

15th August

Memory verse

Thou shalt not oppress an hired servant that is poor and needy,
whether he be of thy brethren,
or of thy strangers that are in thy land within thy gates:
Deuteronomy 24:14

Younger children can learn the words in **bold** and understand that a “hired servant” is any employee – someone who works for another person for wages.
More about today's memory verse in tomorrow's lesson.

Some chilling reading!



Scientists try to find out just how cold they can make things. The atoms which make up everything around us are constantly moving. This thermal motion increases with the temperature of the atoms and “Absolute Zero” is the name for the temperature at which atomic thermal motion would come to a stop. No scientist has yet achieved Absolute Zero, $-273.15\text{ }^{\circ}\text{C}$, in a lab. However, Since the late 1970s, physicists have been edging nearer and nearer

using lasers and there are good reasons for the attempt. The main reason for the research is to improve atomic clocks. These are clocks that work by monitoring the vibration of atoms. They are used for satellite navigation such as the GPS system. The more accurate the clock, the more accurate the navigation system can be.

On **August 15th** 1994, the USA's National Institute of Standards and Technology (pictured above) issued a press release saying that physicists at the institute had recently cooled atoms to 700 nanokelvins, that is a 700 billionth¹ of a degree (a *very* small amount!) above absolute zero. This was the coldest temperature ever recorded for matter. Would it be possible to go any lower? Wait until 14th October to find out!

Map Work

The picture below shows the peaceful seaside resort of Lynmouth as it looks today. In August 1952 it was a different view altogether...



1 USA billions.

In the first two weeks of August 1952 six inches (150mls) of rain fell on Exmoor. All the reservoirs and lakes were full. Then on Friday 15th August a further 9 inches (230 mls) fell in the afternoon and early evening. In fact it was estimated that on that day some 90 million tons of water fell on North Devon and West Somerset. The saturated moor could not absorb the water. It poured into Warcombe Water, Hoarok Water and the other tributaries of the East Lynne and West Lynne rivers.

The water rushed through the narrow coombes of Exmoor tearing up boulders and vegetation and blocking bridges until they collapsed. In the upper valley of the West Lynne the debris formed a dam which when it burst descended on Lynmouth, an unstoppable torrent of water, boulders, trees and rubble which tore down buildings and destroyed everything in its wake.

To make way for development, the River Lyn had been put into a culvert under the town. This quickly blocked with debris and the river raced through the town, red with Devon soil. More than 100 buildings were destroyed and thirty-four people were killed in what is usually described as Britain's worst recorded river flood.²

In 1952 there was still plenty of wartime spirit in Britain. Prominent in the immediate aftermath of the flood disaster were the volunteer forces of the St John's Ambulance Brigade and the Women's Royal Voluntary Service and residents of nearby villages gave shelter to people made homeless. Today the town has been restored and flood defences have been designed to prevent a flood overwhelming the town again.

Make your own rain gauge

Cut the top section (about 6 cm) off a clear 2L plastic pop bottle. Use a ruler and permanent marker to mark measuring increments starting about 4cm from the bottom. Begin the measurements with 0 and then mark in CM increments.

Place several small stones or pebbles in the bottom (for weight), then fill the bottle with water to the 0 mark. This will calibrate your gauge.

Invert the top of the bottle into the rain gauge to act as a funnel. Place the gauge on a flat surface outside.

Now you can keep a record of how much rain falls in your area every day!

Something to think about

The Lynmouth Flood was a terrible disaster but it was only a local flood. God has promised never again to flood the whole earth. Just a local flood can sweep away buildings and destroy a town. It gives a glimpse of how a *global* flood with its associated tsunamis and volcanic activity destroyed everything on earth.

² View contemporary footage of the aftermath here: <https://www.youtube.com/watch?v=Q0VMIRRA6PY>

A true story to read³

If you go to Sunday-school, I am sure you enjoy listening to what your teachers tell you. Here is a true story about a very kind Sunday school teacher. John Alfred Groom (1845-1919) was born on 15th August. He was a godly Sunday-school teacher who had a business as silver engraver in Clerkenwell. Not far from his business premises was Farringdon Market, a meat and vegetable market. Watercress was sold here wholesale and the watercress sellers would buy a small quantity of it for one penny and then divide it up into bunches to hawk about the streets. Who were these watercress sellers? They were mostly young girls with some disability or other, often orphans and all of them were very poor. Other disabled girls made a similar living selling flowers. Mr Groom's heart was touched. This description by a visitor to the market will tell you what he saw each day.

The first coster-cry heard of a morning in the London streets is that of "Fresh wo-ortercreases." As the stockmoney for this calling need only consist of a few halfpence, it is followed by the very poorest of the poor; such as young children, who have been deserted by their parents... As winter draws near, the Farringdon cressmarket begins long before daylight... At the principal entrance to Farringdon-market there is an open space, running the entire length of the railings in front, and extending from the iron gates at the entrance to the sheds down the centre of the large paved court before the shops. In this open space the cresses are sold, by the salesmen or saleswomen to whom they are consigned, in the hampers they are brought in from the country....

By degrees the customers are creeping up, dressed in every style of rags; they shuffle up and down before the gates, stamping to warm their feet, and rubbing their hands together till they grate like sandpaper... one little girl, with the bottom of her gown tattered into a fringe like a blacksmith's apron, stands shivering in a large pair of worn-out Vestris boots, holding in her blue hands a bent and rusty tea-tray. A few poor creatures have made friends with the coffeeman, and are allowed to warm their fingers at the fire under the cans, and as the heat strikes into them, they grow sleepy and yawn....

Mr Groom decided to do something to help these poor girls. He hired a large room in 1866 and began the *Watercress and Flower Girls' Christian Mission*. Because of the disabled condition of the girls, the Mission became known as John Groom's Crippleage. Here the girls could get a mug of cocoa early in the morning free of charge. They could also get a hot dinner here for just a ha'penny. There was a place where they could wash and mend their clothes too. John Groom read Bible stories to the girls and told them about the Saviour's love.

Ten years later he moved the mission to larger premises. He had thought of a way to help the girls out of their poverty-stricken condition. The new premises included a schoolroom and a soup kitchen and also a factory where the girls could earn their living. Here the girls (soon known as the Girl's Flower Brigade) made up beautiful bouquets from the wholesale flowers which were then sold direct from the mission. But what about the winter time? Mr Groom had a real inspiration here. The girls made bouquets and displays of



³ Illustration by kind permission of Peter Higginbotham <http://childrenshomes.org.uk/>.

artificial flowers, putting their skills at flower arranging to good use even when no flowers were available.

With support from Lord Shaftesbury⁴ and others the mission went from strength to strength. Mr Groom founded an orphanage at Clacton on Sea and here the girls from the Girl's Flower Brigade were welcomed for holidays in the summer. When kind Mr Groom died his son carried on the work.

Something to eat

Watercress has a delicious peppery taste and is very good for you. Why not try some today? You can mix the leaves with other salads, use it as a garnish for a hot meal such as a pasta dish or pizza or put it into sandwiches with grated cheese.



4 See the lesson for 1st October (yet to come).