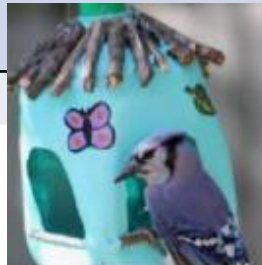


# Year 5

## Knowledge Mats – Term 6

# Year 5 : D&T - Making a bird feeder

Subject Specific Vocabulary		Key Skills	Sticky Knowledge
dimension	the measurement of the length, width, and height of anything.	To use research and develop design criteria to inform design of innovative, functional and appealing products that are fit for purpose, aimed at particular individuals/ groups.	Recognise and name birds in our locality (eg: house sparrow, blackbird, starling, thrush, robin, blue tit).
insulation	material that is used to stop the passage of electricity, heat, or sound from one conductor to another.		Know that different design bird boxes will attract different birds. Eg, a small hole for tits and tree sparrows and an open front box for house sparrows and starlings.
locality	a place and its surroundings.	To improve and develop ideas for the product by combining the 'best' ideas from initial ideas.	Bird boxes should be placed carefully to avoid predators.
natural resin	thick , liquid substances that come from trees.	To modify the design throughout the making process to overcome problems.	Researching existing products informs the design of new products that are fit for purpose.
predator	an animal that lives mostly by killing and eating other animals.	Select the tools, equipment, materials and components.	Choosing the correct tools and using them appropriately helps to develop effective techniques.
species	the most detailed form of classification of living things.	Critically evaluate a product to recognise its strengths and to identify areas for development (both their own and others' work).	Exploring different materials and identifying which one(s) best fit the purpose leads to a more effective outcome.
warp	a twist or curve that has developed in something once flat or straight.		Celebrating what has gone well and recognising what has not gone well enables us to make improvements to our work.
weather resistant	resisting the effects of severe weather.		



# Year 5: SPANISH – ¿Qué tiempo hace?

## Subject Specific Vocabulary

¿Qué tiempo hace?	What's the weather like?
Hace calor.	It's hot.
Hace frío.	It's cold.
Hace buen tiempo.	It's nice weather.
Hace mal tiempo.	It's bad weather.
Hace viento.	It's windy.
Hace sol.	It's sunny.
Hay tormenta.	It's stormy.
Está nublado.	It's cloudy.
Llueve.	It's raining.
Nieva.	It's snowing.
En el norte...	In the north...
En el este...	In the east...
En el sur...	In the south...
En el oeste...	In the west...
Hace ... grados.	It's ...degrees.
y	and
pero	but



## Key Skills

Say, write and read the ten different weather descriptions in Spanish.

Say, write and read numbers 1-31 in the context of giving temperatures.

Say, write and read the compass points to describe weather on a map.

Say, write and read the days of the week as part of a weather forecast.

Use the words 'and' and 'but' to describe weather in further detail.

## Lines of Enquiry

How do I describe the weather?

How can I use the number 1-31 to give temperatures?




How do I say the compass points in Spanish?

How do you use days of the week, weather types and the compass points to give a weather forecast?

How can I say 'and' and 'but'?



## Year 5 : Geography - What is a river?

Subject Specific Vocabulary		Key Skills	Sticky Knowledge
confluence	The meeting of two or more waterways.	<b>Identify</b> and <b>describe</b> how physical features of rivers change from source to mouth.	A river is a moving body of water.
erosion	<b>Erosion</b> is a process where natural forces like water, wind, ice, and gravity wear away rocks and soil.	<b>Explain</b> why the course of a river changes as it flows from higher to lower ground.	A river flows from its source (which is often on high ground) to its mouth (at sea level).
estuary	Where a river meets the sea or an ocean.	<b>Identify</b> and <b>describe</b> the features of river estuaries and <b>explain</b> why they are such important ecosystems for wildlife.	Near its source, the river is fast-flowing; the river bed is narrow and rocky.
flood plain	The flat surface close to the bed of a river or stream.		In its middle course, a river forms bends (meanders) and may form ox-box lakes.
meander	A curve in a river. <b>Meanders</b> form a snake-like pattern as the river flows across a fairly flat valley floor.	<b>Describe</b> and <b>explain</b> the reasons why the Isle of Dogs developed to become part of the busiest river port in the world and <b>evaluate</b> the evidence and <b>make a judgement</b> about the causes of its sudden decline and closure.	A river is at its widest near to its mouth.
mouth	The point where a stream flows into a body of water such as a <b>river</b> or an ocean.		
mud flat	An area of flat empty land at the coast which are covered by the sea only when the tide is in.	 	
ox-box lake	An <b>ox-bow lake</b> is a type of lake which is formed when a meander from a stream or a river is cut off to form a lake.		
river	A river is a flowing, moving stream of water.		
sea level	Sea level is the zero height point where the ocean meets the land.	<b>Understand</b> climatically what the <i>Little Ice Age</i> refers to and how occasional severe winters impacted upon the River Thames and the people of London.	At the mouth, many rivers from estuaries – the land is wide and flat with a wide channel as the river flows out to the sea/ocean.
source	The start of a river is called the source. The source of a river is the furthest point on the river from its mouth.		



## Year 5: Computing – Selection in Quizzes

Vocabulary		Unit overview	Sticky Knowledge
<b>Selection</b>	Part of a program where if a condition is met, then a set of commands is run	<p>Learners will develop their knowledge of 'selection' by revisiting how 'conditions' can be used in programming, and then learning how the 'if... then... else...' structure can be used to select different outcomes depending on whether a condition is 'true' or 'false'. They represent this understanding in algorithms, and then by constructing programs in the Scratch programming environment. They learn how to write programs that ask questions and use selection to control the outcomes based on the answers given. They use this knowledge to design a quiz in response to a given task and implement it as a program.</p> 	I can recall how conditions are used in selection
<b>Condition</b>	A statement that can be either True or False		I can identify conditions in a program
<b>Count-controlled loop</b>	A command that repeatedly runs a defined section of code a predefined number of times.		I can modify a condition in a program
<b>Conditional statement</b>	Instruct the computer on the decision to make when given some conditions.		I can use selection in an infinite loop to check a condition
<b>Algorithm</b>	A precise set of ordered steps that can be followed by a human or a computer to achieve a task.		I can identify the condition and outcomes in an 'if... then... else...' statement
<b>Program</b>	A set of ordered commands that can be run by a computer to complete a task.		I can create a program that uses selection to produce different outcomes
<b>Debug</b>	The process of finding and correcting errors in a program,		I can explain that program flow can branch according to a condition
<b>Input</b>	Data that is sent to a program to be processed		I can show that a condition can direct program flow in one of two ways
<b>Setup</b>	Connecting and preparing a software program, hardware device, or computer to function properly.		I can outline a given task
			I can use a design format to outline my project
			I can identify the outcome of user input in an algorithm
			I can implement my algorithm to create the first section of my program
			I can identify ways the program could be improved
			I can identify the setup code I need in my program
			I can extend my program further

# Year 5: Music – How does music connect us with the environment?



## Subject Specific Vocabulary

Time signature	the type and number of beats in a bar
Key signature	where it shows what key the music is in.
Minim	a note which lasts two beats.
Dotted minim	a note that lasts for three beats.
Crotchet	a note which lasts one beat.
Quaver	a note which lasts half a beat.
Improvise	to make up a tune and play it on the spot.
Major	a key with a bright/happy sound
Minor	a key with a dark /sad sound
Rhythmic pattern	combinations of long and short sounds and silences
Tempo	the speed of the music.
Texture	layers of sound in music.

## Sticky Knowledge

Music is a very natural aspect of humanity. It is a primordial ancient characteristic of what it means to be human. Music is a natural phenomenon – it comes from nature: a natural resource.

All our instruments have come from the resources we have around us. The sound of musical instruments is the sound of human creativity manipulating and engaging with the materials and properties of the world around it.

Nature can be considered as having other 'musics' (not just human music). Birdsong is one example. Recent research has shown that being able to hear and recognise more than around 20 bird calls is equivalent to a significant increase in salary, in terms of the increased sense of wellbeing it delivers. People are increasingly recognising the value of these other 'musics'.

Music can play an active role in protecting our planet, either directly (eg in calling for change through song lyrics) or indirectly (eg in encouraging a love of nature by using instruments to copy natural sounds in a musical composition).



## Key Skills

### Understanding Music

Create and/or identify rhythm patterns using simple combinations of minims, crotchets, quavers, dotted crotchets and their rests

Listen to and copy back melodic patterns using the notes A, B, C, D, E, F#, G from memory and with notation

Create melodic patterns using rhythmic combinations of the notes A, B, C, D, E, F#, G

### Listening

Share your thoughts and feelings about the music using some musical language.

Listen carefully and respectfully to other people's thoughts about the music.

Analyse, explore and discover the song/piece's musical concepts and style.

Place the song/piece in its historical, cultural and global context.

### Singing

Understand the emotion/feeling/intent of the song and explain it to the class or each other

Learn by ear or from notation that the song is in 6/8 time and in C minor.

Learn the design/structure of the song

### Playing

Play any one, or all four, differentiated parts on a tuned instrument – a one-note, simple or medium part or the melody of the song from notation

To listen to and follow musical instructions from a leader.

### Performing

Create and present a holistic performance with some understanding of the musical, cultural and historical contexts

Perform with confidence and with an understanding of the songs you are singing and how the activities fit with the songs

### Composing/Improvising

Compose individually or as part of a group

Talk about their ideas and revise them in response to feedback



# Year 5: Outdoor Adventurous Activity

## Subject Specific Vocabulary – Key words

Orienteering	Team work
challenge	movement
co-operation	communication
maps	location
compass	bearing
direction	control

## Key Skills - Objectives

- Develop strength, flexibility, technique and control.
- To be able to communicate effectively.
- Enjoy collaborating and competing with others.
- Compare performances to previous ones.
- To be able to recognise and evaluate their own success.

## Team Work / Fair Play

- Support others.
- Follow the rules.
- Good communication

## Orienteering

Orienteering is a sport where people run around a place with instructions on a map. There are lots of types of orienteering and the one that most people so is called Foot Orienteering. In orienteering people use a special map which shows where they have to go. People are timed and the person who is quickest wins. The word Orienteering comes from orienting, which is a word that comes from Sweden.



## Local Clubs

[www.kentsport.org](http://www.kentsport.org)

[www.seoa.org.uk](http://www.seoa.org.uk) (South East Orienteering association)

Mote Park Watersports Centre

[www.britishorienteering.org.uk](http://www.britishorienteering.org.uk)



# Year 5: PE - Rounders

## Subject Specific Vocabulary – Key words

Eye contact	Fast arms
Superglue hands	Look where you're running
Hug the ball	Hands ready to catch
Sideways stance	Concentration
High elbow	Aiming
Aim	Outside of the bases
Watch the ball	Underarm throwing
Side on	Overarm- long distance
Hold the bat	
Power	

## Key Skills - Objectives

- Learn how to accurately catch a thrown ball
- Develop accuracy of overarm throwing skills
- Develop batting skills and tactics in rounders
- Learn how to run at speed around bases
- Develop the bowling technique and learn the rules associated with it
- Develop the understanding of the rules of rounders

## Rules of the game

- Take the bat with you when you run
- Run on the outside of the bases
- Can stop at bases, they get half rounder if they reach 2<sup>nd</sup> base
- If they leave a base, they can't go back, they have to run
- Have to stop when bowler gets the ball back
- Can be caught out if the ball is caught

## Team Work / Fair Play

- Encourage all players
- Suggest improvements
- Respect





## Year 5: PSHE – Being My Best

### Subject Specific Vocabulary

Linguistic	The study of language
Logical	Capable of reasoning or of using reason in an orderly fashion - a logical thinker.
Naturalistic	Instinctively interested in and aware of their surroundings. They are nature smart! They learn very easily outdoors and are drawn to working with nature
Interpersonal	Being, relating to, or involving relations between two or more people.
Intrapersonal	The ability for self-reflection, knowing one's strengths and weaknesses, being aware of one's emotional state and motivations.
community	A group of people living in the same place or having a particular characteristic in common.
Independence	Freedom from the control or influence of others.
Responsibility	Something you are expected to do
Physical	Actions or things connected with a person's body, rather than with their mind
Personal	Personal characteristics or attributes. Examples include: honesty, likability, helpfulness.

### Key Skills

Explain why increasing independence brings with it increasing responsibility and give an example of this to help explain it.

Give an example of when I have had increased independence and how that has also helped me to show responsibility.

Predict the increasing levels of independence and responsibilities I will have as I grow older, by giving some examples of this, from teenage to adult years.

Explain that the images for celebrities I see of people on TV, online doesn't always give a true picture of what they are really like (in looks and personality).

Name several qualities that make people attractive that are nothing to do with how they look, but about how they behave.

Explain why media images of celebrities (and sometimes of friends) can make some people feel.



### Sticky Knowledge about Relationships

Our different strengths or skills come from many places, including your brain, inherited genetic strengths, practice, determination, interest etc.

There are lots of different skills that can people show. Linguistic, logical, practical/physical, visual/spatial, musical, interpersonal, intrapersonal, naturalistic etc.

Everyone is different and that is a good thing.

With greater independence, comes greater responsibility.

People have different qualities - physical and personal. The combination of these make up who we are.

The images of celebrities do not truly reflect their personal and physical qualities – do not believe everything you see.

## Year 5 : RE (Christianity) – What is the best way for a Christian to show commitment to God?

### Subject Specific Vocabulary – Key words

Communion	When Christians join together to remember how Jesus sacrificed himself by dying on the cross.
Holy Spirit	The Holy Spirit is the one who speaks to people's hearts and helps them know they should receive Jesus as their saviour.
Holy Trinity	A way of describing God the Father, God the Son and God the Holy Spirit.
Lord's Prayer	Christians believe that God the Father wants to give the graces that will enable them to carry out His will.
Ten commandments	Laws spoken by God to Moses on Mount Sinai and then written on stone tablets



### Key Skills - Objectives

Understand that commitment sometimes causes dilemmas and difficult decisions.

Name the 10 Commandments and explore why they are important to Christians.

Research well-known Christians who have spent their lives 'loving their neighbour'.

Understand what commitment means to oneself (and what it means to a Christian).

Describe how a Christian might show their commitment to God.



### Lines of Enquiry

What are the 10 Commandments? Should everyone try to show these behaviours?

What are Jesus's two commandments?

What is the act of prayer?

Why do Christians go to church?

How and why do Christians show their love for their neighbour?



# Year 5 Science : Properties and changes of materials

## Working Scientifically - Key Skills

Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.

Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

Use test results to make predictions to set up further comparative and fair tests.

Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

Identify scientific evidence that has been used to support or refute ideas or arguments.



## Vocabulary

### Chemical reaction

When two or more substances are combined to create a new substance.

### Reversible change

A change that can be undone.

### Irreversible change

A change that cannot be undone.

### Acid

A substance with many hydrogen ions, such as vinegar, orange juice, and stomach acid.

### Burning

Burning is a chemical reaction, a chemical change, where a new material is formed. Burning is not reversible.

### Rust

A reddish- or yellowish-brown flaking coating that forms on the surface of iron when exposed to air and moisture.

### Materials

The substance used to make something is called a material.

### Base

A substance with many hydroxide ions, such as baking soda, bleach, or soapy water.

## Lines of Enquiry

What is an irreversible change?

What happens when we combine an acid and a base?

What happens when we combine 2 different substances?

What materials have the biggest impact on rusting?

What are the properties and uses of different materials?

