the stage.
2. Select the lowest magnification objective lens.
3. Put the stage as close to the objective lens as possible without touching the slide.
4. Look down the eyepiece lens.
5. Turn the focus to move the slide AWAY from the lens.



Learn the equation for **respiration**.

Glucose + oxygen → carbon dioxide + water

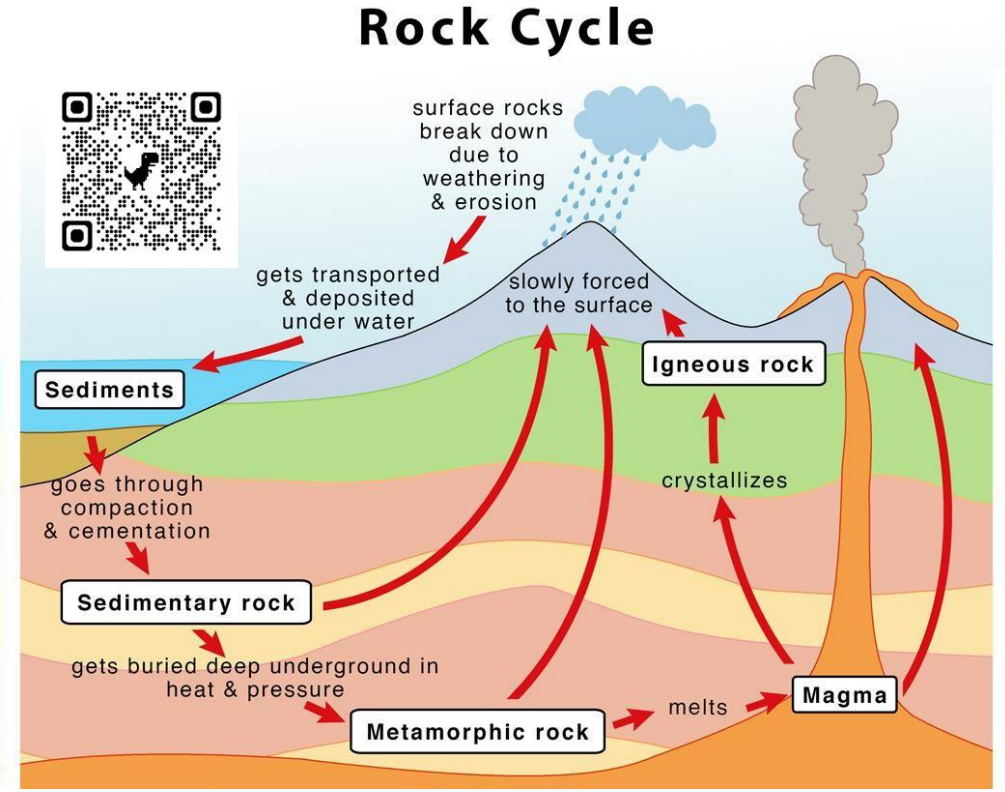
Energy is **released** during respiration which takes place in the mitochondria of all living cells.

Uses for energy in the body:

Keeping warm
Muscle contracting
Chemical reactions such as digestion
Growth and repair of tissues e.g. muscles

3.1 KEY TERMS	
3.1.1. Landscape	The visible features of an area of land.
3.1.2. Uplands	Land that is hilly or mountainous.
3.1.3. Foreground	The part of the view that is at the front.
3.1.4. Land use	What land is used for e.g. farming or industry.
3.1.5. Physical Layer	Where rock type (geology), geology and landscape processes have created a physical landscape.
3.1.6. Biological Layer	The layer that includes soil, plants and trees.
3.1.7. Human Layer	This includes settlements, communications, industry and farming.

3.2 Landscape processes	
3.2.1. Geology	The study of the rocks beneath our feet
3.2.2. Rock cycle	When one type of rock changes into another type of rock
3.2.3. Igneous	A type of rock formed on the earths surface (during volcanic eruptions) or deep underground by the cooling of molten lava
3.2.4. Sedimentary	A type of rock formed by the deposition of sediment e.g. sandstone.
3.2.5. Metamorphic	A type of rock that has undergone change due to intense heat and/or pressure e.g. slate.
3.2.6. Transportation	The movement of material from one place to another.
3.2.7. Deposition	Leaving or depositing transported material.



The Rock Cycle

Long Profile of River Severn

Compare intensive farming landscape to re-wilded one

Topic Tent Posts: Rewilding land once used for intensive farming

Key Vocabulary

- Intensive farming
- Landscape
- Rewilding
- Monocrops
- Global Goal 15

Habitat

Pre-wilded Woodbury Farm

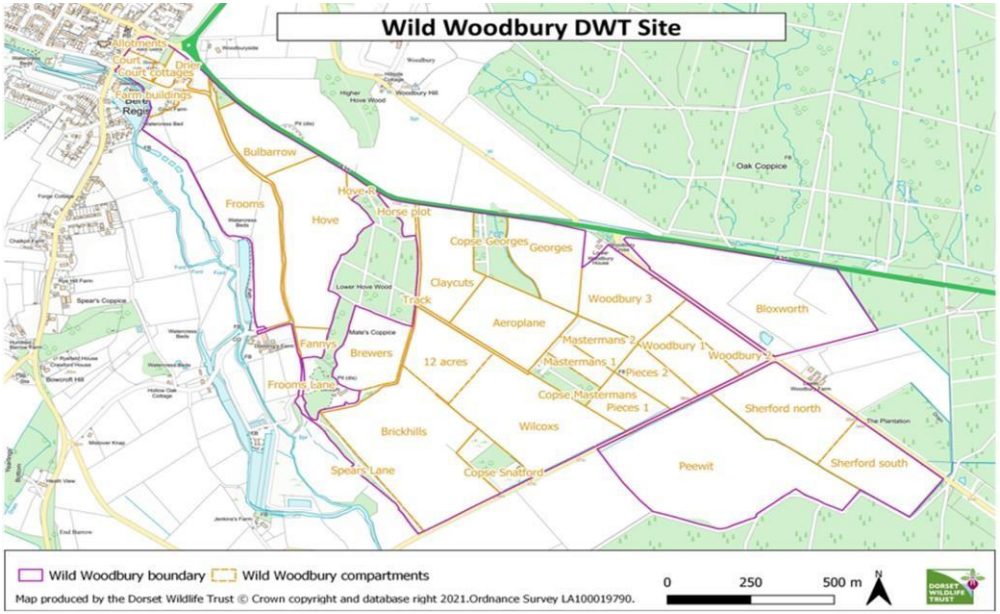
- Was used for grazing veal calves until they go to market weight
- To grow feed for the veal calves
- It needed expensive fertilizer
- Paid for by the BPS (Basic Payment Scheme) UK Government funded through it's farming department DEFRA.
- It was this funding alone that made it work.

Re-wilded Woodbury

- The plants and animals that live in **wetlands** are specially adapted for semi-aquatic conditions and are therefore entirely dependant on the continuation of these habitats for their survival.
- Exmoor PoniesGrazing animals eat selectively and often choose more dominant plant species
- This allows competitive plants to thrive.
- Wildflowers encourage insects, which are eaten by birds and mammals. Increasing biodiversity.
- The cattle and ponies decide for themselves where to concentrate their grazing efforts creating a mosaic of different heights of vegetation and micro-habitats.

Mission

To tackle the ecological and climate crises, Dorset Wildlife Trust acquired 170 hectares (170ha) of land near Bere Regis for a large-scale rewilding project.



Challenges and pressure

Local farmers object to air borne spread of weeds such as thistle.

Solutions

Rewilding

Storing carbon

New wildlife habitats

Rewetting

Cleaning water

New wetland habitats

LANDSCAPES

Painting: Watercolour, blending, wet wash

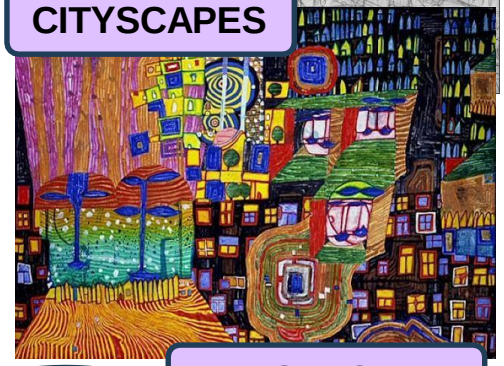
ABSTRACT

Printing: Line, shape, composition, polyprinting

COLOUR

Oil pastel: Blending, directional lines, tone, texture

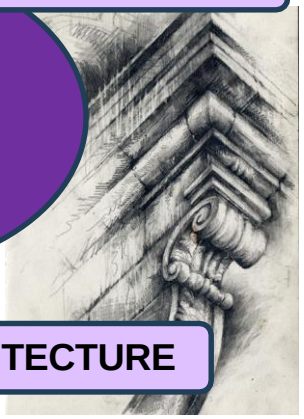
CITYSCAPES



PERSPECTIVE

Drawing: Pencil,charcoal, fineliner, cross-hatching

ARCHITECTURE



Key vocabulary
Abstract
Blending
Contrast
Line
Pattern
Cross-hatching
Mixed media
Proportion
Composition
One point perspective
Architecture
Neo-Impressionist
Polyprinting

Artists we will study: Wassily Kandinsky, Paul Klee, Friedensreich Huntertwasser, Henri Rousseau, Ian Murphy, Nathan Walsh

1. The Musical Elements are the basic building blocks of all music

Melody			**Melody** is The tune; high and low **pitch** notes
Articulation			**Articulation** Is The way a note is played; **staccato** (short) or **legato** (smooth)
Dynamics			**Dynamics** are how loud or quiet the music is
Texture			**Texture** is how thick or thin the music is (how many instruments are playing)
Structure			**Structure** is the building blocks of music (How it is put together)
Harmony			**Harmony** is the effect of two or more notes sounding simultaneously; **chords**, **bass line**
Instrument/ timbre			**Timbre** is the specific sound an instrument makes
Rhythm			**Rhythm** is the pattern of long and short notes. **Duration** is how long or short the note is
Tempo			**Tempo** is how fast or slow the music is played

2. Keywords

Conductor	Person who stands at the front of the orchestra and directs it. They indicate the main beats in the music using a baton (a 'stick' that they hold and beat time with).
Orchestra	A large ensemble (group of musicians) divided into four sections - Strings, Woodwind, Brass and Percussion

3. String section

- Violin
- Viola
- Cello
- Double Bass
- Harp

4. Woodwind section

- Piccolo
- Flute
- Clarinet
- Oboe
- Bassoon

5. Brass section

- Trumpet
- French Horn
- Trombone
- Tuba

6. Percussion section

4.1 Tuned Percussion (Can play different pitches)


Timpani


Piano


Xylophone


Glockenspiel

4.2 Untuned Percussion (Can only play one pitch)


Cymbals


Bass Drum


Snare Drum


Guiro


Woodblock


Tambourine


Triangle


Maracas

The French fashion industry is important to France's economy and culture in many ways, it accounts for 3.1% of GDP and Paris is said to be the capital of fashion. Paris has a fashion week once a year in Autumn. Famous French designers include: Christian Dior, Jean-Paul Gautier, Yves Saint Laurent and Chanel

Je porte = I wear

Je préfère porter = I prefer to wear

Je n'aime pas = I don't like

J'adore = I love

C'est à la mode = it's in fashion

Ce n'est pas à la mode = it's not in fashion

Pour aller au collège... = to go to school

Pour sortir avec mes amis = to go out with friends

Pour travailler = for work

LES VETEMENTS


Un polo


Un tee-shirt


Un sweat


Un jean


Des chaussures


Un pull


Une chemise


Des chaussettes


Un pantalon


Une jupe


Des baskets


Un blouson

What is Eco Fashion?

Eco-fashion, also known as sustainable fashion, is a social and cultural movement that aims to reduce the environmental impact of the fashion industry.

Ethical and responsibly sourced fashion is produced in a way that is socially and environmentally responsible. It focuses on fair, healthy working conditions, and a fair living wage. It also considers the materials used, the dyes and finishes, and the company's policies and track record.

Why do we use Spreadsheets?

- Spreadsheets are used to store information and data.
- Once we have our information in a spreadsheet we can run powerful calculations, make graphs and charts and analyse patterns/trends.
- Charts/Graphs can be used to clearly display the information in a spreadsheet
- How to use spreadsheets. Use this QR code to learn and test yourself on the BBC Bitesize website www.bbc.co.uk/bitesize/guides/zdydmp3/revision/1

Google Sheets

How spreadsheets work – what software do we need?

- At Dorset Studio School, we use Google Sheets. This works with our Chromebooks and is linked with our Google Drive.
- The other popular software for creating and editing spreadsheets is Microsoft Excel. Most PCs use Microsoft Excel.

What can spreadsheets be used for?

- Spreadsheets are used by many businesses around the world. Some examples:
- Budget tracker e.g. working out the costs for a school prom
- Stock tracking of a business such as a market stall selling fruit and vegetables (see example image on the right)
- A teacher may also use it to keep a record of grades.

File Edit View Insert Format Tools Data Window Help

	A	B	C	D	E
1	Produce	Unit	Number sold	Price	Sales
2	Apples	kg	7	£0.70	£4.90
3	Potatoes	25kg	8	£6.00	£48.00
4	Oranges	kg	6	£0.90	£5.40
5	Carrots	25kg	8	£8.50	£68.00
6	Sprouts	kg	4	£1.40	£5.60
7	Cabbage	kg	6	£0.70	£4.20
8	Onions	kg	9	£0.56	£5.04
9				Total	£141.14

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Formulas	Functions
Formulas and functions are extremely useful features. They make automatic calculations that update when the data changes.	

• Formulas are usually simple calculations, e.g. adding two or more numbers together.
• They always start with an equals sign (=).
• There are a number of symbols used in formulas or calculations.
• These are the most common ones:
  ○ '+' add
  ○ '-' subtract
  ○ '*' multiply
  ○ '/' divide
	• Functions make more complex calculations.
	• Like formulas, all functions start with an equals sign (=) followed by the function's name, e.g. =SUM, =MIN, =MAX, etc.
	• Simple and regularly used functions include:
	  ○ SUM – adds values in selected cells
	  ○ MIN – finds smallest value
	  ○ MAX – finds largest value
	  ○ AVERAGE – finds the average value
	  ○ COUNT – counts how many of the selected cells have numbers in them

Spreadsheets Key words	
Axis labels on charts	A label for a chart or graph's horizontal or vertical axis that explains what the value relates to.
Cell	An individual spreadsheet box where you enter data.
Cell reference	Names of individual cells (B3 for example).
Column	Cells that go down the spreadsheet page.
Computer model	Predicts and investigates how real-life devices might behave in different situations.
Data	Values, typically letters or numbers.
Formatting cells	The appearance of a document, including the fonts, colours, size and rotation.
Formula	Makes automatic calculations that update when the data does.
Function	Makes more complex calculations.
Row	Cells that go across the spreadsheet page.
Sort / Filter	Sorting data organises it alphabetically or numerically. Filtering data makes it easy for us to find a piece of data.