March 9th

Memory verse

My times are in thy hand. Psalm 31:15 This is a very easy verse for even young ones to learn.

A painting to look at and some map work



Artists who paint the life they see around them are sometimes called "realist" painters. Depicting the everyday life of people rather than historical events is also known as "genre painting". The Ukrainian artist Mykola Kornylovych Pymonenko (1862-1912), born on 9th March, specialised in genre or realist painting such as the one shown above which was completed in 1896. At this time Ukraine was part of the Russian Empire. It was, and still is, a massive grain growing area. The painting gives a feeling of the heat of the summer day and the vast spaces. The details show us how the harvest was gathered in. Can you spot the cart that is carrying away the harvested crop in a cloud of dust and the stacks (presumably of straw)? How many people can you spot at work on the harvest in the picture altogether? Notice the hard dry ground in the foreground of the picture. The child's cradle has been neatly constructed to swing or rock and carefully covered from the sun and you can see which of the working women is his mother! What is the woman behind her doing? On the horizon on the right hand side of the picture you can see water. I guess that is either the shore of the Black Sea or the Dnieper River. Some people say the picture reminds them of the Ukrainian flag which is simply two areas, top and bottom, with blue at the top and yellow at the bottom. Whether this resemblance is intentional on the part of the artist or whether the flag itself is inspired by the landscape I have not been able to find out. Can you find the places highlighted in green in your atlas?

To paint good pictures of people at work Mykola must have spent much time watching what went on around him. His work includes many rural scenes including weddings, people doing simple daily tasks such as washing, embroidery, minding cattle and geese or fetching water and also delightful depictions of children and old people. He must have spent many hours watching how ordinary people worked and lived. Everyone can train their mind to be observant of what goes on a round them and it is a good habit. Whether you want to paint people or write about them, noticing what goes on is useful. What is going on in your environment just now? Peep out of the window – what is happening? Could you draw it or write about it?

Do some astronomy

Pastor David Fabricius (1564-1617) cartographer and astronomer was born on March 9th. In 1596 he was the discoverer of the first known variable star, Omicron Ceti, now known as Mira. If you don't already know, can you find out from your encyclopedias or reference books what a variable star is?

David Fabricius was a Lutheran pastor in Osteel, Germany and his son, Johannes (1587-1616) was a student at Leyden University in the Netherlands. In 1611 Johannes brought home some telescopes from the Netherlands and the two



men tried to observe the sun using one. This is a very dangerous thing which no one should attempt to do, although they did not realise it. You can easily burn the retina at the back of your eye causing permanent damage. This can happen without you noticing it, as there are no pain sensors in this part of your eye. Thankfully, the father and son quickly realised that they would have to find another way of observing the sun and they were keen to do so because they had noticed something strange. The sun had black spots on it!

The father and son soon rigged up a piece of equipment that would allow them to observe the sun. They made themselves a *camera obscura*. This is a sun viewer just like the one you might have made in connection with the lesson for 25th January. If you did not make one then, today would be a good day to do so. Once you have such a viewer you can look out for sunspots yourself but **never try to do so by looking directly at the sun.**



Using their camera obscura David and Johannes began to observe the strange spots. They found that they seemed to move round the sun! The spots would appear on the eastern edge of the sun and steadily move to the western edge. Then they would disappear. They noted how long it took for the spots to cross the sun. After the same amount of time had elapsed the spots would re appear at the east again. They deduced from this that the sun is rotating.

David and Johannes were correct in their deduction, although they did not know that different parts of the sun rotate at different rates! This is because the sun is not a solid body.

Sunspots come and go in cycles of about eleven years. They are whirling masses of gas on the sun's surface. They look dark because they are several thousand degrees cooler than their surroundings. We now know that the sun's magnetic field is especially strong in sunspots and they accompany other magnetic activity like solar flares, coronal loops, solar prominences, and auroral displays¹ in the Earth's atmosphere. Can you find out what each of these things is?

David Fabricius published their findings in a book: *Narratio de maculis in sole observatis et apparente earum cum sole conversione*. (*An Account of the Spots Observed on the Sun and their Apparent Rotation with the Sun*), the same year. This was the earliest published account of sun spots.²

¹ See the lesson for 25th January.

² There is an activity for older children here: <u>https://www.schoolsobservatory.org/teach/activities/solar_rotation</u> which parents can prepare. Check your children have the correct maths skills to do the activity before you attempt it. I have

What's in a name?

Do you know why America is called America? In 1507, the German map maker Martin Waldseemüller (c. 1470 - 1520) published his wonderful 12 page wall map of the world at which we will be looking in a few days time.³ Before this time, what we now call America was generally described as "the Indies" by Europeans who thought they had found another way round the earth to Asia. Look at your globe to see where they went wrong!

Of course, the people who were living in America before the Europeans came had their own name for it. They spoke many different languages but in at least one they called the place where they lived *Anowara:kowa* or Turtle Island, indicating that they knew that the continent was surrounded by sea and referencing their creation and flood legends. The Vikings who later crossed the Atlantic on voyages of exploration called the land they found "Vinland".



Waldseemüller used the name "America" on his map. For the first time here was a map that showed America (or as we would now say The Americas) *not* joined to Asia. Christopher Columbus had not realised that he was not in Asia. Waldseemüller therefore named the continent not after Columbus but after Amerigo Vespucci (1451-1512) who was born on 9th March. Waldseemüller considered that Vespucci had realised that he was not in Asia.

Use your own encyclopedias and reference books to find out about Vespucci. Write a couple of paragraphs about his adventures and then make up your mind: did Waldseemüller make a good choice of name? If you had had the job of naming the new continent, what would you have called it and why? Write about your choice and your reasons in a third paragraph.

Economics



What is Economics? It is the study of the "production, transfer and consumption of wealth" or as Adam Smith (1723-1790) put it, "economics is an enquiry into the nature and causes of the wealth of nations."

Adam Smith is sometimes called the Father of Economics and his most famous book *Wealth of Nations* was published on March 9th 1776.One of his most

interesting ideas is that of the "invisible hand".

What did Adam Smith mean by an "invisible hand"? It was his way of explaining the way a free market has within it a self-correcting power. A free market is an economic system in which prices are determined by unrestricted competition between privately owned businesses. Buyers and sellers in a free market unknowingly act in a way benefiting the overall economy, as if guided by an invisible hand. We can explain it like this:

Imagine that two people set up businesses in March. James starts *Garden Zappers* and provides a service to householders who cannot mow lawns or tidy flower-beds because they are elderly or just too busy. John sets up *Toasties* and goes out to homes to fix broken toasters. By June James is rushed off his feet and is having to find someone to help him. Everyone seems to want their garden

only skimmed through this but there does not seem to be any evolutionary or long ages content. It would be ideal for today.

³ See lesson for 16th March.

attended to. But John is no longer in business because toasters cost more to repair than to replace so no one wants his services.

No one told either James or John which business to start. No one advised the customers to employ James and ignore John. James ended up in a position to offer a job to another person as well as being useful to the community where he lived. John soon had to find something to do that would be of more benefit to his community. There was no need for outside interference; it is as if an invisible hand moves customers and business owners to do what is best for the economy.

Adam Smith argued that when governments interfered with this process by regulation and taxation they damaged the economy and made the nation poorer. When they stepped back and allowed the market to work freely the invisible hand acted and society prospered and grew wealthier.



Adam Smith lived in times when it was fashionable to be a deist in intellectual circles. We learned about the beliefs of deists recently this month.⁴ These were the days of Tom Paine (1737-1809),⁵ Erasmus Darwin (1731-1802)⁶ and Josiah Wedgwood⁷ all of whom promoted deism. It was also the period when freemasonry was becoming fashionable. Adam Smith moved in circles steeped in freemasonry – which has strong connections to Deism. His closest colleagues were all masons, although he seems not to have been one himself. Despite these connections, and despite language in his own works which echoes deist vocabulary, Adam Smith was insistent that God was the source of the natural economic laws which he was codifying.

Adam Smith had had a Presbyterian upbringing and when he took up the chair of Moral Philosophy at Glasgow University in 1753 he signed the Westminster Confession of Faith before the Glasgow Presbytery. With Smith this was not a mere formality. He was a scrupulous man who would not have put his name to things he did not think he believed. Whether or not he was truly born again himself, his background and upbringing led him to describe the "invisible hand" as part of an intricate system designed by God for the benefit of mankind.

More about economics later this month.8



Something to think about for older children⁹

On 9 March 2005, a Partnership Agreement was signed between the British Library, the University Library in Leipzig, the National Library of Russia in Saint Petersburg and Saint Catherine's Monastery in Egypt for the conservation, photography, transcription, and publication of all surviving pages and fragments of a manuscript, parts of which they each own. What was the fragmented document and why is it considered so important that these very different organisations should collaborate in making all its details widely available?

This document is now known as Codex Siniaticus and it is a copy of The New Testament together

8 See lesson for 13th March.

⁴ See the lesson for 3rd March. There is more to come on this subject in the lesson for 23rd March.

⁵ See lesson for 9th February.

⁶ See lesson for April 8^{th.}

⁷ See lesson for 13th July.

⁹ Information from https://www.tbsbibles.org/page/CodexSinaiticus?&hhsearchterms=%22hexapla%22 and other sources.

with large parts of the Greek translation of the Old Testament called the Septuagint and of the Apocrypha¹⁰ and some other apocryphal¹¹ writings. It seems to have been made all at one time, although specialists consider that three different copyists worked on it.

The institutions that now own parts of the manuscript are so awed by it because it is the oldest complete copy of the New Testament that survives. The manuscript is not the same in some places as the majority of the manuscripts of the New Testament – and of course these copies are all more recent. Surely, where there is a difference, this older manuscript must be more correct as it was written nearer to the time of the apostles themselves. Well, we might think so but, as we shall see, there are reasons to doubt that it is more accurate than later manuscripts.

In one place in the manuscript the scribe has left a note, explaining that the copy has been "corrected" in accordance with a previous manuscript. This, says the note, was "very old" and was



made by direction of Bishop Pamphilus (c. AD 240–309) of Caesarea from a copy owned by him. That copy in turn had been also "corrected" using a copy of Origen's *Hexapla* – not just any old copy either but one that had been personally corrected by Origen himself. If you have been doing these lessons for a while you may have already come across Origen (c.185-c.254 AD) and his *Hexapla*.¹² You will know that he was a heretic who was not above meddling with the text of the Scripture when it did not conform to his ideas and who considered this meddling to be scholarship. The

Hexapla was one of the "fruits" of his researches. Was there, then, a very good reason why this manuscript survived when others from its day wore out with use? Yes! It was not used and not copied because those in charge of it recognised it as unreliable! I myself would have my doubts about following the "corrections" in a New Testament manuscript that originated in the work of a man who thought the Bible contained "...many things not true, but actually impossible and absurd..." I would prefer un"corrected" copies even if they were not so old. For they would be copied in turn from manuscripts that were older and free from Origen's meddling.

It is precisely because *Codex Siniaticus* differs in so many places from later manuscripts of the New Testament that the non Christian scholars in the museums are so keen to promote its contents. They are of the same view as Origen, convinced that the Bible is not true, impossible and absurd. It is a sad fact that behind much of the interest in *Codex Siniaticus* is the promotion of the idea that the Bible is not a fixed entity and we cannot know what it said originally. The Bible is the foundation of Christianity. Without it there is no Gospel for us to proclaim. We need to be absolutely sure what it says in every detail. God in his goodness knows this and he surely did not leave his church without an uncorrupted version of the Bible from the middle ages to the discovery in the nineteenth century of a manuscript such as this. No, the "newer" old manuscripts are the best.

¹⁰ These are books mostly in Greek or Aramaic, never considered part of the Bible in Old Testament times or by the Apostles or quoted in the New Testament. They do indeed include " many things not true, but actually impossible and absurd"!

¹¹ Apocryphal means not part of the Bible but pretending to be so.

¹² See the lesson for 30th September.