

In this theme students will explore the religious and scientific ideas of how the universe came into being. The driving question focuses students on the conditions needed for life to exist. As they progress through the theme they will discuss the impact of important scientific figures and discoveries on how, as humans, we understand our position in the universe.

The Flipped Learning task develops the students' understanding of how scientific and technological revolution are intertwined, and how they have driven huge leaps in our knowledge of our solar system. By the end of the theme students will have a well formed idea about the significance of Earth within our solar system.

In this theme I will learn to...

- Discuss the creation of Planet Earth, describe and explain religious creation stories.
- Describe the theory of day and night and explain what changes occur when the Earth spins once around its axis and orbits the Sun.
- Define key literary devices, identify and explain the key literacy devices present in a poem and analyse the effect of the key literacy devices present.
- Identify the relationship between mass, weight and gravity.
- Calculate and compare weight on different planets.
- Outline examples of how and why robotics are used in space and construct a prototype robotic arm.
- Write an information text, selecting and organising information appropriately for audience and purpose.
- Explain who Galileo was, what happened to him during his life and what contribution he made to the history of astronomy.
- Explain the events of the 1969 Moon Landing.
- Identify the inner 4 and outer 4 planets and the characteristics that set them apart.
- Apply Microsoft PowerPoint features such as animations and slide transitions to create an imaginative and engaging presentation.
- Define key vocabulary and prevalent theories.
- Research the key points of the Big Bang Theory
- Produce a fact booklet analysing the Big Bang Theory.
- Debate the significance of the Big Bang theory for society.
- Identify the features of persuasive writing and use this to create a persuasive debate around the teaching of religious creation stories and scientific theories.
- Clearly identify the negative effects of peer pressure and explore a variety of options for handling these situations.
- Read and annotate a chapter from 'War of the Worlds' and work collaboratively to produce explanation paragraphs using evidence and quotations from the text.

In this theme the skills I will develop will be...

- Explain the similarities and differences between religious creation stories.
- To draw conclusions and make decisions based on scientific evidence.
- Annotation skills and being able to interpret language devices.

- Explain, draw conclusions and make decisions based on scientific evidence.
- Understand the relationship between hardware and processing.
- Collaborate with others to reach a common goal.
- To select and use ambitious vocabulary.
- To write a mnemonic.
- To teach other students about what you have learned.
- How to work effectively as part of a group.
- To independently research information.
- To create a PowerPoint presentation for the purpose of providing information about a given topic.
- To write a diary entry.
- Demonstrate an understanding of other people's thoughts and feelings through various drama techniques.
- To practise debating different points of view and produce a persuasive piece of debate style writing.
- Working creatively to produce pieces of Drama from a given scenario.
- Drama based skills (facial expressions, body language, Mime and control)
- To work collaboratively with my peers to identify evidence within a text to explain how an author uses language to convey specific feelings and ideas (inference).

Competencies studied as part of this theme:

Competency	Emerging	Developing	Proficient	Advanced
SE.RE.01: Give coherent accounts for religious traditions with analysis (learning about religion)	Use and develop religious vocabulary to describe some key features of religious traditions, recognising similarities and differences	Make links between beliefs and their origins e.g. religious stories and sacred text.	Describe some forms of religious expression	Analyse the impact religion has on believers' lives.
*SC.DM.03: Explain, draw conclusions and make decisions based on scientific evidence.	Suggest a scientific reason for the conclusions which have been made	Make a suggestion which includes scientific facts, ideas, data and conclusions to support any conclusions which have been made from the data collected.	Describe the scientific evidence which supports any conclusions which have been made.	*Use abstract scientific knowledge and understanding when describing findings. Consider a wider range of perspectives to inform opinions and decisions.
PL.TP.01- Collaborate with others to reach a common goal.	Student rarely work well with others and show poor interpersonal skills.	Student participates in groups but does not contribute an equal share.	Student work in a group contributing a fair share of effort to the task at hand.	Students demonstrate emerging leadership skills in group situations.

Competency	Emerging	Developing	Proficient	Advanced
TL.CS.03: Understand the relationship between hardware and processing.	I have some knowledge of robotics in space and have heard of specific examples such as the mars rover.	I can discuss how and why robotics in space are used and can give some specific examples.	I can evaluate the success of robotics in space exploration and can develop a robotic prototype (development) of my own.	I can complete a prototype robotic arm and complete a series of test effectively, documenting results in depth. I completed a detailed evaluation of my prototype and the data collected from testing.
*CL.WP.05 - Word Choice: Select effective vocabulary appropriate to task and purpose	Limited vocabulary with occasional well selected word (usually taken from teacher).	Limited vocabulary with occasional well selected word.	*Attempts to vary vocabulary and use discursive markers (connectives). Vocabulary occasional well chosen.	Varied vocabulary appropriate to purpose including discursive markers (connectives) e.g. Furthermore..., In addition... Vocabulary and phrases increasingly well-chosen with some literary features.
*CL.WP.03: Organise and present whole texts effectively, sequencing and structuring ideas, information and events (Organisation)	Shows evidence of erratic paragraph structure, with little use of discursive markers (connectives). Shows limited structural features.	Some attempt to write in paragraphs. Attempts at some structural features with occasional success. Some ideas in logical sequence.	*Some attempt to write in paragraphs, beginning to mark a shift in focus, with an increasing use of appropriate, if mechanical, discursive markers (connectives). Shows some evidence of structural features, for example, short paragraphs and dialogue if appropriate. Presents a number of related ideas in an increasingly logical sequence.	Paragraphs mostly accurate with range of discursive markers (connectives). Structure appropriate for purpose with some specific language features. Presents a number of related ideas in a logical sequence.
*RL.ID.01: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.	Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	*Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.	Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
CL.SL.06: Take on roles in group discussion (Group discussion and interaction).	Usually takes turns in conversation beginning.	Usually take turns in small group situations.	Takes turns in a range of situations and groups.	Takes turns as a speaker and listener when required.
*PL.IE.01: Undertake a self-directed research project: planning, researching and collating information around a chosen topic or concept.	Students use a range of given resources.	Students select appropriate resources from a given set with some guidance.	*Students select well from a set of given resources.	Students make full use of given resources identifying where further information can be found.

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*C.DR.01: Using a range of dramatic approaches to explore ideas, texts and issues	Participates in dramatisations for others in the class, based on work they have done. May take on a role for a limited time in dramatic situation.	Participates in dramatisations for others in the class, based on work they have done able to take on a simple roles and maintain them for a short periods	*Participates in dramatisations for others in the class, based on work they have done. Begins to develop ways to explore in role a variety of situations	Presents dramatisations to others in the class, based on work they have done. Uses improvisation and work in role to explore characters and situations.
*TL.IT.01: Explain, demonstrate and justify the use of Information Technology.	Collects, organises and presents data and information in digital content. (AB)	Uses a variety of software to manipulate and present digital content: data and information. (AL)	*Makes judgements about digital content when evaluating and repurposing it for a given audience. (EV) (GE)	Creates digital content to achieve a given goal through combining software packages and internet services to communicate with a wider audience e.g. blogging. (AL) Recognises the audience when designing and creating digital content.
*SC.PL.01: Asking scientific questions: Formulate a hypothesis which can be investigated in order to explain scientific phenomenon.	Find and use a variety of evidence, information and ideas.	Find and use relevant evidence, information and ideas. Making predictions based on scientific knowledge and understanding, including simple models.	Use and evaluate information and idea's. Make predictions using abstract scientific ideas	Analyse information and idea's. Make predictions using abstract scientific ideas and communicate them using appropriate scientific vocabulary.
Identifies the negative effects of peer pressure and explores a variety of options for handling these situations	Can you list examples of peer pressure? Can you describe a few effects of peer pressure? Can you list reactions to peer pressure?	Can you explain a first-hand peer pressure experience? Can you explain emotions involved in peer pressure situations?	Can you describe situations of peer pressure your age group faces? Can you describe the negative effects on all parties experiencing peer pressure? What options are there when reacting to a peer pressure situation?	Can you describe the impact of negative peer pressure? Are you able to discuss motives of peers to pressure others in a negative way. What are the options for reacting to peer pressure situations that one may experience later in life?
RL.PV.02: Analyse the writer's main point of view and likely intention and summarise the key supporting details and ideas (Reading persuasive texts).	May identify the writer's main point of view or likely intention and make broad comments which recognise that texts are shaped for different purposes and audiences. Can distinguish between fact and clearly signposted opinion, eg I think....	Generally identifies the writer's overall likely intention and intended audience eg identifies an advert is intended to persuade children to buy a toy. Can distinguish between fact and less obviously signposted opinion, eg It could be argued that...	Identifies the writer's likely overall intention and audience, though this may be largely drawn from recognition of form or text type rather than the text itself, eg recognises an advert as a text intended to persuade. Can distinguish between fact and opinion, eg identifies writer's use of statistics with some reference to their purpose.	Clearly identifies the writer's overall purpose and likely intention and responds to it, though with limited explanation. Can identify bias and may identify the use of fact and/or opinion, particularly where one is predominant.

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<p>*CL.WP.02 Voice: Produce clear and coherent writing in which the development, organisation, and style are appropriate to task, purpose, and audience.</p>	<p>You may have a limited awareness of purpose and audience. You may use simple linguistic devices, such as the rhetorical question and lists, but not always appropriately. Register may vary between formal or slang, sustaining neither.</p>	<p>You show awareness of the purpose of the writing. You may use a limited range of linguistic features, but repetitious. You attempts to write in a register which is appropriate for your audience.</p>	<p>You are clear on the intended audience for your writing and you try hard to use language, layout and organisation to help them understand your views about scientific theory and creation stories.</p>	<p>You show a clear awareness of purpose and audience. You are increasing your experimentation with linguistic features of persuasive writing, mostly accurate with a clear and logical organization to your debate ideas. Register appropriate to audience.</p>