

YEAR 10 GCSE HOME LEARNING RELIGIOUS EDUCATION WEEK BEGINNING 18TH MAY AND 1ST JUNE

We are starting a new unit from the THEMES paper – it is called THEME B: Religion and Life – this is the last unit of work we need to cover before Summer.

Complete all activities on lined paper and put them into an **organised folder**. – I will be checking this when we come back into school

The overview for this THEME is below.

Once you have completed all the ACTIVITIES in this document. **Please complete the assessment on the school website entitled: ASSESSMENT 1: THEME B.**

For feedback please email Christopher.Cooney@brineleas.co.uk – Mr Cooney is going to set this up on TEAMS too. My maternity leave starts on 22nd May – so I will not be able to respond to any questions after this date. Mr Cooney will continue to set work for THEME B through TEAMS and on the school website. Miss Williams 😊

THEME B: OVERVIEW

PAPER 2: THEME B: RELIGION AND LIFE			
The origins and value of the universe	The origins of the universe	religious teachings about the origins of the universe different interpretations of teachings relationship between scientific and religious views	
	Value of the world	The duty of humans to protect the world religious teachings about stewardship and dominion religious teachings about awe and wonder religious teachings about responsibility	
	Use and abuse of the environment	use of natural resources Pollution	
	The use and abuse of animals	animal experimentation Use of animals for food	
The origins and value of human life	The origins of life	Religious teachings about the origins of human life different interpretations of teachings relationship between scientific and religious views	
	Concepts	sanctity of life quality of life	
	Abortion	legal position Situations where the mother's life is at risk Religious teachings on abortion Ethical arguments relating to abortion	
		Euthanasia	legal position Forms of euthanasia Religious teachings on euthanasia
			The right to die
	Beliefs about death and the afterlife	Is death the end Religious teachings on the afterlife impact on beliefs about the value of human life	

What are the learning objectives for this fortnight?

- To be able to explain religious beliefs about the origins of the universe.
- To be able to explain contrasting interpretations of the beliefs.
- To be able to explain scientific views on the origins of the universe e.g the Big Bang theory
- To consider the relationship (compatibility) between scientific views and religious views

How long should I spend on work in RE this fortnight?

Aim to spend 3 hours on Religious Education this fortnight – you can split this up into 30 minute sessions across the fortnight.

What should I do if I complete the work early?

There are some EXTENSION activities at the end of this document which you could complete once you've finished all of the work.

Lesson 1: Title: Religious Teachings on the Origins of the Universe (to be completed wk beg 18th May)

On lined paper, put the title and date.

Activity 1: Copy the Key Idea and Key Quote below

Key Idea: Christians believe that the universe did not just make itself, but that it was designed and made by God. They believe that God created all things that exist ex nihilo – a Latin term meaning 'out of nothing'.

Key Quote: "In the beginning God created the Heavens and the Earth." Genesis 1 :1

Activity 2: Put the sub title The Genesis Creation Story

Watch the video below

[https://www.youtube.com/watch?v= D-C4_7x9Rw](https://www.youtube.com/watch?v=D-C4_7x9Rw)

Use the video, to bullet point the order of Creation according to the Genesis story –

For example –

- God created Heavens and Earth
- The Earth was formless and Empty – (the Spirit of God was hovering over the waters – N:B – Christians believe all 3 parts of the Trinity were present at creation)

If you would like to read the story to help, follow the link below

<https://www.biblegateway.com/passage/?search=Genesis+1&version=NIV>

Activity 3: Put the sub title "Contrasting religious beliefs about the origins of the universe"

Read the text below, then identify the Muslim teachings on the origins of the universe that are different to the Christian teachings

Christians/Muslims/Jews – similar beliefs about the origins of the universe. Sacred writings = universe created in six days (phases).

According to religious texts, before time existed, only God existed and he created the universe with his **divine word**.

Although some translations of the Qur'an refer to days, most Muslims understand the original text to mean **six phases**, or **distinct periods of time**. The length of these periods is not given.

Unlike the Bible, **the Qur'an does not specify exactly what took place during each period** but it does describe at various points some of God's creations. ***"We have made the sky as a well-secured canopy" "It is He who created night and day, the sun and moon, each floating in its orbit"***

The Qur'an does not mention a **day of rest**. The Qur'an describes how, after the six periods of creating the heavens and earth, God then organised the whole universe to be under his watchful command; ***"He is with you wherever you are"***, and befitting his glory.

Muslims believe that God's work and creation never ends as it continues with every new birth and every new seed that grows. ***"Vegetation comes out of good land in abundance, by the will of its Lord."***

Activity 4: Put the sub title “Scientific Explanations of the Origins of the Universe”

Copy down the following explanation of the Big Bang Theory, then complete the activities to ensure you know EVIDENCE for this theory

The Big Bang Theory - A massive expansion of space which set in motion the creation of the universe.

Matter - is eternal; can never be created nor destroyed, can only change from one form to another – called the law of **thermodynamics**.

The Big Bang is the current leading scientific explanation for how the universe began.

- 1) Around 13.8 billion years ago all matter was compressed into an incredibly small, hot and dense collection of mass.
- 2) A massive expansion of space suddenly took place (huge explosion) and the condensed matter was flung in all directions.
- 3) The explosion made a cloud of dust and gas.
- 4) The universe has been expanding ever since, forming the cosmos as we know it today.
- 5) As the universe expanded and cooled, the matter that had been flung in all directions became stars grouped into millions of galaxies.

Activity 5: Use the link below to **explain how the Red Shift Effect provides evidence for the Big Bang theory**

<https://www.bbc.co.uk/bitesize/guides/zqfgmnb/revision/1>

Activity 6: Watch the video below of Professor Brian Cox explaining how evidence for the Big Bang can be found by analysing the colour of starlight. **Make notes, ensure you have included how cosmic microwave background radiation provides evidence for the big bang.**

<https://www.bbc.co.uk/bitesize/guides/z8gqpbk/revision/2>

Activity 7: Use the information below to **Identify issues raised with the Big Bang Theory**

INFORMATION BOX

However, questions are still asked about how nothing can actually explode. Scientific ideas like the Big Bang seem illogical – how can something come from nothing?

How can a totally ordered and structured world come from an explosion? Explosions cause chaos. Why was there a ball of energy in the middle of nothing, everything needs to have a beginning? Most of what Scientists understand about the Big Bang theory comes from mathematical theory/models. The size of the universe is so enormous that even with the most advance telescope, astronomers are unable to see (peer back at the universe's birth) its end and see for certain if this theory is correct.

Scientific theories are open to change/development and revision – science is an evolving, changing description of the world and its workings – it is the truth for the time we are in and the knowledge we have. The Big Bang replaced the Steady State theory. Religious theories can be challenged and tested by other theories, so is not absolute. Religious ideas are what people said before science.

Activity 8: Put the subtitle: Scientific truth versus Religious truth

Use the information below to answer the following questions in **full sentences**

- 1) What do we mean by scientific truths? How is it found?
- 2) What do we mean by religious truth? How is it found?
- 3) What are the differences between scientific and religious truths?

Scientific truth

Scientific truth comes from *making a hypothesis*, then *testing* it to see if it is true. Seeing something happen again and again is important, this is called *repeated observation*. Think about how you do experiments in science. You write what you are trying to do and what you think will happen. Then you do a lot of testing to check. So your tests confirm or disprove your idea.

Science includes things like $E = mc^2$, or that the Earth is in orbit around the Sun, or that the Northern Lights are a reflection of space dust hitting the atmosphere. In other words, scientific truth is describing our world and how it works.

Science answers the *what* and *how* questions; function and process.

Scientific truth is always open to being developed and added to, as we find out more information, or find out new circumstances. It can be challenged and tested by other theories, so is not absolute. It is always *conditional*, that is, true when based on the conditions in which the testing/observation took place.

Religious truth

Religious truth comes from religions and holy books. We read it, or we get taught it, or some people think they were told by God. Many religions, or versions of a religion, are based on a person's experience of God.

Religion tries to explain things like why we are here, who God is, how we should behave, and what will happen after we die. In other words, it gives us answers to ultimate questions; the questions no one else has an answer for, and which are really important to humans.

Religion answers the *why* questions; purpose and meaning.

Religion, and holy books, can be open to interpretation, but their words do not change. The truth of religion is considered to be *absolute*, that is, unchanging and relevant for all times.



Activity 9: Put the sub title: Contrasting interpretations of the Christian beliefs about the origins of the universe.

Copy down the following key terms:

Liberal Christians are those Christians who believe that the Bible's authors were guided by God, but that not everything they wrote is a literal account of what happened.

Fundamentalist Christians believe that the statements in the Bible are **literally true** and are a central basic belief essential to Christian faith.

Read each of the different people's understanding of Genesis given below.

Summarise each person's understanding.

Consider if they could believe in both the Big Bang and Genesis.



Josh believes the Bible is the Word of God. Everything written in it is absolutely true. God told people exactly what to write. This includes Genesis. So Josh believes that every word of Genesis is true. He believes that the Genesis story is exactly how the world began. It is word for word true. The world was created in seven days by God.

Josh says God can do anything and God is really clever. This means God could create the world. He says we will never understand how, because we are humans not gods, so we should just believe it.

Ronnie believes the Bible is true, but not word for word. He believes God told people things, but they made some mistakes when they wrote them down. So the story in Genesis is right, but not exactly. For example, the story you have read uses the word 'days', but the original language uses a word which means 'periods of time'. Maybe the story was really saying that over a long time, God made the world change and develop. Ronnie believes that. Ronnie believes Genesis is more or less what happened.



Brett believes the Bible is people's ideas about things that happened. He thinks people thought about events and believed that God had been involved. This means that someone was saying how they believed the world began because of God. This means Genesis is not word for word true. Brett still believes God created the world. Scientists did not exist when the story was first told. People had to tell the story in the way that made sense. Genesis makes sense, and it matches the way that scientists say the universe was formed and life developed.

Whether someone could believe both depends on how strictly they follow their religious story. The Big Bang Theory and the religious creation story obviously say different things, so a literal understanding of Genesis would make believing both a problem. However, the less literally we take Genesis, the easier it is to see it as a non-scientific way of understanding the world around us. If we think of Genesis as having a message for us, then it is not even answering the same question as science. Science is telling us *how*, whilst religion is telling us *why*.

It is the same with science though; the more completely you believe that theory, the less room there is to believe anything else.

Activity 10: Read the information below on the different Christian responses to the scientific explanations about the origins of the universe and complete the questions at the end of each response in full sentences.

Response 1: Some creationist Christians believe that science is wrong and that an omnipotent God created the universe in six days. Creationist Christians argue that all the evidence for the Big Bang and evolution can be explained by the effects of Noah's flood (which must have totally changed rock formations and created fossils) and the Apparent Age theory, the idea that if you accept the Bible view then when Adam was made the Earth was six days old, but to Adam it would have looked billions of years old because trees would have been created with rings showing them hundreds of years old.

1) What do creationist Christians teach about the scientific explanations of the origins of the universe?

2) How do creationist Christians respond to the 'evidence' which scientists use to support their theories about the origins of the universe?

Response 2: The compatibility response - Some Christians argue that it is not only science that can explain how the world was created but both science and the Bible are correct and the main points in the Bible story fit with science. For example, some Christians regard the quote in Genesis 1:3 'God said, Let there be light' as a direct reference to the Big Bang. Also, some Christians argue that the order in which God creates life as described in Genesis - plants, trees, fish, birds, animals, humans - is the same order as described in the theory of evolution of the species. They believe that the biblical stories of creation are not meant to be read as literal accounts of how God created the universe. They are simply meant to show that God created everything. So, they believe in the Big Bang but believe that God set it off and controlled how the world has developed since. These Christians see scientific discoveries as providing more evidence for God. For example;

- The Big Bang had to be at exactly the right microsecond. If the explosion had been too soon it would have been too small to form stars; if the explosion had been too late, everything would have flown away too quickly for stars to form.
- There had to be scientific laws such as gravity for the matter of the universe to form solar systems, only God could have made the laws on which the universe is based.
- Life on Earth requires carbon to be able to bond with other atoms and water molecules. This could not have happened by chance, so God must have ensured it was able to happen.

3) Describe the compatibility response from Christians regarding the scientific explanations of the origins of the universe.

4) What evidence is there that the scientific explanations are compatible with the existence of God? Include the scientific laws of gravity, and that life on Earth requires carbon to bond with other atoms.

Response 3: Finally, some Christians argue that the world is too complex to have come about simply as a result of a chance explosion. They have adopted the theory of intelligent design, which is the principle that the biological structures of the world are so complex that they need intelligent causes to explain them and that we can find evidence for these causes. They believe the universe has lots of complexity e.g the universe depends on many interacting parts and the removal of any one of these parts would mean that the whole system would stop working. Also, the patterns in living things such as DNA show great complexity. These complexities mean that neither the Big Bang nor evolution could have happened by chance.

So God must have ensured it happened. Therefore, it is not only science that can explain how the world was created.

- 5) What is the theory of intelligent design? How does it show that God was involved in creation?
- 6) Give examples of complexity in the universe which supports the idea that the Big Bang could not have been a chance happening.

PLEASE KEEP ALL OF YOUR NOTES FOR THIS LESSON IN AN ORGANISED FOLDER

NOW TRY TO COMPLETE: ASSESSMENT 1: THEME B.

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