

12th December

Memory verse:

Out of the strong came forth sweetness Judges 14:14

Today's memory verse is very short (and sweet) and you will understand why I chose it when you read the lesson for 14th December.



In 1901 on 12th December, a large kite was flown from a hill in St John's Newfoundland. Attached to it was 400 feet of wire leading to a wireless receiver and at 12.30 p.m. the operator, Percy Wright Page, picked up a Morse signal from Poldhu Cornwall, 2,200 miles away. He was proving that wireless waves can carry vast distances, even across oceans. The experiment had been set up by Guglielmo Marconi (1874-1937) and it was the first ever transatlantic radio signal. Find the two places in your atlas to get an idea of the distance. In the picture you can see Marconi himself (far left) at Newfoundland watching the kite being raised that would be used for the experiment.

Marconi had been experimenting with radio waves since he was 20. Like you he was home educated, although his parents employed private tutors and specialists to teach him. When he was 18 he was allowed to attend lectures at the University of Bologna and to use the university's laboratories for physics experiments.

On 12th December 1896, Marconi had given the first public demonstration of his radio equipment in London. William Preece, chief electrician of the British Post Office had arranged for the demonstration to take place. Preece saw that wireless telegraphy might replace the existing post office wire service.¹ He arranged for a hall and advertised the event. A large crowd turned up to see the experiment and the newspaper men were there too so everyone would hear about it. Marconi tapped the key on the transmitter and as he did so Preece carried the receiver box around the room. This proved there were no wires between the transmitter and the receiver yet a bell in the receiver rang each time Marconi closed the key. The radio waves were carrying the signal!

A number of further experiments followed including a cross channel transmission in 1899. Then Marconi went to the USA and demonstrated his equipment there. On his way home he fitted up

¹ This service used Morse code. See the lesson for April 2nd.

wireless equipment on board the SS St Paul on which he was travelling. The ship thus became the first ever to signal her approach to port by wireless. Marconi's Royal Needles Hotel radio station contacted the ship 66 nautical miles off the English coast.

But after the 1901 transatlantic transmission some people were sceptical. Marconi had said what signal he was sending, the Morse Code letter S, just three clicks. They had been heard sporadically, he said. But had they really? Was it just atmospheric noise? Actually we now know that he had chosen a bad time of day for his test. It was broad daylight all across the Atlantic and radio signal travel better in the dark. It is possible that he really was mistaken!

Marconi organised another test that would be better organised and better documented to prove that his idea would work. In 1903 he was able to transmit a greeting from United States President Theodore Roosevelt to King Edward VII. There were still problems with reliability, however.

Marconi's equipment began to be used by ships. After the *Titanic* disaster,² in which Marconi's radio equipment helped to alert nearby ships to the *Titanic's* plight, Marconi work became better recognised. "Those who have been saved, have been saved through one man, Mr. Marconi ... and his marvellous invention," said Britain's Postmaster General.

Something to make

Marconi's invention was the first step in the development of radio broadcasting. Did you know you can make your own very simple radio transmitter?

You need a fully charged or new 9-volt battery and a coin. For the receiver you need an ordinary AM radio.

First tune the radio to an area of the dial where you hear static.

Now hold the battery near the antenna and quickly tap the two terminals of the battery with the coin so that you connect them together for an instant.

You will hear a crackle in the radio that is caused by the connection and disconnection of the coin.³



You can also make a wave machine that will demonstrate how waves travel. You need wooden barbecue skewers, gaffer tape and jelly babies!⁴

Something to pray about

Missionary efforts can often be helped by Marconi's wonderful discovery. The first Christian radio station in the world was HCJB "The Voice of the Andes" in Ecuador which began broadcasting in 1931. Gospel messages can be broadcast to places where missionaries are not allowed to go. The Bible can be read out at just the right speed for a listener to copy down the words. This has often been used to help Christians in places where Bibles are scarce and not allowed by the authorities. We can pray for those whose only contact with the Gospel is through listening to the radio.

A crime story to read

Did you read the lesson for 15th April about the Mona Lisa? The Mona Lisa is the most famous painting in the world today but you will be surprised to know that years ago, this was not the case. Apart from art lovers no one had heard of it. Then in 1911 the painting suddenly came to public

² See the lesson for April 14th.

³ Older children can take this further here: <https://www.youtube.com/watch?v=drLxfjqZHVo>

⁴ Full instructions here: <https://www.youtube.com/watch?v=2eMT3skCTDg&t=116s>

attention in a dramatic way and it has remained famous ever since. What happened? The painting was stolen!

The painting was such a run-of-the-mill item in the great galleries of the Louvre, Paris where it was housed that for a whole day no one even noticed that it was gone. When someone reported that it was not in its place it was thought that it had been taken away by museum staff who were photographing the paintings in the collection. When it was discovered



that the painting had been stolen, there was uproar. Who had been behind the theft? Was it a rich American business tycoon prepared to add to his collection by foul means was well as fair? Or, since there was no love lost between the Germans and the French at the time, was it the German Kaiser? Or was it a living artist who wanted the picture, Picasso perhaps? The Louvre closed for a week and frantic investigations began.

Meanwhile, the Italian gang who had taken the Mona Lisa, Vincenzo and Michele Lancelotti, and the ringleader, Vincenzo Perugia were making their escape. But things did not turn out quite as they had hoped.



The thieves had hidden in the Louvre overnight. One of them was a workman who had actually helped install the protective glass that covered the Mona Lisa. Before the Louvre opened on the next day they removed the painting and covered it with a blanket. Then, when the Louvre opened, looking like legitimate workmen, they carried the painting outside and slipped away to a nearby railway station.

The theft made the painting instantly famous. All over the world newspapers carried the story on their front pages with hazy black and white reproductions of the mysteriously smiling lady's portrait. Suddenly the thieves

had a problem. They had wanted to sell the painting. But now the story of its theft was so well known this would be difficult. Suddenly, everyone had heard of the Mona Lisa!

The gang leader Vincenzo Perugia, hid the painting away in the room of the boarding house in Paris where he was staying. Perhaps all the fuss would die down – eventually. In 1913 Perugia tried to sell the painting to the director of a gallery in Florence and was arrested. On **12th December** 1913 the French Ambassador in Italy was informed – the Mona Lisa had been found! There was such rejoicing when the painting went back to the Louvre. Perugia was not harshly punished. He had taken the painting back where it belonged he said. He had stolen it because the artist, Leonardo Da Vinci, was an Italian painter. He thought it should have been in a gallery in Italy not France!