11th February 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

Map work¹

On February 11th, 1957, a chimney pot crashed down to the ground in a street in Derby, injuring a little boy who was playing below. At the same time a stone cross toppled from a memorial in Ashby-de-la-Zouche, narrowly missing passers-by.

It was not just a coincidence, these things happened on the same day at the same time, for other chimneys fell in different parts of the midlands and cracks suddenly appeared in the walls of houses.

They were caused by an earthquake that was felt as far afield as Bristol, Bolton, Lincoln and Leicester. It was only a mild tremor, but it caused a lot of damaged and injured several people.

You will not be surprised to learn that we have earthquakes in Great Britain if you did the lesson for 8th February. In fact, over a thousand have been recorded but they are usually so mild that instruments are needed to pick them up.

The Elizabethan historian, Ralph Holinshead, from whose works William Shakespeare took some of the plots for his historical plays, described an earth tremor in Lincoln in 1185 in these words:

On the Monday in the week before Easter, chanced a sore earthquake through all parts of the land, such a one as the like had not be heard of in England since the beginning of the world. For stones that lay couched fast in the earth were removed out of their places, stone houses were overthrown and the great church of Lincoln was rent from the top downwards.

Hollinshead was writing four hundred years after the occurrence he describes, so his account may be exaggerated or distorted.

England was to suffer another earthquake in the middle ages, about which we have some more contemporary reports. In 1382 an earthquake, now known as the Dover Straits Earthquake, caused widespread damage in south-eastern England and in the Low Countries – the Netherlands. We now know that the epicentre of this quake was probably in the Straits of Dover – hence its name. It caused damage in Kent, destroying the bell tower of Canterbury cathedral and also damaging St Paul's cathedral and Westminster Abbey in London.

¹ Adapted from Owen, Evan, *What Happened Today?* Book 1 available on the *Mothers' Companion* flashdrive https://motherscompanion.weebly.com/

At the time a synod or meeting of church leaders was taking place which became known as the Earthquake Synod. It met to deliberate the teachings of John Wycliffe, about whom we learned earlier this month.²

John Wycliffe was a most learned scholar at Oxford university. He He attacked the corrupt practices of the Church became the leader of those who sought a return to Scripture and to following Christ. In his treatise, *The Kingdom of God* and in other writings, he shows that "the Gospel of Jesus Christ is the only source of true religion," and that "the Scripture alone is truth". His translation of the Bible wrought a revolution in English thought.³ Writing and circulating popular tracts and organizing bands of travelling preachers called Lollards, Wycliffe found to be the most effective means of spreading the teachings of Scripture. So great was his influence that all the power of his bitter enemies could not accomplish more than to drive him from Oxford to his retreat in Lutterworth, which became a centre from which instruction and encouragement went out over the country. Among the learned men in Wycliffe's day the teachings of the Fathers, decisions of Councils and decrees of Popes, were considered, together with the Scriptures, as constituting authority in matters of religion, the Scripture not holding a higher position than the others. Gradually, as he grew intimately acquainted with the Scriptures, Wycliffe came to acknowledge their unconditional, binding authority. Any other writing had authority only is as far as it agreed with the Scriptures. This was the great truth to which Wycliffe bore witness and which was attacked by his opponents. This he expounded in his book, Of the Truth of Holy Scripture (1378), in which he taught that the Bible is the Word of God or Will and Testament of the Father; God and His Word are one.4

It was these ideas which the Synod, which met at Blackfriars in London, was deliberating and it came to the conclusion that they were "heresies and errors" opening the way for prosecution and execution of Lollard preachers and their followers. The historian George Macaulay Trevelyan explains what happened next:

A curious accident enabled Wycliffe's friends to boast that, though their master had been condemned by the Bishops, the Bishops had been condemned by God. It was on May 19 that the theses were pronounced to be 'heresies and errors.' About two o'clock that afternoon, while the churchmen were sitting round the table at the pious work, the house was shaken by a terrible earthquake that struck with panic all present except the stern and zealous [Archbishop] Courtenay. He insisted that his subordinates should resume their seats and go on with the business, although the shock appears to have been more violent than is usual in our country, casting down pinnacles and steeples, and shaking stones out of castle walls. It took away from this solemn act of censure some at least of the effect on which the Bishops had calculated, and Wycliffe did not let pass the opportunity to point the moral. Such an omen was no light thing in such an age.⁵

We know more about the most violent earthquake ever known in the country, in 1884. The centre of the shock was felt at Colchester, where hundreds of buildings were damaged. A rumbling noise accompanied the tremor. In one village near Colchester hardly a chimney pot was left in place and in another village every house was damaged. There were no casualties, and it is seldom that people are injured in earthquakes in this country.

Look up the places highlighted in green in your Atlas.

² See the lesson for 1st February. There is more on this remarkable scholar coming up in the lesson for June 10th.

³ See the lesson for 22nd May for more on Wycliffe's translation of the Bible.

⁴ Adapted and abridged from E H Broadbent, *The Pilgrim Church* (1931)

⁵ George Macaulay Trevelyan, *England in the Age of Wycliffe* (London, 1925) See also Douglas C Wood, *The Evangelical Doctor* (Welwyn, 1984) p.100-101.

Earthquakes in Britain are monitored by British Geological Survey.⁶ They use sensors buried in the ground to record the scale of earthquakes. "Why we get earthquakes in certain parts of Britain and not in others is still a real mystery which nobody really understands!" says a BGS spokesman.

The device used to detect earthquakes is called a seismograph. Modern seismographs record the information they receive in electronic form but early seismographs recorded information on strips of paper. Here is how to make and use your own paper seismograph.

Materials

Medium-sized cardboard box

Paper or plastic disposable cup

String

Marker pen

Scissors

Paper

Sellotape

Coins, marbles, small rocks or other small, heavy objects to use as weights

Cut the lid or flaps off the cardboard box. Stand the box up on one of the smaller sides.

Make two holes opposite each other near the rim of the cup.

Tie a piece of string (slightly longer than the length of the box) to each hole.

Make two holes in the top of the box (make them the same distance apart as the holes in the cup). Push the two pieces of string through the box holes, and tie them together above the top of the box so the cup hangs down inside the box. The bottom of the cup should be about 2 cm above the bottom of the box.

Make a hole in the centre of the bottom of the cup. Take the cap off the marker and push the marker through the hole so its tip just barely touches the bottom of the box.

Fill the cup with coins or other small weights.

Make a long strip of paper by cutting an A4 piece of paper into 4 long strips and taping them together. Graph paper would be good if you have some to hand. You could use a long till receipt instead if you have one.

Cut two slits on opposite sides of the cardboard box—as close as possible to the bottom edge. The slits should be wide enough to pass the paper strip through one side, across the middle of the box, and out on the other side.

Make sure the marker is centred on the paper strip. You might need to poke different holes in the top of the box and re-hang the cup if necessary.

One person should stabilize the box with their hands as the other person slowly starts to pull the paper strip through the box from side to side. Try to move the paper at a constant slow speed. What does the marker draw on the paper strip?

Next, shake the box backwards and forwards as the other person continues to pull the paper strip through. How does the line on the paper strip change?

Continue to pull the paper strip while you stop shaking the box. Then give it a harder shake. Then pause again and give a more gentle shake.

Now you can take the paper out altogether and examine it. Can you work out when the box was not being shaken. Can you distinguish the hard and gentle shakes?

You can repeat the experiment with fresh paper.

⁶ Te BGS website http://www.earthquakes.bgs.ac.uk/ gives up to the minute information on recent earthquakes in the UK and round the world.

When you pull the paper through the box with no shaking the marker should just draw a straight line on the paper. When you shake the box, it moves back and forth, and the paper moves along with it. Because of the heavy mass of the cup and the way it is suspended by strings, the cup does not move as much. This means that the paper moves back and forth under the (mostly) stationary marker, resulting in a squiggly line. The size of these squiggles (called their amplitude) corresponds to how hard you shook the box—just like how the line drawn by a real seismograph corresponds to the strength of the earthquake.

More about earthquakes on 7th June, 9th July and September 28th.

Something to think about and to listen to for older children.

Today is the anniversary of one of the most famous debates about the existence of God. How do we know that there is a God? Christians will often answer with the words of the children's hymn, "The Bible tells me so". That is a good answer. It is an answer that satisfies Christians. However, sometimes we can wonder about the answers to questions that atheists ask, such as, "how do you know the Bible is true?" There are many famous atheists about these days, Dr Richard Dawkins for example, and they are very vocal in their promotion of their ideas. Do we have to ignore what they say? Surely, if God exists and the Bible is true their arguments must be flawed. Should we answer them or is that a waste of time?

For someone to become a Christian it takes a work of God's free grace in their heart. Whatever arguments we can marshal to counter what atheists say, we are not likely to convince them to become Christians by force of argument alone. They usually do not *want* there to be a God. This is because if there is a God we are accountable to him – we cannot live however we want. The atheist wants to be able to say "I am the master of my fate, I am the captain of my soul."

Nevertheless, it is quite true that the arguments of atheists are flawed. They must be mustn't they if the truth is to be found in the Bible? It can be very helpful to the Christian to hear the arguments of leading atheists satisfactorily answered. It is a good way of honing our God-given powers of reasoning and strengthening our faith.

Debates between atheists and Christian apologists do occur from time to time but, especially since 1985 many atheists have been wary of debating with Christian apologists who take a firm stand on the truth of the Bible. Instead they prefer to debate with Christians whose principles are weak or diluted by, for instance, trying to combine evolutionary theory with Christianity. Why is this? This is because of a debate which took place at the University of California, Irvine between Dr Greg Bahnsen and Dr Gordon Stein on 11th February that year.

Dr Gordon Stein (1941-1996) was a leading atheist. You will sometimes hear him described as a "village atheist" i.e. someone not really able to take on an intellectual giant such as Dr Greg Bahnson in debate. However, this description seems to have only been used *after* the debate was over when Dr Stein had been clearly defeated. At the debate he was announced as "one of America's foremost scholars of atheism, President of the American Rationalist Federation, President of the Free Thought Association, Member of the Board of Directors of the North American Committee for Humanism, Vice President Pacific of the Freedom from Religion Foundation, Vice President of Atheists United... [the author of] five leading books... including [a pamphlet] *How to Argue with a Theist and Win* as well as several scholarly articles... also the editor of the *American Rationalist Journal* [and] associate editor of *Free Inquiry* magazine." Could none of these organisations find a scholarly giant to fill these posts? No, Dr Stein was not regarded as a "village atheist" until after 11th

⁷ William Ernest Henley.

February 1985 when suddenly it was embarrassing to think of him as an intellectual. Completely flummoxed early on in the debate Dr Stein "...huffed and puffed and sputtered away, finding various ways of using his prepared material—which (in the view of the audience) Bahnsen had shown to be irrelevant. In the end, Stein walked and talked like a broken man", 8 said an eye witness.

There are a number of Christian apologists today who are skilled in the methods Dr Bahnsen used. It is interesting to note that Dr Richard Dawkins refuses to hold a debate with any of them. He will only debate with those he is sure he can do well against.⁹

Recordings of the Great Debate of 1985 and a number of transcripts exist. ¹⁰ Listening to the debate with or without the transcript in front of you can be very encouraging and uplifting for the Christian. We do not need to prove that the Bible is true but that does not mean that we cannot do so. However, it is important the notice that the defeat of Dr Stein did not lead to his conversion. Such debates seem to be more useful to the Christian than to the atheist.

⁸ https://frame-poythress.org/bahnsen-at-the-stein-debate/

^{9 &}lt;a href="https://creation.com/global-atheists-reject-debate-challenge">https://creation.com/global-atheists-reject-debate-challenge. The Huxley Memorial Debate (Oxford 1986) *The Doctrine of Creation is More Valid Than The Theory of Evolution* in which Richard Dawkins took part is often cited as a reason why he now refuses such debates. He resorted to heavy sarcasm and *ad hominem* attacks but despite a hostile environment he did not win by an overwhelming majority.

¹⁰ For instance: https://reformedwiki.com/bahnsen-stein-debate