

Year 5

2023-24

Knowledge Organisers

Spring 1

Year 5: Exploring the associations between music, sounds and colour

Musical feature: Composition

In this unit we compose our own musical composition to represent Holi, the Hindu festival of colour, which celebrates the beginning of spring and the triumph of good over evil.

Holi celebrations include people throwing and smearing each other with vibrant, multi-coloured paints and powders.



Vocabulary

Graphic score

A way of writing down music on the page without using traditional stave notation, using symbols and images to represent the music.

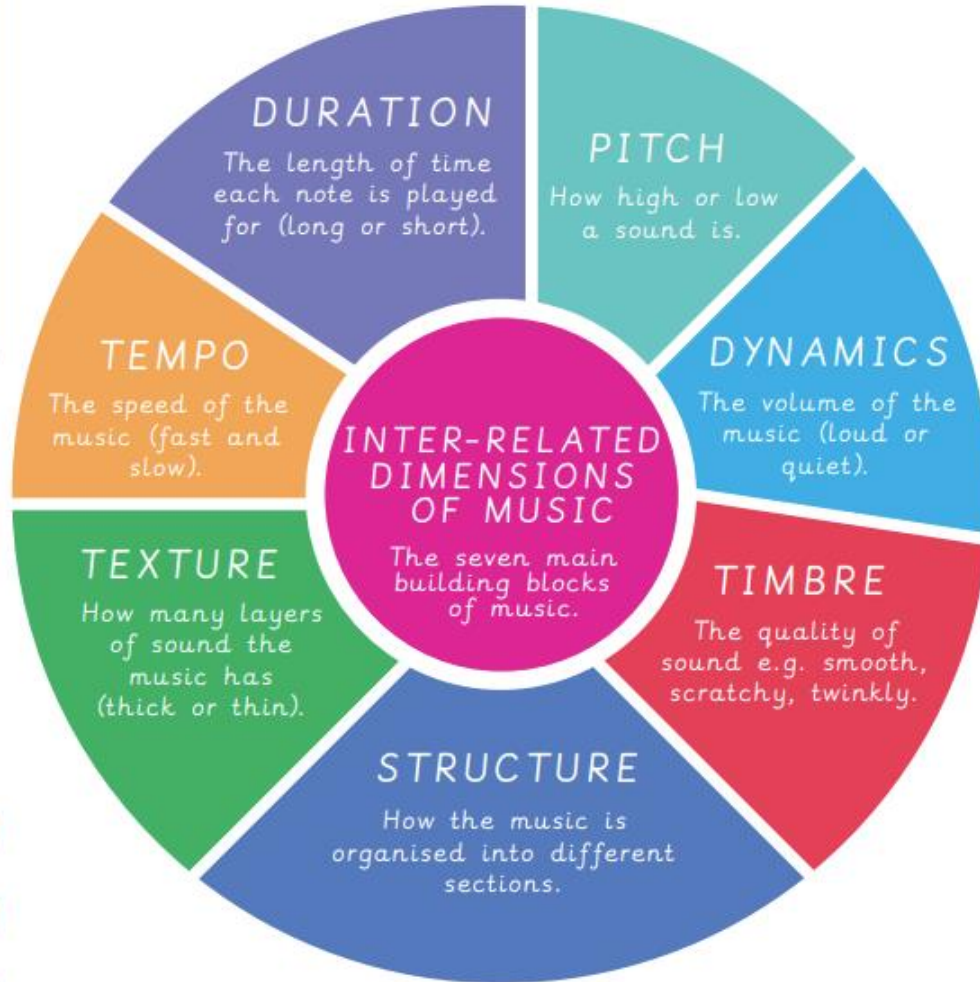


**Synaesthesia** A condition where you 'see' music as colours.

**Major** A tonality where the music sounds happy or bright.

**Minor** A tonality where the music sounds sad or tense.

**Layering** An overlapping of different music or instruments to create a 'thick' texture in a musical piece.



## Disciplines: Painting, Drawing, Sketchbooks

### I Can...

- I have seen how artists respond to land and city scapes in various ways by using inventive mixed media combinations.
- I have seen how artists work outside amongst the land and city scapes which inspire them, and how they use all their senses to capture the spirit of the place. I have been able to share my response to their work.
- I can extend my sketchbook thinking creatively about how I can change the pages giving myself different sizes and shapes of paper to work on.
- I can use my sketchbook to explore and experiment. I have taken creative risks and been able to reflect upon what worked and what didn't work.
- I have continued my exploratory work outside the sketchbooks, bringing my "sketchbook way of thinking" to larger sheets of paper.
- I can share my journey and discoveries with others and am able to reflect upon what I have learnt.
- I can appreciate and be inspired by the work of my classmates, and I can share my response to their work.

### Vocabulary:

Landscape, Cityscape, Working from Life, Mixed Media, Senses, Spirit, Energy, Capture, Composition, Format, Present, Share, Reflect, Respond, Articulate, Feedback, Crit, Similarities, Differences

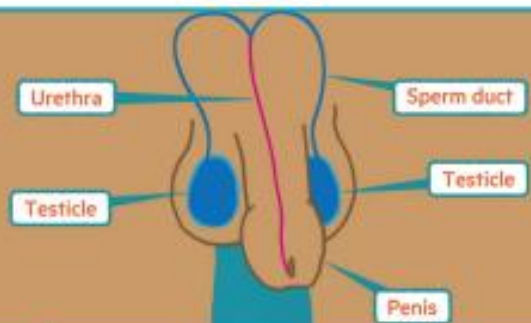




## Year 5 - Safety and the changing body

### Genitals

The external sex organs. The word genitals is used for both males and females.



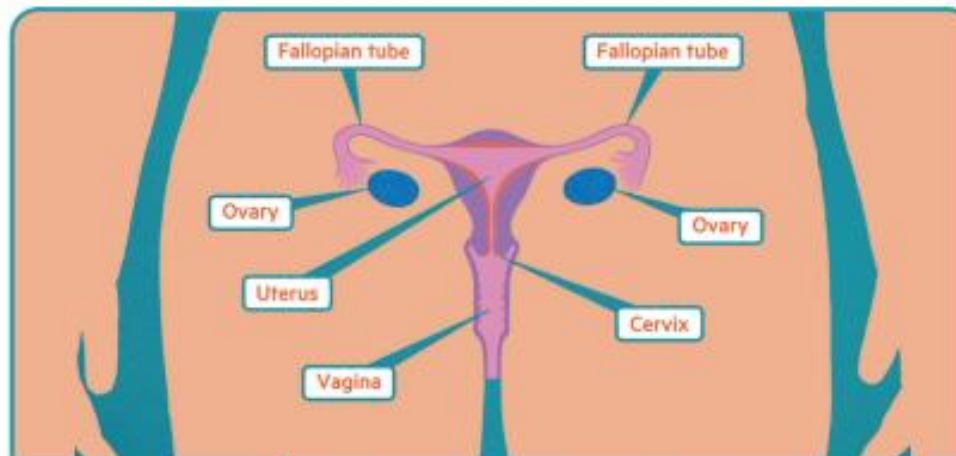
Erection	When a male's penis becomes hard and upright.
Ejaculation	When the penis becomes erect and sperm come out of the body.
Penis	The male external sex organ.
Scrotum	The pouch which hangs behind the male's penis and contain the testes.
Sperm duct	The tube sperm travels through.
Testicles / testes	Produce sperm and male sex hormones.
Wet dreams	Ejaculation which happens when a boy is asleep.

### Key concepts

We might not know people we meet online as well as those we have met in person. So we need to be careful with the information that we share with them.



Our feelings and emotions also change during puberty.



Breasts	Enlarged soft parts of a female's chest which produce milk for a baby.
Menstruation / period	The shedding of the womb/uterus lining each month which causes bleeding.
Ovary / ovaries	On each side of the womb and release eggs each month.
Vagina	The tube inside a female which connects the womb to the outside.
Fallopian tube	The tube which connects the ovaries to the womb/uterus.
Labia	The folds of skin on the external female genitals (vulva).
Nipples	On the chest of males and the breasts of females. In females, a baby can suck milk from the nipple.
Uterus / womb	The place in a female where a baby grows during pregnancy.
Vulva	The external female sex organs.



**THINK**

Before sending online messages,  
remember:

- T - Is it true?
- H - Is it helpful?
- I - Is it inspiring?
- N - Is it necessary?
- K - Is it kind?

**Kapow**  
Primary

## Getting help

In an emergency,  
call **111** or **999**.

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If you are worried about  
something, talk to an  
adult you trust.

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Contact: Childline  
[www.childline.org](http://www.childline.org) | 0800 1111  
Calls **do not** show on the phone bill

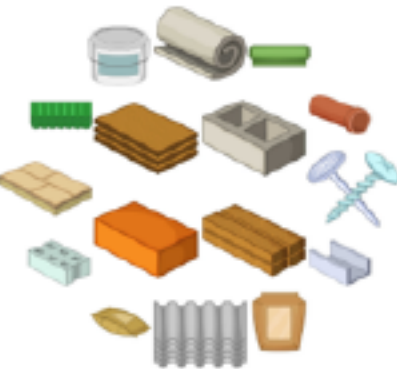


**Kapow**  
Primary



# PROPERTIES AND CHANGES OF MATERIALS KNOWLEDGE ORGANISER


**What you should already know...**



- Materials are the substances that things are made from.
- The properties of materials make them useful for different purposes.
- Materials have more than one property and can be natural or man-made. Properties can include the hardness, whether it conducts electricity, the shininess, or whether it is magnetic.
- There are three main states of matter – solids, liquids, and gases.
- The state of matter of materials can change, through processes such as freezing and melting.

**Solutions and Separation**

**A solution is a specific type of mixture where one substance is dissolved into another.**




- A solvent is a substance that dissolves a solid, liquid, or gaseous solute.
- A solute is the substance dissolved in the solvent. When it dissolves, it looks as though it has disappeared, but in fact it has been broken down to become a part of the liquid.
- One example of a solution is salt water. You cannot see the salt, and the solution will remain if left alone.
- Some mixtures and solutions can be separated, e.g. through processes such as sieving, filtering & evaporating. Salt and water can be separated by evaporation.

**Grouping Materials by Properties**

PROPERTY	YES	NO
ELECTRICAL CONDUCTOR	Copper, aluminum, gold, silver, steel, sea water	Glass, air, plastic, rubber, wood, oil, diamond
MAGNETIC	Steel, nickel, cobalt, iron, uranium, platinum	Paper, glass, plastic, rubber, wood, wool
TRANSPARENT	Glass, water, clear plastic	Wood, rubber, oil, steel, copper, iron, silver
WATERPROOF	Plastic, rubber, metal, glass	Tissue, sponge, fabric


**Reversible and Irreversible Changes**

**REVERSIBLE CHANGES**



- There are many ways in which materials can be changed, for example through heating, cooling, or mixing with other substances.
- Some changes can be reversed (e.g. the material can be returned to its previous form). These are known as reversible changes. An example of this is the freezing of water into ice – it can be melted to become water again.

**IRREVERSIBLE CHANGES**



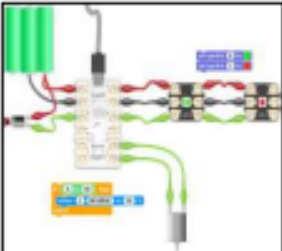
- Other changes are irreversible. This means that those changes cannot be 'undone.' Examples of this include cooking, baking, frying and burning materials. For example, you can fry a raw egg to cook it. You can't return it back to a raw egg again.
- Changes that involve the formation of new materials (e.g. mixing cement) are not normally reversible.



# COMPUTING: PROGRAMMING KNOWLEDGE ORGANISER

### Overview

#### Selection in Physical Computing




- Programming is when we make and input a set of instructions for computers to follow.
- Microcontrollers are devices that can be programmed to control output devices that are connected to them.
- We use algorithms which we can plan, model, trial and debug, in order to create accurate command sequences, involving multiple output devices (e.g. LEDs and motors).

### Microcontrollers, LEDs and Motors


- **Microcontrollers:** A microcontroller is a small device that can be programmed to control devices that are connected to it.

- One brand of widely used microcontroller is called a Crumble controller, which can be used to control many things, e.g. LEDs and motors.




#### LEDs:

- LEDs are output devices that emit light. When electricity is passed through an LED it produces light. One type of LED light, controlled by a Crumble controller, is called a Sparkle.



#### Creating Circuits:




- The USB port connects the microcontroller to a computer. Crocodile clips pass electricity and data through to the LED/motor.

- The + and - power pads on the Crumble should be connected with the + and - power pads on the Sparkle and battery box. The D pads on the Crumble and Sparkle should also be connected.


#### Motors:

- Motors are another output device. A motor can start, stop, spin forwards, spin backwards, and go at different speeds.



### Programming Commands


- For programming, we should use the microcontroller software.
- Crumble uses command blocks (like Scratch).
- **Adding/Removing Commands:** To add a command block, drag it from the menu towards the program. When the grey arrow appears, the command will snap into the program. To remove a command block, drag it away from the program and back to the menu.
- **Modifying Commands:** Clicking on the colour square in the command block allows us to change the Sparkle's colour. To change the time of commands, click on the value. Delete the current value and type in the new value. Press enter after completed.
- **Count Controlled Loops:** These allow us to put programs on a loop. Count Controlled Loops are found in the 'Control' options. Drag the desired program into the Count Controlled Loop command block. 'Do until' loops allow commands to happen until a condition is met.



### Sequencing and Algorithms

- A **sequence** is a pattern or process in which one thing follows another.


- We design **algorithms** (sets of instructions for performing a task) to help us program sequences involving multiple output devices (e.g. LEDs and motors).



- **Programming** is the process of keying in the code recognized by the computer into the software (using your algorithm).

### Trialling and Debugging

- Programmers do not put their computer programs straight to work. They **trial** them first to find any errors:



- **Sequence errors:** An instruction in the sequence is wrong or in the wrong place.
- **Keying errors:** Typing in the wrong code.
- **Logical errors:** Mistakes in plan/thinking.

- If your algorithm does not work correctly the first time, remember to **debug** it.

### Important Vocabulary





- Programming
- Circuit
- Electricity
- Microcontroller
- Code
- LED
- Algorithm
- Motor
- Modify
- Debugging

There will be no History focus for Year 5 this half-term







# Year 5 Knowledge Organiser – SPRING TERM 1 niveau rouge

un arrondissement	district in Paris
<b>Ordinal number</b>	
le premier	the first (masculine)
la première	the first (feminine)
le 1 <sup>er</sup>	1 <sup>st</sup>
<b>Time phrase</b>	
moins le quart	quarter to

<p><b>New York</b></p>  <p><b>New York</b></p>	<p><b>Sydney</b></p>  <p><b>Sydney</b></p>	<p><b>Moscou</b></p>  <p><b>Moscow</b></p>	<p><b>Tokyo</b></p>  <p><b>Tokyo</b></p>
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<b>Grammar</b> cardinal and ordinal numbers	<b>Pronunciation and spelling</b> adjectival agreement	<b>Knowledge about France</b> un arrondissement	<b>Knowledge about France</b> la Poste	<b>Knowledge about France</b> la SNCF
A <b>cardinal number</b> represents quantity; it tells us how many, e.g. 1, 2, 3, 4, 5. An <b>ordinal number</b> tells the position of something in a list, such as 1st, 2nd, 3rd, 4th, 5th.	When qualifying a feminine noun, an adjective must show that it agrees. Unless it already ends in e, it adds e. This can change the pronunciation, eg <i>verte</i> , <i>grise</i> .	<b>Un arrondissement</b> is an administrative district in a large city; there are 20 in Paris.	<b>La Poste</b> is the name of the public postal service company in France, similar to Royal Mail in the UK. <b>Une poste/la poste</b> is also the name of the post office in the local community.	<b>SNCF</b> is France's national state-owned railway company.

<p>une piscine</p>  <p>piscine a swimming pool</p>	<p>une gare</p>  <p>a railway station</p>	<p>une banque</p>  <p>a bank</p>	<p>une mairie</p>  <p>a town hall</p>	<p>une poste</p>  <p>a post office</p>
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# Geography

## Geography- Year 5- Spring


### How has the UK changed over time?




1890s

Land Use

- Agricultural
- Industrial
- Commercial
- Residential
- Recreational
- Transportation




OS Map Symbols



1950s


My Local Area



Sketch map

A sketch map needs:


- A title
- A key
- A North arrow
- A frame
- Simple line drawings
- Not to scale
- note



2020s

What is the land used for? How has this changed over time?

Why has it changed?



What is the same/different in an aerial photo compared to a map?

Can you draw a sketch map of the local area including all features?

Vocabulary	Definition
Land use	What the land is used for.
Settlements	A place where people have built places to live.
Village	Small settlements usually built around a church originally built as safe places for people working on the land.
Rural Areas	An open area of land with few homes and people.
Urban Areas	Areas with lots of buildings and human developments related to towns and cities.
Population	The number of people in a place.
Towns	Larger settlements where people live with many streets and buildings.
Cities	The largest settlements where a large population of people live and work.



I can use awareness of space/others to make good decisions.

I can understand ways (criteria) to judge performance.



**Static Balance**  
Stance

I can reach and pick up cone an arms distance away, swap hands and place it on the other side.

I can reach and pick up cone an arms distance away and place it on the other side using same hand (both directions).

I can hold a V-shape with straight arms and legs for 10 seconds.

I can reach and pick up cones from in front, to the side and from behind.

I can reach and pick up cones from in front, to the side and from behind with eyes closed.

I can reach and pick up cones from in front, to the side and from behind while a partner applies a force.

I can reach and pick up cones from in front, to the side and from behind with eyes closed, while a partner applies a force.

# PE Organiser – Y5

## Spring 1



**Coordination**  
Footwork

I can transfer a tennis ball on and off back in a front support.

I can transfer a cone on and off tummy in back support.

I can transfer a tennis ball on and off tummy in back support.

I can hold front support position with only 1 foot in contact with floor and transfer cone on and off back.

I can rotate fluently from front support to back support, and then continue rotating with fluency

### Vocabulary

Upper body

Figure of eight

Criss-cross

Swerve

Travelling

Striking

Racquet

Pathways

Receiving

Rally

Hand eye coordination

Stationary

Serve

Stationary

Possession

Accuracy



# Religious Education

**Key Question:** Does the community of the Mosque help Muslims lead better lives?

**Learning Intention:** To explore how the Mosque is viewed and how it influences the life and belief of Muslims.

**Values Explored:** community, charity

**What I should already know:**

\*Key features of a Church



**Key features of a Mosque:**



- \*Men and women are usually kept separate in a Mosque.
- \*The Qur'an is not kept wrapped on a high shelf in the Mosque as the whole building is considered holy.
- \*Worshippers face the same direction in the main worship hall.
- \*There are places for ritual washing.
- \*The Mosque is the focus on Fridays for the five daily prayers.

**What I will know by the end of this unit:**

- \*Features of a Mosque
- \*Key differences between a Mosque and a Church
- \*The term Ummah applies to all Muslims and refers to the unity of Islam

**Key Vocabulary:**

**Mosque (Masjid)-** a place of prayer for Muslims.

**Community-**a group of people that have certain attitudes and interests in common.

**Ummah-**the whole community of Muslims bound together by their faith.

**Wudu-** ritual washing before daily prayer.

**Five Pillars of Islam-** the **five things** that Muslims are expected to do.

- Shahadah:** Declaration of faith
- Salah:** Pray five times a day
- Zakat:** Donate to charity
- Sawm:** Fast for one month during Ramadan
- Haji:** Pilgrimage to Mecca once in their lifetime

**Reflection:**

- How does community affect your life?
- What would you do to make your community better?
- Are there things that you have learned from the Mosque that make you want to change your community?

