November 1st

Thus saith the Lord, Stand ye in the ways, and see, and **ask for the old paths**, where is the good way, and walk therein, and ye shall find rest for your souls. But they said, We will not walk therein.

Jeremiah 6:16

Tiny children could learn the words in bold. They could understand that the "path" means the way which we should follow. Because God is eternal it is an "old path". The Bible tells us what path God wants us to follow. The Bible is like a map of the "old path". Jeremiah told the people God's message. What a foolish answer they gave!

A poem to read aloud and learn¹

No sun – no moon – No morn – no noon – No dawn – no dusk – no proper time of day – No sky - no earthly view -No distance looking blue No road – no street – no t'other side the way – No end to any row – No indication where the crescents go – No top to any steeple – No recognition of familiar people – No courtesies for throwing 'em -No knowing 'em! No travelling at all – no locomotion – No missing of the way – no notion – No go – by land or ocean – No mail – no post – No news from any foreign coast -No park – no ring – no afternoon gentility – No company – no nobility – No warmth – no cheerfulness – no healthful ease – No comfortable feel in any member -No shade - no shine - no butterflies - no bees -No fruits - no flowers - no leaves - no birds -November!

Thomas Hood.

If you began a poetry memorisation programme on 5th January (if not look at that lesson and begin one now) you could include this one.

¹ Adapted from an exercise on the Mothers' Companion Flashdrive https://motherscompanion.weebly.com.



Do you know? Some questions you can answer on paper or in your exercise book.

Is the poet describing November in the town or in the country? What is '*em* short for? What is *t*'other short for?

What particular feature of November weather accounts for the lack of all the things mentioned in the first ten lines?

This Poem is called "November". Can you think why the title is not put at the top of the poem? Could you write a story about getting lost in a fog?

Something to read from the history of art

Benvenuto Cellini, (1500-1571) the sculptor, was born in the city of Florence, Italy, on November 1st. Some of his finest work was on a small scale and made in bronze and precious metals, though his most famous work is the great bronze statue of Perseus in Florence. The story of Perseus is one of the most famous of all classical legends. You can read it for yourself in today's optional resources file.² When it was originally made this statue was put on display along with other great statues which not bronze but were carved from stone. When you have read the story of Perseus you will understand the significance of this.³



Benvenuto Cellini's statue of Perseus was cast in one piece. Previously statues of this size had been cast in several smaller pieces that were then joined together. Do you understand what it means to "cast" an object? The best way to understand this is to read Benvenuto's own account of casting this statue. You will find it in the optional resources files for today and it is quite an exciting story!

Science – metals

Metals are elements. An element is a substance that cannot be broken down into any other substance. There are over 100 elements, each with its own type of atom. Everything in the universe contains the atoms of at least one or more elements. The periodic table lists all the elements we know of and groups together those with similar properties. You can see the periodic table on the next page. The names of the elements are in very small writing. The big letters are the symbols that stand for each element.

² As retold in *Legends of Greece and Rome* by G. H. Kupfer which is available complete on the *Mothers' Companion* Flashdrive <u>https://motherscompanion.weebly.com</u>.

³ In the story, looking at the head of Medusa (which Perseus is holding aloft in the statue) turned the observer into *stone*.

1 H Hydrogen																	Helium
J Litium	Beryllium											5 B Boron	6 C Carbon	7 N Nitrogen	8 O _{Oxygen}	9 F Fluorine	Neon
Na	12 Mg Magnesittm			2								Aluminium	14 Sil Sillcon	Phosphorous	16 S sulfur	Chlorine	Argon
19 K Potassium	20 Calcium	Scandium	22 Ti Titanium	23 V Vanadium	Chromium	25 Mn Manganese	Fe	Cobalt	28 Ni Nickel	29 Cu _{Copper}	Zn Zinc	Gallium	32 Geemanium	33 As Arsenic	34 See selenium	35 Br Bromine	36 Krypton
37 Rb Rubidium	38 Sr Strontium	39 Y	40 Zr zirconium	A1 Nb Niobium	42 Mo Molybdenium	43 TC Technetium	44 Ru Rutenium	45 Rh Rhodium	46 Pd Palladium	A7 Ag silver	48 Cd Cadmium	49 In Indium	50 Sn ™	Sb Antimony	52 Tellurium	53 I Iodine	S4 Xenon
55 CS Caesium	56 Ba Barium	57 La Lanthanum	72 Hf _{Hafnium}	73 Ta Tantalum	74 W Tungsten	75 Re Rhenium	76 OS Osmium	77 Ir Iridium	78 Pt Platinum	79 Au Gold	80 Hg Mercuty	81 TI Thallium	Pb Lead	83 Bismuth	84 PO Polonium	85 At Astatine	86 Rn Radon
87 Fr Francium	88 Ra Radium	89 Actinium	104 Rf Rutherfordium	105 Db Dubnium	106 Sg Seaborgium	107 Bh Bohrium	108 HS Hassium	109 Mt Meitnerium	110 DS Darmstadtium	111 Rg Roentgemum	112 UUUb Ununbium	113 UUUt Ununtrium	114 UUq ^{Ununguadium}	115 UUp Ununpentium	116 UUh Ununhexium	117 UUS Ununseptium	118 UUO Ununoctium
			Cerium	59 Pr Praseodymium	60 Nd Neodymium	61 Pm Promethium	62 Sm _{Samarium}	63 Eu	64 Gd Gadolinium	Tb Terbium	66 Dy Dysprosium	67 HO Holmium	68 Er Erbium	Tm	70 Yb Ytterbium	71 Lu	
			90 Th	91 Pa Protactinium	92 U	93 Np Neptumum	94 Pu Plutonium	95 Am	96 Cm	97 Bk Berkelium	98 Cf	99 ES Einsteinium	100 Fm	101 Md Mendelevium	102 No	103 Lr Lawrencium	

Elements can be grouped into metals and non metals. Most of the elements on the periodic table are metals. They are in the centre and to the left of the table. You can draw a line on the table above to separate the metals from the non metals.

Do it like this:

Draw a horizontal line between Boron (B) (non-metal) and Aluminium (Al) (metal). You will find them on the centre top right of the table. Continue with a vertical line downwards between Aluminium and silicon (Si) (non-metal) and continue down between Gallium (Ga) (metal) and Germanium (Ge) (non-metal). Now make the line go horizontal again between Germanium and Tin (Sn) (metal). Then the line turns vertically again between Tin and Antimony (Sb) (non-metal). Next the line goes horizontal again between Antimony and Bismuth (Bi) (metal) and then vertically between Bismuth and Polonium (Po) (non-metal). The line goes horizontally between Polonium and Ununhexium (Uuh) (metal) and then finally vertically down between Ununhexium and Ununseptium (Uus) (non-metal). Everything to the right of the line you have just drawn is a nonmetal. Everything to the left of the line and on the very bottom two lines of the table is a metal – with one exception. The exception is hydrogen which sticks up on its own on the far top left of the table.

How can we test if an element is a metal? Metals have certain properties and characteristics. On the next page is a table showing the characteristics shared by metals and how these characteristics are different from those of non-metals. I have also included some well known uses of these characteristics and highlighted them in turquoise on the table.

Bronze is an alloy; that is a substance made by mixing metal elements together and sometimes adding non-metal elements as well. The main metal in bronze is copper (CU) to which tin (Sn) is added. You can find these two elements on the periodic table. If you read Benvenuto Cellini's account you will notice that he added pewter. Pewter is another alloy. The main metal in it is tin to which copper and lead (Pb) are added. It was often used for plates and mugs. Nowadays it is not used for this purpose because of the poisonous nature of the lead it contains.

The bronze alloys usually used in sculpture have properties that are particularly useful to the sculptor. Before they set, they expand slightly. This pushes the metal into all the fine indentations in the mould. Then as the bronze cools down it shrinks a little. This makes removing the statue from the mould easier.

Metals	Non-Metals
Strong Used to build scaffolding and bridges.	Brittle
Malleable and ductile. Used in cables.	Brittle
React with oxygen to form basic oxides	React with oxygen to form acidic oxides
Sonorous sound when hit with hammer Used in bell making.	Dull sound when hit with hammer
High melting and boiling points	Low melting and boiling points
Good conductors of electricity Used in electrical cables.	Poor conductors of electricity Used as insulating material around wire cables.
Good conductors of heat Used to make cooking pans.	Poor conductors of heat Used to make cooking pan handles.
Mainly solids at room temperature. Exception mercury which is liquid at room temperature	Solids, liquids and gases at room temperature
Shiny when polished Made into jewellery due to their hard and shiny appearance.	Dull looking
When they form ions, the ions are positive	When they form ions, the ions are negative - except hydrogen that forms a positive ion, H+
High density	Low density

Something to do

Today would be a good day for doing some "sculpture" of your own. You might like to use **plasticine**. Did you know that nowadays sculptors often use plasticine instead of the wax that Benvenuto Cellini used? Or you could look at the lesson for January 18th where we did sculpture in **soap**.

If you want to make a sculpture that can be hardened and preserved by being heated you can use salt dough. There is a recipe for salt dough in the lessons for 19th May.

Benvenuo Cellini made a plaster cast or mould for his statue. If you want to make something using a mould you can melt down broken wax crayons. You can use small shaped silicone baking moulds, if you have them, to do this. Remove the paper from the wax crayons and break them up into small pieces. These can be put into the moulds. Melt the wax using a very gentle heat in the oven and then allow them to cool and harden before removing the wax shapes.

Edible sculpture can be done in marzipan. You can make small sweet-sized models of fruits and tint them with food colouring applied with a paint brush. To make a miniature sculpture of an orange, for instance, tint some marzipan orange using a very tiny drop of food colouring. Then roll a walnut-sized piece into a ball. The skin will look like a real orange if you gently roll your ball over the surface of a fine grater. A whole clove stuck in the top completes the orange. To make an apple use a tiny drop of green colour instead of orange and roll a ball. Dab a tiny patch of red onto your apple. Use a clove again for the stalk but press



the head of the clove into the apple leaving the stalk sticking up. Bananas are easy to make. Strawberries can be shaped just a little smaller than life-size. They look pretty if rolled in sugar. Tiny leaves for decoration can be made if you roll and cut the marzipan carefully. Not as longlasting as Benvenuto's work, of course, but definitely more tasty!