

February 9th

Memory Verse:

God is our refuge and strength,
a very present help in trouble.

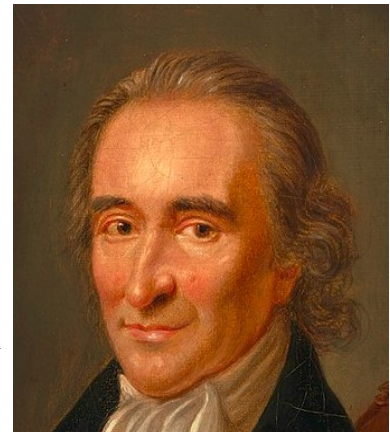
Therefore will not we fear,
though the earth be removed,
and though the mountains be carried into the midst of the sea;
Though the waters thereof roar and be troubled,
though the mountains shake with the swelling thereof.

Psalm 46:2-3

Information about this verse and a method for learning it can be found in yesterday's lesson. Very young children can learn the words in **bold**.

The story of a change of mind¹

People often change their minds – they do so today and they have always done so. For that reason we need to be careful when reading about who agreed with whom and who influenced whom in history. Someone, or indeed a whole group of people or a nation, might agree with a man who subsequently changed his ideas. Later careless readers might assume that the agreement continued. But perhaps when the original person changed their ideas the group who agreed with him did not. An important example that will explain what I mean is that of Thomas Paine (1737-1809) who was born on February 9th in Thetford, Norfolk.



Thomas Paine was influential in America at a time when the American Colonies wanted freedom from the British government. They wanted to be a republic, governed by elected representatives without a king. Paine wrote a book *Common Sense* in which he set out reasons why he thought such a government would be good and he founded his arguments on the Bible. The book was very influential in America and helped to inspire support for the revolution. At that time Paine was good friends with Dr Benjamin Rush, one of America's founding fathers. Rush had great respect for Christianity and was influenced by the Bible. He helped Paine put together *Common Sense*. This is how Paine explained the character of a republic with reference to the Bible in his *Common Sense*:

The children of Israel being oppressed by the Midianites, Gideon marched against them with a small army, and victory thro' the divine interposition decided in his favour. The Jews, elate with success, and attributing it to the generalship of Gideon, proposed making him a king, saying, Rule thou over us, thou and thy son and thy son's son. Here was temptation in its fullest extent; not a kingdom only, but a hereditary one, but Gideon in the piety of his soul replied, I will not rule over you, neither shall my son rule over you. THE LORD SHALL RULE OVER YOU. Words need not be more explicit; Gideon doth not decline the honour but denieth their right to give it; neither doth he compliment them with invented declarations of his thanks, but in the positive style of a prophet charges them with disaffection to their proper Sovereign, the King of heaven.

Paine did not remain in America. He travelled to France in 1790 and here he encountered very different influences. Voltaire, Rousseau and the other godless philosophers upon whose ideas the

1 Information from <https://christianheritagefellowship.com/how-thomas-paine-betrayed-america/> and other sources.

French Revolution² was founded had no time for the Bible as a source for principles of government. Paine drank in the ideas he found in France and his next book, *The Age of Reason*, was very different to *Common Sense* as a result. He became a full-blown Deist³ explaining:

I do not believe in the creed professed by the Jewish church, by the Roman church, by the Greek church, by the Turkish church, by the Protestant church, nor by any church that I know of. My own mind is my own church. All national institutions of churches, whether Jewish, Christian, or Turkish, appear to me no other than human inventions set up to terrify and enslave mankind, and monopolize power and profit....

Every national church or religion has established itself by pretending some special mission from God, communicated to certain individuals. The Jews have their Moses; the Christians their Jesus Christ, their apostles and saints; and the Turks their Mahomet; as if the way to God was not open to every man alike. Each of those churches shows certain books, which they call revelation, or the Word of God. The Jews say that their Word of God was given by God to Moses face to face; the Christians say, that their Word of God came by divine inspiration; and the Turks say, that their Word of God (the Koran) was brought by an angel from heaven. Each of those churches accuses the other of unbelief; and, for my own part, I disbelieve them all.

It is very revealing that Paine says “My own mind is my own church.” He is admitting that he is making up his own religion – his own god. A moment's thought will show how foolish that is. An imaginary god will be of no use to us when we have to face the Maker of Heaven and Earth one day!

Paine's American friends distanced themselves from his new ideas. Founding father Benjamin Franklin urged him not to publish *Age of Reason* and Rush was horrified. One of the founding fathers, Elias Boudinot, wrote a lengthy refutation. Paine's *new* views were not those of his *old* American friends. Present-day Americans who want to remove all religious influence from American society often cite Paine as an influence on the founding of America. He was certainly an influence to begin with but America did not change her mind when Paine changed his.

Some astronomy⁴



On **February 9th** 1986 Halley's comet was at perihelion. Comets are icy masses that orbit the sun. They have an elliptical orbit and every time a comet passes near the sun, some of its icy material evaporates. This evaporated material forms the comet's tail. After enough orbits a comet will have completely evaporated. Perihelion is the name given to the point in a comet's orbit when it is closest to the sun. As a comet gets near perihelion it gets brighter and releases gasses and dust. As comets come closer to the sun they become visible from earth.

There are about a thousand comets which can be seen from earth. Different comets take different lengths of time to orbit the sun. Halley's comet takes between 75 and 79 years. It is the only comet where there is a possibility of someone seeing it more than once in a lifetime as other comets have too long a time interval between their appearances. Halley's comet is also large and bright enough to be seen with the naked eye.

² See the lessons for 14th July and 10th November on the French Revolution and 30th May on Voltaire.

³ See lessons coming up next month on 3rd and 23rd March for information about Deists and what they believed.

⁴ Information from <https://creation.com/halleys-cometbeacon-of-creation>, <https://creation.com/fragile-comets-origins-mystery> and other sources.



Halley's comet has been seen and noticed by astronomers since 240BC at least but it was not until the eighteenth century that someone realised that what was being seen was the same object each time. Sir Edmund Halley, the Astronomer Royal, worked out that the comet seen in 1531 and 1607 was the one he had seen himself in 1682 since it obeyed the laws of orbital motion. He predicted that it would appear again in 1758. Halley died in 1742 in his mid eighties but his prediction was correct.

When Halley's comet reappeared in 1986 it was most clearly visible from the southern hemisphere. My husband and I were in Australia at the time and got a really good look at it. My recollection is of an almost triangular shape that was not

particularly bright. When I asked my neighbour, Mrs Jones, if she was going to go out and look at it she told me she would not be bothering as she had "seen it last time!" That would have been the 1910 appearance which was the first time it had been possible to photograph the comet. In 1910 people had been scared by a prediction that as the earth passed through the tail of the comet everyone on earth would be gassed to death. Which just goes to show that scares spread by mistaken scientists (such as the ones who tell us the world is going to over-heat because there is too much carbon dioxide in the atmosphere) are nothing new.



Comets such as Halley's that come back after a relatively short time are known as "short-period" comets. Because comets lose some of their mass at every perihelion, they eventually disappear altogether. This happened in 2022 to Comet Leonard, for instance. Scientists estimate that comets cannot last more than about 10,000 years because of this. This means that, as we are still seeing many comets, the solar system must be less than 10,000 years old. Since this is not long enough for evolution to have taken place on earth, scientists who need the earth to be much older to make their evolutionary models work, have said that there must be belts outside the solar system beyond where we can see which are a continual source for new comets. One proposed source for comets is the Kuiper Belt, the area where Pluto and other small planets (called planetesimals) are found. But there would need to be about a billion icy cores in this belt if it were to replenish the supply of comets. No one yet knows whether or not there are so many objects in the Kuiper Belt.

The other belt proposed for the origin of comets is completely hypothetical. This belt is called the Oort Cloud but there is no evidence at all for its existence. However, the fact that it is hypothetical and has never been observed is not something that would be at all obvious from the way educational sources for children explain it. The NASA website, for instance, begins its article on comets with a bald statement that the solar system originated 4.6 billion years ago, something that is not demonstrable and is only a current estimate even by evolutionary logic. There is no way of proving the age of the earth by experiments. Then it says:

Comets are mostly found way out in the solar system. Some exist in a wide disk beyond the orbit of Neptune called the Kuiper Belt We call these **short-period comets**. They take less than 200 years to orbit the Sun.

Other comets live in the Oort Cloud, the sphere-shaped, outer edge of the solar system that is about 50 times farther away from the Sun than the Kuiper Belt. These are called **long-period comets** because they take much longer to orbit the Sun. The comet with the longest known orbit takes more

than 250,000 years to make just one trip around the Sun!⁵

This is by no means factual. We do not know that short-period comets originate in the Kuiper Belt. We do not even know that the Oort Cloud exists! The information is presented in this way only because if it were not so, comets would be irrefutable evidence for the (relatively) young age of the earth.

Younger children may enjoy the comet on a stick activity in today's optional resources files which comes from the NASA website.

More about Halley's comet in the lesson for 20th April.

5 <https://spaceplace.nasa.gov/comets/en/>