Year 6 Gold Spring 1: Why Are People Living Longer?
School Value: Empathy – we want to help ourselves and each other to be better citizens

Topic Sticky Knowledge	
Science	Mammals have hearts with four chambers. The blood that has come from the body is deoxygenated, and the blood that has come from the lungs is oxygenated again. The blood isn't actually red and blue: we just show it like that on a diagram.
	The heart pumps blood to the lungs to get oxygen. It then pumps this oxygenated blood around the body.
	Capillaries are the smallest blood vessels in the body and it is here that the exchange of water, nutrients, oxygen and carbon dioxide takes place.
	Your blood is made up of many things. Plasma is liquid. The other parts of your blood are solid. Red blood cells carry oxygen through your body. Platelets help you stop bleeding when you get hurt and White blood cells fight infection when you're sick.
	Blood transports gases, nutrients (including water) and waste products.
Geography	Life expectancy can be affected by the living conditions of a country. For example, air quality, quality of homes, availability of medicine and healthcare and diet.
	Across the world, populations are ageing, which can create different challenges for governments and communities. An ageing population means that fewer people will be of working age. Additionally, more people will require pension payments and healthcare.
Art	Henry Moore was a British artist who was famous for making bronze sculptures, usually shaped like semi-abstract humans. Moore was born in 1898 and died in 1986, and his work continues to inspire artists all around the world.
	Henry Moore is famous for his sculptures of people with bumpy forms and hollow spaces in their bodies. His sculptures also sometimes have holes right through them! As well as bumps and hollows he used flowing, abstract shapes in his sculptures. Most of his sculptures are female figures, some are families and some just faces
	Joining wet clay is done by scoring and adding liquid clay – called slip. This seals the pieces together.

Topic Vocabulary		
Science	Blood vessels	The tube-like structures that carry blood through the tissues and organs. Veins, arteries and capillaries are the three types of blood vessels.
	Ateries	Arteries carry oxygenated blood away from the heart.
	Veins	Veins carry deoxygenated blood toward the heart.
	Oxygenated Blood	Oxygenated blood has more oxygen. It is pumped from the heart to the rest of the body.
	Deoxygenated Blood	Deoxygenated blood is blood where most of the oxygen has already been transferred to the rest of the body.
	Circulatory System	A system which includes the heart, veins, arteries and blood transporting substances around the body.
	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
	Nutrients	Substances that animals need to stay alive and healthy.
Geography	Heat Map	A representation of data in the form of a map in which data values are represented as colours.
	Life expectancy	The average age that a person is expected to live to.
Art	Scoring	Roughly scratching
	Slip	A mixture of very wet clay that acts as a glue

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Stand-Alone Sticky Knowledge	
RE	The 5 Key Sikh beliefs • God is in everything (Sikhs see God as an energy source rather than as a physical entity) • It is a Sikh's duty to serve others (sewa) • All people should be treated as equals • Sikhs should share what they can with others • Sikhs should earn their living honestly
	The Langar is an important concept in Sikhi as it was started by Guru Nanak, founder of Sikhi. Everyone, regardless of rank or wealth, sits and eats freely provided and freshly produced vegetarian food and non-alcoholic drink together as equals
	Guru Nanak, founder of Sikhi, wanted people to be treated equally as he believed all were loved by God.
Music	Benjami Britten set to music text by many different poets and authors. The music always illustrates beautifully the mood of the text. All the songs are accompanied by the piano.
	In the 1920s and early 30s, children sang mostly nursery rhymes and playground chants, and Folk songs with simple accompaniments. When Britten composed these songs, they would have felt very contemporary to the children, just as it does when we sing the latest Pop songs at school today.
Computing	Artificial intelligence is the study of creating automated systems that can accomplish tasks which require intelligence when undertaken by humans. Recent developments in artificial intelligence have been based on machine learning – a computer model determines the relationships between inputs and outputs rather than programmed instructions.
	Common applications of machine learning include game playing, speech recognition, image recognition, natural language processing and automation such as self-driving cars

Stand-Alone Vocabulary		
RE	Harmadir Sahib	Golden Temple – place of Pilgrimage in India.
	Langar	Free vegetarian meal available for all
	Vand ke Chakna	Sikhs believe in sharing what they have with others, especially those in need. This helps to make the world a better place.
Music	Ostinato	A short, repeating pattern
	Unison	Sounds or singing happening at the same time
	Cover	A version of a song performed by someone other than the original artist that might sound a bit – or very – different.
Computing	Artificial Intelligence	The study of automated systems that perform actions which require intelligence when performed by humans
	Machine Learning	Approach to artificial intelligence in which the relationship between input and output of a computer system is determined by the data provided to the system, rather than by the program directly.
	Spectogram	Representation of audio showing the different frequencies present
	Node	individual 'neuron' in an artificial neural network, accepting inputs and using a function to determine output
French	Qu'est-ce que c'est?	What is it?
	Il/ Elle porte..	He/She is wearing…
	Maintenant	Now
	Il y avait…	There was/were…