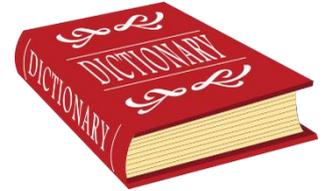


What do you understand about the word **Benchmark**?

Is there more than one meaning for this word?

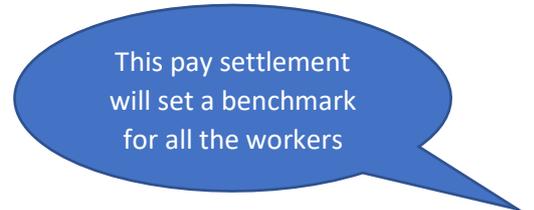
Hint: Have a look in a dictionary.



Today the word has several different meanings. Commonly it is used to mean “a standard or point of reference against which things may be compared”.

However, if you have a Global Positioning System (GPS) device, benchmarking could

be a hobby.



This tour is based on the benchmarks that are used by surveyors. You may have seen workers using them in the street?

Today surveyors have may have more modern devices, but the basic principles of surveying have not altered.

So, let us find a benchmark in Nantwich.



This tour starts outside Nantwich Museum, in Pillory Street. If you have come by car, the nearest car park is in Love Lane. The museum is a 4-minute walk from Nantwich Railway Station, and a 6-minute walk from Nantwich Bus Station.



Stand at the museum’s front door.

Can you spot a benchmark?

Hint: A benchmark consists of a horizontal line with an arrow below the line.

A surveyor would often chisel a horizontal mark, and then highlighted it with a chiselled arrow below the horizontal line.





You do not have to go far to find your first benchmark.

There is one on the museum! Find the sign which says, "The Town's History & Changing Exhibitions", and then look down below it (by the lamp post).

The OS on the sign tells us it is from Ordnance Survey, and the BM stands for Bench Mark. There are different types of benchmarks, as you will later see.

The one on Nantwich Museum is a Flush Bracket Benchmark (FBM). They were fixed to walls at 1-mile intervals between FBMs. They consist of a metal plate with a unique number to identify them, the number on this one is S1124.



Walk into the town centre along Pillory Street and High Street. After you have walked past The Square and [The Crown](#) turn left and continue to the traffic lights. Cross over and (making sure you are on the right-hand side of Welsh Row) continue straight ahead until you reach the Wilbraham Arms.



Did you spot any benchmarks?

There is one on the corner of this building – but you could easily miss it.

Do you think you could have missed any other benchmarks?



Retrace your steps to the river bridge, at the start of Welsh Row.



Look carefully at the bridge again. Can you now see the benchmark, on the north (swimming pool) side?



The horizontal line on this benchmark on the bridge is 36.6888m above sea level.



How were benchmarks used?

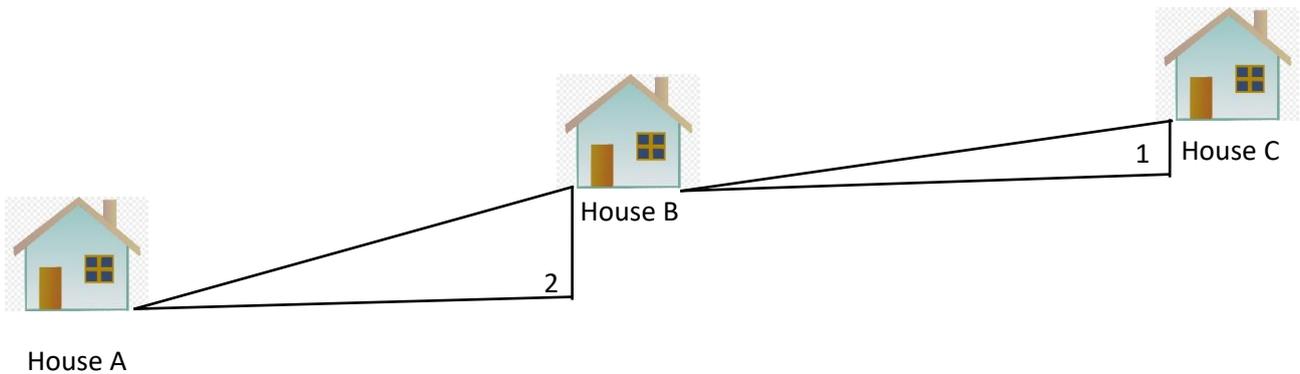


At the start of this tour, we told you that benchmarks were used by surveyors. Today, it is relatively easy to find the altitude of anywhere. You can look on maps, or even use a GPS device.

However, in the past it was a lot harder. To measure all the way from Nantwich to the coast would have been a massive task. The surveyors made it easier, by breaking it up into a series of smaller tasks.

To use a very simple example, imagine 3 houses, we'll call them House A, House B and House C. House B is 2 metres higher than House A, and House C is 1 metre higher than House B.

How much higher is House C, compared with House A?



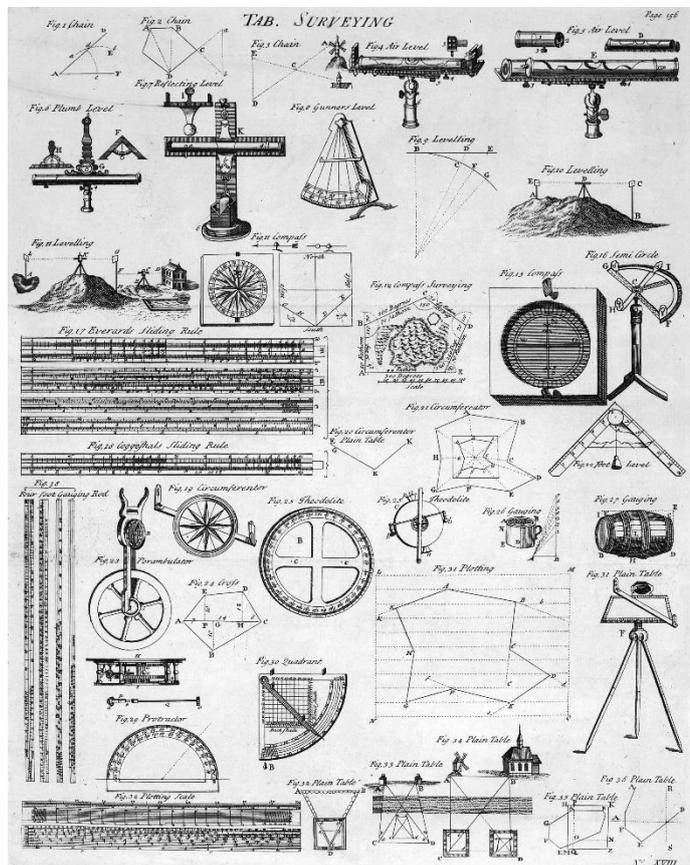
The answer is easy, $2 + 1 = 3$.

In the past, the height above sea level for a place was calculated using lots of steps and measuring the height changes between each step.

If you have done trigonometry at school, in maths, you will hopefully now have a better understanding of why you had to do it!

The equipment used has changed over the years, but the general principles have not.

However, whilst surveyors today still carry out measurements, they may be comparing the distance from satellites, rather than adjacent building using GPS devices.



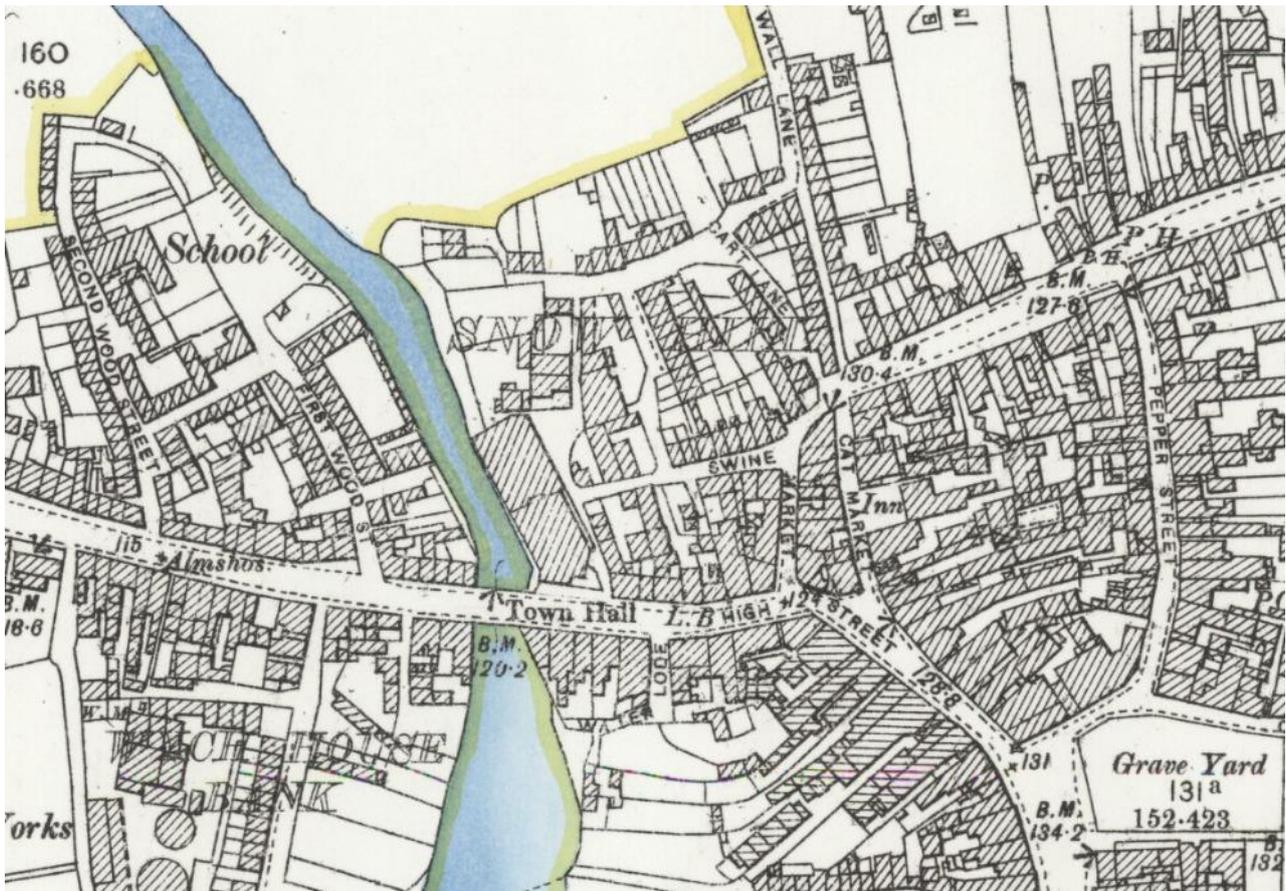
How do we know where to find benchmarks?



On some of the old, large-scale, maps of Nantwich, the benchmarks are shown on the map.

You can view some old maps of Nantwich online, courtesy of the [National Library of Scotland](#).

On the 1898 map below, the actual location of the benchmark is indicated by the benchmark symbol. To the left it says BM 120.2. This number is height above sea level, the reason why the number is different to the one we have just given you is that in those days' altitudes were measured in feet, and not metres.



1898 map - Reproduced with the permission of the National Library of Scotland

Some old maps had a number on every property, showing the height above sea level. If a property has no number on it, it was unoccupied when the map was surveyed. Notice that there were also benchmarks on the Savings Bank, the Union Vaults, the Red Lion (on Oat Market) and the Nags Head (on Beam Street). These benchmarks have now gone.



Walk back up to The Square and then turn left (walking past two banks) to get to Nantwich Market (designed by Nantwich architect [George Latham](#), whose other works include Willington Hall and Arley Hall):



Old maps indicate that there should be a benchmark here, can you spot one?
If you cannot see it, what do you think the reason could be?



According to records, there should be a Flush Bracket Benchmark (number S1123), like the one on the museum's wall, on the market building.

This site (whose members monitor benchmarks):
<https://www.bench-marks.org.uk/bm10718>
tells us that they last observed this benchmark in 1995.

We suspect that some of the stonework has been replaced, and the benchmark lost.



Walk across to St Mary's church (adjacent).



There is a benchmark on this building. By now, you should be an expert on spotting benchmarks, so we are not going to help you too much!

This is what you are looking for:



Go through the gate into Church Lane and carry on until you get to Hospital Street.

The building on the corner of Church Lane and Hospital Street is Chatterton House.

This used to be the Lamb Hotel (if you look up at the windows you will see lambs and grapes).

Can you spot the benchmark on this building?



If you wish, it is a short walk (though Cocoa Yard) back to Nantwich Museum.

We hope that you will visit, if it is open, and learn more surprising facts about our beautiful market town.

That is the end of our guided tour of benchmarks in Nantwich. However, we deliberately have NOT shown you all the benchmarks in Nantwich!

We have found over 20, just in Nantwich.

The Ordnance Survey have a database of benchmarks on their website. It is a downloadable, Comma Separated Variable (CSV) file, which means that you can read it using most spreadsheets (e.g. Excel):

www.ordnancesurvey.co.uk/benchmarks.



Alternatively you can search for them on web sites like the Bench Mark Database:

www.bench-marks.org.uk/search

None of these sites show all the benchmarks. It has been suggested that there could be over half a million. Old maps are a good place to see where they might be. You can also find benchmarks on the Interactive Public Rights of Way map, on Cheshire East's web site.

You may also see something which looks like this.



This is not a benchmark, but a GPO cable marker. The arrow/crow's foot mark is a universal government mark indicating (historically) government property. The basic arrow can be found on all sorts of things e.g. munitions (WW1 shell cases), government property, prison uniforms, War Department boundary stones around military establishments etc. etc.



GPO cable marker opposite Nantwich Veterinary Hospital

There is also a Facebook Group [Finding Ordnance Survey Benchmarks](#), and another for [Finding Environment Agency Benchmarks](#).

How many more benchmarks can you find?

We hope that you liked this tour.

Find more on our **Things to do** page:

<https://nantwichmuseum.org.uk/learning/things-to-do>

www.nantwichmuseum.org.uk