


Year 6: How can we save our world?

Geography Knowledge Mat


Subject Specific Vocabulary	
biomes	Large areas of the world with specific climates, plants and animals (e.g., rainforest, desert)
carbon footprint	The amount of carbon dioxide produced by a person, group or activity
climate change	Long-term change in Earth's temperature and weather patterns, mainly caused by humans
ecosystem	A community of living things and their environment
fossil fuels	Coal, oil and gas – energy sources that pollute when burned.
globalisation	How the world is becoming more connected through trade, travel and communication.
pollution	Harmful substances entering air, water or land
renewable energy	Energy from sources that won't run out (wind, solar, hydro)
sustainability	Using resources in a way that protects the planet for the future



Key Skills	
<ul style="list-style-type: none">• Use maps, atlases, globes and digital mapping to locate countries and describe features studied.• Identify the position and significance of latitude, longitude, Equator, Northern & Southern Hemispheres, Tropics, Arctic/Antarctic Circle, Prime/Greenwich Meridian and time zones.• Describe and understand key aspects of physical and human geography• Communicate geographical information in a variety of ways: maps, numerical data, writing and art.• Develop fieldwork skills: collecting, analysing and presenting data about the environment.	

Enquiry questions	
<ul style="list-style-type: none"><input type="checkbox"/> What are the 7 continents?<input type="checkbox"/> What are eco-systems and biomes?<input type="checkbox"/> What are the threats to the Amazon Rainforest?<input type="checkbox"/> How does human activity affect different continents?<input type="checkbox"/> What is the impact of tourism in Africa?<input type="checkbox"/> What can we do?	

Year 6 Science Knowledge Mat: Circulatory System

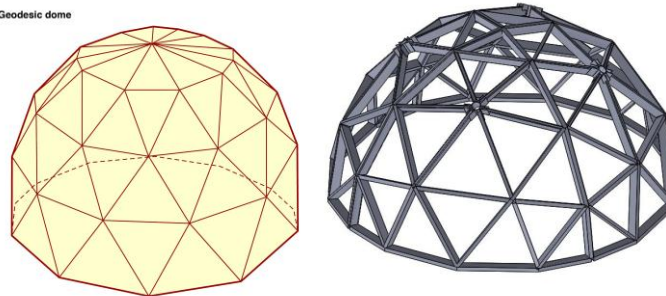
Subject Specific Vocabulary		Our famous scientist	I will be able to answer...
blood vessels	Blood vessels are a series of tubes inside your body. They move blood to and from your heart.		
drugs	A drug is a chemical that is not food and that affects your body. Some drugs are given to people by doctors to make them healthy.		<input type="checkbox"/> How many times does the heart beat each day?
atria	The atria are the two uppermost chambers of the heart. Blood is pushed from the atria to the ventricles.		<input type="checkbox"/> How many gallons of blood does your heart pump each day?
William Harvey	He was the first person to accurately describe the function of the heart and the circulation of blood around the body.		<input type="checkbox"/> How long does it take for the blood to complete an entire trip around your body?
cardiovascular	The blood circulatory system (cardiovascular system) delivers nutrients and oxygen to all cells in the body.	Important facts to know by the end of the circulatory system topic: <ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system. Know the function of the heart, blood vessels and blood. Know the impact of diet, exercise, drugs and lifestyle on health. Know the ways in which nutrients and water are transported in animals, including humans. Know who William Harvey was. 	<input type="checkbox"/> How does blood transport oxygen, waste and nutrients throughout the body?
ultrasound	An ultrasound machine uses sound waves to take pictures of the inside of the body.		<input type="checkbox"/> What does the circulatory system include and what is its purpose?
cardiologists	A cardiologist is a doctor with special training and skill in finding, treating and preventing diseases of the heart and blood vessels.		<input type="checkbox"/> How can we keep our heart healthy?
capillaries	Capillaries are very thin blood vessels. They bring nutrients and oxygen to tissues and remove waste products.		<input type="checkbox"/> What can affect your heart?
pulse	Your heart has to push so much blood through your body that you can feel a little thump in your arteries each time the heart beats.		
ventricles	The ventricles are the two lower chambers in the heart.		

Year 6 D.T: Design, make and evaluate geodesic structures

Subject Specific Vocabulary	
Structure	A combination of parts arranged to support loads and resist forces. In DT, pupils learn how structures are designed to be stable and strong.
Framework	A skeletal support system that gives shape and strength to a structure. Geodesic structures rely on frameworks made of interconnected triangles.
Dome	A rounded vault forming the roof of a structure, often built using geodesic principles. Pupils explore how domes distribute weight efficiently.
Load-bearing	Describes parts of a structure that support weight.
Geodesic	A geodesic is a type of structure made from straight lines (usually struts or rods) that form triangles to create a curved shape, like a dome. These structures are very strong and lightweight because the triangle shapes spread out the forces evenly.
Geometry	Geometry is the area of mathematics that deals with shapes, sizes, angles, and space . The shapes are combined to make strong and stable structures like geodesic domes.
Assemble	To put parts together to make a complete structure or product, this is by using joining techniques and following a design plan.
Stability	The ability of a structure to stay upright and resist tipping or collapsing .

Key Skills
Design Thinking Pupils generate ideas, plan, and develop design criteria for a geodesic dome.
Mathematical Application Pupils apply geometry (especially triangles and angles) to understand and build geodesic shapes.
Teamwork and Collaboration Pupils work in teams to share ideas, solve problems, and construct their dome collaboratively.
Construction and Making Pupils use simple materials and joining techniques to build a stable geodesic structure.
Evaluation and Reflection Pupils test their dome's stability and reflect on how well it meets the design criteria.

Geodesic dome



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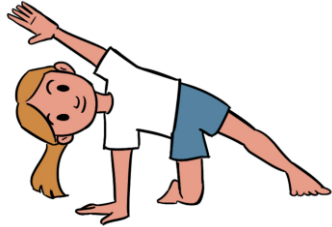
Sticky Knowledge

- ☐ Researching existing products informs the design of new products that are fit for purpose.
- ☐ Choosing the correct tools and using them appropriately helps to develop effective techniques.
- ☐ Exploring different materials and identifying which one(s) best fit the purpose leads to a more effective outcome.
- ☐ Celebrating what has gone well and recognising what has not gone well enables us to make improvements to our work.

Year 6: PE – Yoga

Subject Specific Vocabulary – Key words

aware	fluidity
calm	notice
connected	practice
collaboratively	salutation
develop	transition



Glossary

Asana: Refers to physical poses and postures.

Namaste: In yoga this means 'the divine in me acknowledges the divine in you ' and is a respectful way to start or end a class.

Mindfulness: The process of purposely bringing one's attention to experiences occurring in the present moment.

Pranayama: Refers to breathing techniques. Prana is our life force, our breath.

Key Skills - Objectives

Balance

Strength

Flexibility

Coordination

Working safely

Working independently

Selecting and applying actions



Team Work / Fair Play

Leadership

Sharing ideas

Confidence

Creating, observing and providing feedback



Famous People/Teams

Adi Shankaracharya (788 AD)

Maharishi Mahesh Yogi (1918–2008)

Year 6: PE – Tag Rugby

Subject Specific Vocabulary – Key words

Joints	Accuracy
Attack	Fluency
Dodge	Performance
Technique	Release
Try	Fake and feint

Local Clubs

Medway Dragons Rugby League Football Club

Medway Rugby Football Club



Key Skills - Objectives

To choose, combine and perform skills more fluently and effectively in invasion games.

To understand, choose and apply a range of tactics and strategies for defence and attack.

To use these tactics and strategies more consistently in similar games.

To understand why exercise is good for fitness, health and wellbeing.

To understand the need to prepare properly for games.

To develop their ability to evaluate their own and others' work, and to suggest ways to improve it.

Team Work / Fair Play

Working as a team

Supporting each other

Passing the ball

Follow the rules

Famous People/Teams

Sarah Hunter



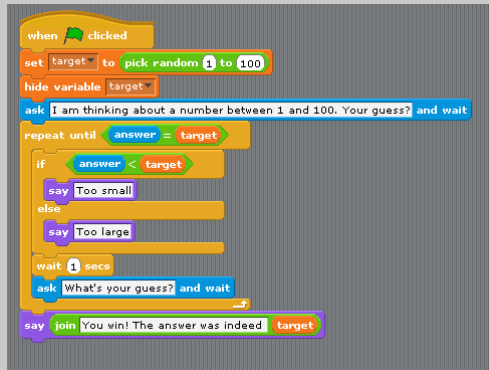

Owen Farrell

Billy Vunipola


Emily Scarratt



Year 6 ICT: Variables in games

Subject Specific Vocabulary		Software and Tools	Sticky Knowledge about Using Scratch
Edit	To change or correct something to improve it.		I can evaluate an existing game and note its key features.
Presentation	A speech or talk in which a new product, idea or piece of work is shown and explained to an audience.		I can follow and create a set of specific instructions.
Software	The programs and other operating information used by a computer.		I can debug my game and fix any errors
Software	The programs and other operating information used by a computer.	E-Safety	I can think of ways to improve my instructions. Where can I be more specific?
Debug	Locating and removing computer information used by a computer.		I can use a range of software to make a presentation.
Input	Any information or data that is sent to a computer for processing		
Output	Data generated by a computer	<p>Pupils can incorporate images and sound effects that they download from the web but should respect any license conditions when doing so.</p> 	
Algorithm	A set of instructions designed to perform a specific task		
Interactive	Software which accepts input from the user as it runs.		
Pitch	A speech or act that attempts to persuade someone to buy or do something		
<p>Unit Overview:</p> <p>In this unit, the children will design and make their own 'Thinking of a number' algorithm. Children will need to think logically to plan and test their set of instructions.</p>			

Year 6 : RE – Islam: What is the best way for Muslims show their commitment to God?

Subject Specific Vocabulary		Key Skills/Objectives	Lines of Enquiry
Allah	The one and only God in Islam	Comparing the different ways Muslims put their beliefs into practice.	What does commitment mean?
Mosque	A Muslim place of worship.	Understanding and discussing the term 'commitment'	What are the 5 pillars of Islam?
Ramadan	The ninth month of the Muslim year, during which strict fasting is observed from dawn to sunset	Identifying the Islamic beliefs highlighted through the 5 pillars of Islam	How do Muslims put their beliefs into practice?
Makkah	The holiest of Muslim cities. All devout and able Muslims attempt a pilgrimage (hajj) at least once in their lifetime.	Explaining when and why Muslims go to the Makkah.	What is the 'best' way for Muslims to show their commitment?
Muhammed	The founder of Islam.	Ranking the effort that Muslims go to practice their beliefs.	When and why do Muslims pray?
			Where and what is Makkah?



Year 6: Spanish – La fecha (the date)



Subject Specific Vocabulary

lunes	Monday
martes	Tuesday
miércoles	Wednesday
jueves	Thursday
viernes	Friday
sábado	Saturday
domingo	Sunday
enero	January
febrero	February
marzo	March
abril	April
mayo	May
junio	June
julio	July
agosto	August
septiembre	September
octubre	October
noviembre	November
diciembre	December

Days of the Week in Spanish



Key Skills

To name, understand and use the days of the week in Spanish.

To name, understand and use the months of the year in Spanish.

To say, read and write numbers 1-31 in Spanish.

To ask and answer the question ¿Qué fecha es hoy?

To ask and answer the question ¿Cuándo es tu cumpleaños? (When is your birthday?) in Spanish.

Lines of Enquiry

What are the days of the week in Spanish?

What are the months of the year in Spanish?

What are the numbers 1-31 in Spanish?

How do I ask and answer questions about the date in Spanish?

How do I ask and answer questions about birthdays in Spanish?



Year 6 : Music – How does music bring us together?

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.
Crotchet	A note which lasts one beat.
Quaver	A note which lasts half a beat.
Improvise	To make up rhythms and melodies on the spot.
Major	A key with a bright/happy sound
Minor	A key with a dark /sad sound
Blues	A key and type of music which generally has a sad feel. Sometimes some of the notes clash together which makes it feel unstable.
Texture	The thickness of the music – thick or thin

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 music is when:

- any musical style or combination of styles can be performed, in any context.
- any instrument can be included in the orchestra, such as amplified/electronic instruments and audio effects.
- unusual harmonies, melodies and rhythms can be used.
- unusual vocal and instrumental performance techniques can be used.









Key Skills (Lesson Learning) Children will be able to:

- Internalise and move in time with a steady beat in 4/4 time
- Copy back rhythms from memory
- Listen to the rhythms provided and create a rhythmic answer.
- Create patterns using simple combinations of minims, crotchets, quavers
- Listen to and copy back melodic patterns using the notes A, B, C, D, E, F#, G from memory
- Listen to the melodic patterns and create a simple melodic answer. Create melodic patterns using rhythmic combinations of the notes A, B, C, D, E, F#, G
- Begin to understand the importance of warming up your face, body and voice
- Copy back melodic patterns using voices
- Create personal musical ideas using the given notes
- Improvisation is about making up your own tunes on the spot
- When someone improvises, they make up their own tune that has never been heard before. It is not written down and belongs to them
- Improvise with confidence
- Improvise using more complex riffs and phrases
- Share and talk about their improvisation

Year 6 : PSHE – Zones of Regulation

Subject Specific Vocabulary		Key Skills/Objectives	Lines of Enquiry
Blue Zone	The Blue Zone is used to describe when a person feels sad, tired, sick, or bored.	<p>Identify a range of emotions and read my own body's cues to determine emotions that I am experiencing.</p> <p>Explain how my behaviour affects me and how other people feel about me.</p> <p>Identify triggers that influence my behaviours.</p> <p>Confidently use tools to regulate myself when I am experiencing intense emotions.</p> <p>Know how to problem solve desirable solutions to problems I encounter.</p>	What emotions are linked to each of the Zones?
Green Zone	A person may be described as calm, happy, focused, or content when he or she is in the Green Zone. The person feels a strong sense of internal control when in the Green Zone.		How can the Zones help you to understand and express your feelings?
Nurture	To take care of, feed, and protect someone or something.		What is a trigger?
Red Zone	A person may be experiencing anger, rage, explosive behaviour, panic, extreme grief, terror, or elation when in the Red Zone and feels a loss of control.		How can the Zones help you to regulate your behaviour?
Self-regulation	The ability to achieve the preferred state of alertness for the given situation. This includes regulating one's body's needs as well as one's emotions.		
The Zones	A system to categorize how the body feels and emotions into four coloured Zones with which a person can easily identify.		
Trigger	An irritant that causes a person to become less regulated and increases the likelihood of going into the Yellow or Red Zone.		
Yellow Zone	A person may be experiencing stress, frustration, anxiety, excitement, silliness, or fear when in the Yellow Zone. The person's energy is elevated yet he or she feels some sense of internal control in the Yellow Zone.		

The ZONES of Regulation

							
							
							
Blue Zone	Green Zone	Yellow Zone	Red Zone				
Sad	Happy	Worried	overjoyed/Elated				
Bored	Focused	Frustrated	Panicked				
Tired	Calm	Silly	Angry				
Sick	Proud	Excited	Terrified				