



Year 4 DT Knowledge mat - Mechanisms (Model car)

Subject Specific Vocabulary		Key Skills	Sticky Knowledge
Wheel	found below a vehicle the revolves on an axle to move easily over the ground.	<ul style="list-style-type: none"> Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 	<input type="checkbox"/> Know that a vice will hold wood still when cutting it with a saw
Axle	a rod that passes through the centre of a group of wheels		<input type="checkbox"/> Know that a saw should be used responsibly and against a vice when cutting
Engine	a machine with moving parts that converts power to motion	<ul style="list-style-type: none"> Select from and use a wider range of tools and equipment to perform practical tasks accurately 	<input type="checkbox"/> Know that a car needs wheels to enable it to move over a surface
Steering wheel	used by the driver to control direction of the vehicle	<ul style="list-style-type: none"> Know how to use all tools and equipment safely and when to ask for support 	<input type="checkbox"/> Know that an axle joins two wheels and is used to help them rotate
Headlight	powerful light at the front of a vehicle.	<ul style="list-style-type: none"> Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	<input type="checkbox"/> Know that the power from the engine moves the axle and wheels
Hacksaw	A saw with a narrow fine toothed blade set in a frame	<ul style="list-style-type: none"> Understand and use electrical systems in their products 	<input type="checkbox"/> Know an electric circuit is used to light the bulbs in the headlights of a car
Dowel rods	Cylindrical rods usually made from wood, plastic or metal		
Vice	An object attached to a table or bench to hold wood firmly		

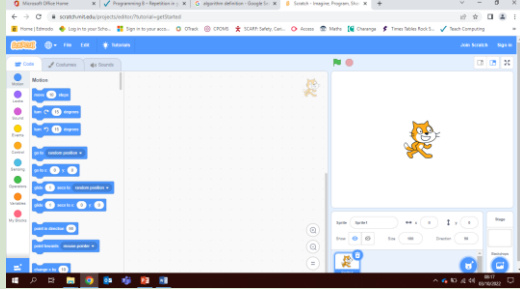


Year 4: Tourism – Where will our USA road trip take us? (North America)

Subject Specific Vocabulary			Key Skills
nomad	A member of a people that travels from place to place to find fresh pasture for its animals and has no permanent home.		<ul style="list-style-type: none">• Use a map to locate some states of the USA and countries in North America• Describe and compare some similarities and differences between places in North America• Identify and sequence a range of settlement sizes from village to city.
Native American	A member of any of the indigenous peoples of North, Central, and South America.		
American state	The U.S. is a country of 50 states covering a vast swathe of North America.		
national park	An area of countryside, or occasionally sea or fresh water, protected by the state for the enjoyment of the general public or the preservation of wildlife.	Sticky Knowledge about North America	
coyotes	Coyotes were a purely North American animal that lived in the West. They are small wolf-like creatures.	<input type="checkbox"/> Mexico City is the largest city with more than 9 million people living there.	
Statue of Liberty	The Statue of Liberty is a colossal neoclassical sculpture on Liberty Island in New York Harbour in New York City.	<input type="checkbox"/> Before the Europeans arrived, the indigenous and native Americans lived in the continent. Today, only about 2% of US Americans consider themselves as descendants from native Americans.	
Niagara Falls	Niagara Falls is a group of three waterfalls at the southern end of Niagara Gorge, between the Canadian province of Ontario and the US state of New York.	<input type="checkbox"/> Greenland is the not only the biggest island in North America but also in the world.	
tribe	The definition of a tribe is a group of people, or a community with similar values or interests	<input type="checkbox"/> Lake Superior, which borders Canada and the US, is the third largest lake in the world and the largest North American lake.	



Year 4 : Programming B – Repetition in games (ICT)

Subject Specific Vocabulary		Software and Tools	Lines of enquiry about repetition in games
Input	Information put into a computer system.	<p>Scratch – coding and programming software.</p> 	How can I use loops to create shapes?
Output	The result of something that leaves a computer system.		What different loops can I code?
Loop	A program of instructions that is repeated.		How can I animate my own name?
Code	Program instructions.		How can I modify a game?
Sprite	A computer graphic that can be moved and edited on screen.		What game will I create?
Event	An action in a program that begins or ends a process.		How will I code my game?
Modify	To make changes and improvements to a program.		<p>Unit Overview:</p> <p>Learners will explore the concept of repetition in programming using the Scratch environment. The unit begins with a Scratch activity similar to that carried out in Logo in Programming unit A, where learners can discover similarities between two environments. Learners look at the difference between count-controlled and infinite loops, and use their knowledge to modify existing animations and games using repetition. Their final project is to design and create a game which uses repetition, applying stages of programming design throughout.</p>
<p><u>E-Safety (Project evolve)</u></p> <p>Online Reputation</p> <p>I can describe how to find out information about others by searching online.</p> <p>I can explain ways that some of the information about anyone online could have been created, copied or shared by others.</p>			

Year 4: Music – How does music shape our way of life?

Subject Specific Vocabulary	
Melody	Another name for a tune.
Rhythm	Long and short sounds that happen throughout the music.
Time signature	An indication of rhythm and how many beats are in a bar.
Ensemble	A French word used to describe playing/singing/performing together.
Major	A key with a bright/happy sound
Acapella	Singing without instruments.
Gospel	Music that is Christian and sung with rich harmony and call and response
Harmony	Different notes sung or played at the same time to produce chords
Call and response	A solo person sings or plays and the rest of the performers sing or play a different musical idea.



Sticky Knowledge

Gospel music is:

- Passionate, uplifting lyrics about God, heaven and salvation.
- A strong solo vocalist supported by a choir or instrumental accompaniment.
- Often includes instruments such as drum kit, electric bass and keyboard or Hammond organ.
- Use of syncopated rhythms and a faster tempo than traditional hymns or Spirituals.

20th and 21st century orchestral music is:

- Any style or combination of styles can be performed by an orchestra, in any context.
- Any instrument can be included in the orchestra, including amplified instruments, electronic instruments and audio effects.
- Use of harmonies, melodies and rhythms that weren't heard in earlier styles of orchestral music.
- Use of vocal and instrumental performance techniques that weren't heard in earlier European orchestral styles.

Classical music has:

- Simple, homophonic texture featuring strong melodies and an accompaniment.
- Instrumental pieces are neatly divided into sections, like a song.
- Use of a medium-sized orchestra and/or piano (not harpsichord).
- The mood and dynamics change quite often.

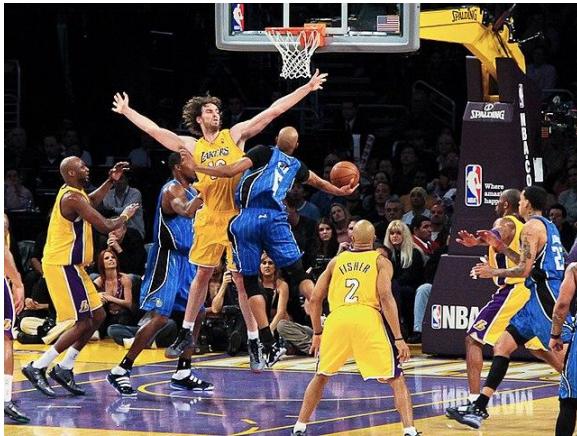
Key Skills (Lesson Learning) Children will be:

- Find and keep a steady beat in the time signatures of: 2/4, 3/4 and 4/4.
- Recognise and copy back rhythmic patterns made of semibreves, minims, dotted crotchets, crotchets, quavers, semiquavers and their rests, by ear or from notation.
- Copy back melodic patterns using the given notes in the key of C major.
- Recognise the sound and notes of the pentatonic scale by ear and from notation.
- Describe legato and staccato.
- Rehearse and learn songs from memory and/or with notation.
- Sing in different time signatures: 2/4, 3/4 and 4/4.
- Sing as part of a choir with awareness of size: the larger, the thicker and richer the musical texture.
- Sing 'on pitch' and 'in time'.
- Sing expressively, with attention to breathing and phrasing.
- Read and perform pitch notation within a range.
- Follow and perform simple rhythmic scores to a steady beat: maintain individual parts accurately within the rhythmic texture, achieving a sense of ensemble.
- Rehearse and learn to play a simple melodic instrumental part by ear or from notation, in C major, F major, G major and D major.
- Improvise on a limited range of pitches on the instrument you are now learning, making use of musical features, including smooth (legato) and detached (staccato) articulation.
- Improvise over a simple chord progression.
- Improvise over a groove.
- Create a melody using crotchets, minims, quavers and their rests.
- Use dynamics.
- Use a pentatonic scale.
- Understand how the individual fits within the larger group ensemble.
- Reflect on the performance and how well it suited the occasion.

Year 4: PE – Basketball

Subject Specific Vocabulary – Key words

Dribble	Basket
Double dribble	Hand-eye coordination
Space	Agility
Opponent	Speed
Defender	Direction
Attacker	Communication
Chest pass	Aim
Bounce pass	



Local Club

Kent Crusaders

<https://www.kentcrusaders.co.uk/wp/>

Key Skills - Objectives

To develop protective dribbling against an opponent.

To move into a space to support a teammate.

To choose where to pass and when to dribble the ball.

To track an opponent and use defensive techniques to win the ball.

To perform a set shot and a jump shot.

To understand the rules of the game and use them to play a game

To use all of the tactics learnt to play a game.



Rules of the game

To win the game you must score more baskets than your opponent.

Players need to keep themselves and the ball inside of the playing area.

Players cannot walk or run while holding the ball, they need to dribble the ball whilst moving.

You cannot dribble with two hands at the same time.

You cannot double dribble. This is where you dribble, stop and then dribble again.

Players must not make unfair contact with another player.

Team Work / Fair Play

Respect coaches, teammates, opposition and referees.

To accept the decision of the referee with good grace.

Players work towards a collective effort to score baskets to achieve success.

Listen and take on board the ideas of others.

Famous People/Teams


Ben Gordon – British player for Chicago Bulls

LeBron James (Famous American basketball player)

Basketball England

Year 4: Spanish – At the cafe

Subject Specific Vocabulary

Spanish	English
 un bocadillo de jamón	a ham sandwich
 un bocadillo de queso	a cheese sandwich
 un pastel de limón	a lemon tart
 unos churros	some churros
 unos calamares	some calamari
 una tortilla de patatas	a Spanish omelette
 una ensalada mixta	a mixed salad
 una paella	a paella
 una tarta de chocolate	a chocolate cake
 una crema catalana	a crème brûlée
 unas gambas	some prawns
 unas croquetas	some croquettes
 unas patatas bravas	some patatas bravas
 un café	a coffee

Spanish	English
 un café con leche	a coffee with milk
 un té	a tea
 un zumo de naranja	an orange juice
 un chocolate caliente	a hot chocolate
 una limonada	a lemonade
 una coca cola	a coca-cola
¡Hola!	Hello!
¡Adiós!	Goodbye!
¿Qué deseas?	What would you like?
quisiera	I would like
gracias	thank you
por favor	please
y	and
la cuenta	the bill

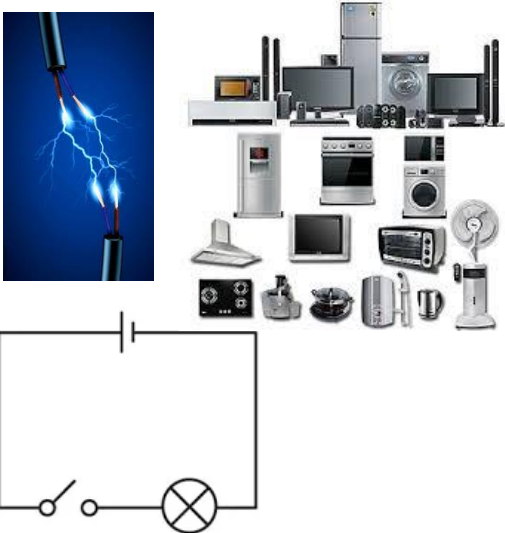
By the end of this unit I will be able to answer:

- What food and drink is offered in a cafeteria?
- How would I ask for something to eat?
- How would I ask for something to drink?
- How would I ask for more than one item?

Key skills:

- Repeat, remember, and attempt to spell items typically offered in a Spanish cafeteria.
- Change a singular noun to a plural noun in Spanish.
- Ask for items I would like to eat and items I would like to drink in a cafeteria in Spanish

Year 4: Electricity Knowledge Mat

Subject Specific Vocabulary		Working Scientifically	Sticky Knowledge about electricity
circuit	An electrical circuit is a completed path through which an electrical current flows.	<ul style="list-style-type: none"> ❑ Set up simple practical enquiries, comparative and fair tests. ❑ Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. ❑ Identify differences, similarities or changes related to simple scientific ideas and processes. ❑ Report on findings from enquiries using oral and written explanations, displays or presentations of results and conclusions. 	<ul style="list-style-type: none"> ❑ Electricity can be generated by from power stations, wind, the sun, water and even animal poo!
buzzers	A buzzer is an automatic signalling device. They are used as alarms and door bells.		<ul style="list-style-type: none"> ❑ Electricity is a type of energy that can build up in one place to flow to another.
conductor	A conductor is an object or type of material that allows the flow of an electrical current in one or more directions		<ul style="list-style-type: none"> ❑ A power station is a place where electricity is created and sent to our homes.
battery	A battery is a device that stores chemical energy and makes it available in an electrical form.		<ul style="list-style-type: none"> ❑ Electricity travels at the speed of light, which is more than 186,000 miles per hour.
cells	An electrical cell is a device that is used to generate electricity.		<ul style="list-style-type: none"> ❑ One flash of lightening could power 1000 houses for a whole year.
switch	A switch is an electrical component that can 'make' or 'break' an electrical circuit.		<ul style="list-style-type: none"> ❑ Know the symbols for a simple circuit diagram – battery, bulb, switch, wires
socket	Sockets allow electrical equipment to be connected to the alternating current (AC) power supply in buildings and at other sites.		<ul style="list-style-type: none"> ❑ When an electric charge builds up on the surface of an object it makes static electricity. This is why we sometimes have a small electric shock.
appliance	An electrical appliance is a device that uses electricity to perform a function.		<ul style="list-style-type: none"> ❑ The first power plant opened in 1882 and was opened by Thomas Edison.
appliance series circuit	Components connected in series are connected along a single path, so the same current flows through all of the components.		<ul style="list-style-type: none"> ❑ Thomas Edison was a very famous inventor who helped us make the most of electricity from bulbs to fuses.
insulator	An insulator is a material whose internal electric charges do not flow freely.		

Year 4 : PSHE – Rights and responsibilities

Subject Specific Vocabulary	
Right	A moral and legal entitlement to something.
Rules	A set of instructions everyone usually follows.
Laws	The system of rules used in a country to govern it safely.
Digital footprint	The information about someone that exists on the internet based on their online activity.
Cookies	A packet of data sent by a web server to a browser. It is used to identify the user or track their access to the server.
Advertising	Describing or drawing attention to a product, service or event publicly to promote sales or attendance.
Fact-check	Investigating a statement to check whether what is said is truth or opinion.
Passive	Allowing things to happen to yourself or others without resistance.
Bystander	A person who is present at an event but does not take part.
Budget	An estimate based on income and expenses over a set period of time.
Finances	Managing amounts of money
Poverty	To live in poverty means you cannot afford or do not have access to necessities such as food, water and shelter.

Key Skills
Understand everything online has a digital footprint.
Know that organisations can use personal information to encourage people to buy things.
To compare content shared for factual purposes and for advertising.
Understand that people make spending decisions based on their budget, values and needs.
Know how to keep track of money and why it is important to know how much is being spent.
Know about different ways of paying for things.
Understand how the way people spend money can have positive or negative effects on themselves and others.



Sticky Knowledge about The wider world
Everything we share online has a digital footprint.
Organisations online can use our data for tracking and advertising purposes.
Not everything we see is factual. We should fact-check what we read to check if it is accurate.
Popular websites often appear more than less popular ones, and this can affect the information people access.
How people spend their money depends on a range of factors.
People's budget and finances often determine what they can or cannot afford.
It is important to keep track of money so we know what we are spending and how much we have left.
There are lots of ways to pay for items such as card, cash, and e-payments.
People can spend money in positive or negative ways, and this affects others as well as themselves.
Some people live in poverty, and cannot afford or have access to basic things we take for granted.

Year 4 RE: Judaism – How important is it for Jewish people to do what God asks them to?

Subject Specific Vocabulary		Lines of enquiry:	Key Skills
Passover	A Jewish festival to remember the freeing of slaves from Egypt.	What is the importance of food?	<ul style="list-style-type: none"> Describe the variety of practices and ways of life in different religions. Identify religious symbolism. verbal and non-verbal actions are used to convey meaning. Describe and explain the main rituals within acts of worship and recognise that shared feelings are part of it. Examine how religious festivals are related to key figures events and stories.
Kashrut	The Jewish laws about which foods are and are not allowed to be eaten.	What are Jewish people able to eat?	
		What is Passover?	
Seder	The special dinner and ceremony that Jewish families hold on the first two nights of Passover. It usually involves a range of foods and readings from the Torah.	Why is the Seder meal important?	
		How do Jewish people show their respect to God?	
Kosher	Food that is able to be eaten by Jewish people.		
Treif	Food that is not able to be eaten b Jewish people.		
Exodus	A mass departure/movement of people.		



Year 4 RE: Judaism – What is the best way for a Jew to show commitment to God?

Subject Specific Vocabulary		Lines of enquiry:	Key Skills
Responsibility	Having a duty to deal with something or someone.	When are we old enough for responsibility?	<ul style="list-style-type: none">Describe the variety of practices and ways of life in different religions.verbal and non-verbal actions are used to convey meaning.Describe and explain the main rituals within acts of worship and recognise that shared feelings are part of it.Understand the different ways in which people show commitment to their faith.
Bar Mitzvah	The initiation ceremony of a Jewish boy at the age of 13, who is considered ready to observe religious rules and take part in public worship.	What is a Bar Mitzvah?	
		What are the different ways Jews show commitment to God?	
Bat Mitzvah	The initiation ceremony of a Jewish girl aged 12 years and 1 day, considered the age of religious maturity.	How do Jews show their commitment to God?	
Mitzvoth	A commandment or religious duty.		
Tu B'Shvat	A Jewish holiday on the 15th day of the month of Shevat. Known as the 'New year of the trees' people often plant trees in celebration.	