



Year 4 Spatial Sense Reading Booklet

Lesson Series:

1. Globes
2. Scale
3. Grid References
4. Our Local Area
5. Our Local Area- Changes over Time
6. Assessment

Name: _____

Class: _____

Lesson 1

Globes



From space, the Earth looks like a sphere, or ball, containing land and water.

A **globe** is a model of the Earth and shows what it looks like from space.

Some globes show how the land is divided into different countries - around 200 of them.

All the **countries** on our planet are located in seven different **continents**:

- Europe
- Africa
- North America
- South America
- Asia
- Oceania
- Antarctica



Antarctica is a special case. The continent contains no countries, instead it is governed under a 1959 agreement called the Antarctic Treaty which was signed by 12 nations, including the United Kingdom.

Globes often have lines depicted on them that help us to identify the location of places around the world. The equator is an imaginary line that splits the Earth in two; the Northern Hemisphere and the Southern Hemisphere. The Earth is split further by lines of latitude (lines that tell us how far north or south from the equator a place is) including the Arctic Circle, The Tropic of Cancer, The Tropic of Capricorn and the Antarctic Circle. Lines of longitude also split the earth, they tell us how far east or west a location is from the Prime Meridian line. In between the Tropic of Cancer and the Tropic of Capricorn is an area of the Earth where the sun can be directly overhead at some points in the year.

Longitude etymology, from Latin *longitudo*, from *longus* 'long'. Latitude etymology, from Latin *latitudo* 'breadth', from *latus* 'broad'.

Lesson 2

Scale



The top of most maps is north and a compass can be used to find which direction north is. Compasses show four directions - north, east, south and west.

The needle always points north, so when that is lined up with the map it is easy to see in which direction things are.

Maps are not drawn to the same size as the ground because they would be far too big! Instead they are drawn to a smaller scale.

The scale on a map is a set of numbers that can be used to compare distances and can be written, for example, as 1:25,000.

This means that the actual size of the ground is 25,000 times bigger than it is on the map.

The same scale can also be written as 4cm to 1km, so every four centimetres on the map is one kilometre in real life.

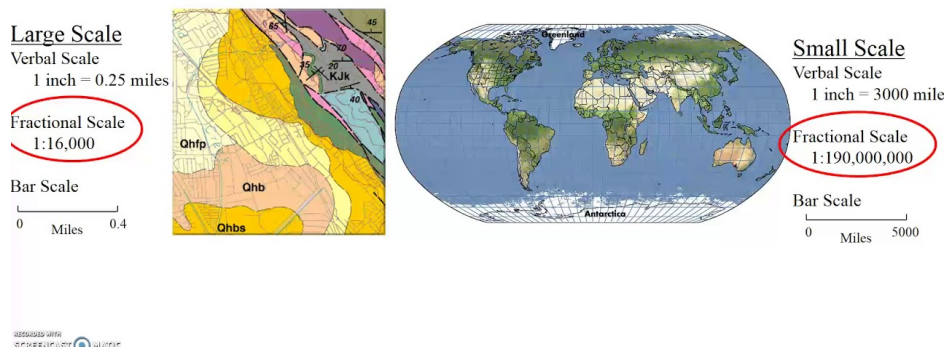
A map that uses scale usually has a scale bar that gives you the information you need to work out distance between two places.

A map that shows a small area in lots of detail is called a large-scale map. These maps are useful if you are walking around a place and need to know where footpaths are.

A map that shows a large area with very little detail is called a small-scale map. These maps might be more useful if you are driving or flying over an area. Scale is useful for working out distance between two places and helps us to plan journeys.

Large Scale vs. Small Scale

- Large scale – large amount of detail; can only show small area
- Small scale – small amount of detail; can show a large area



Lesson 3

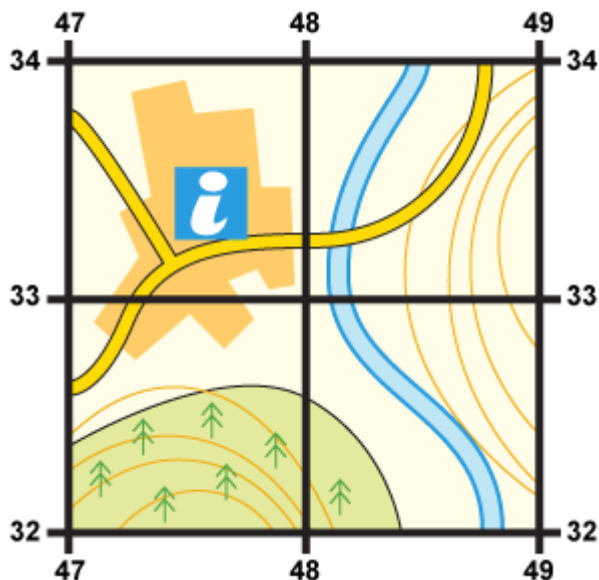
Grid References (revising Y3)



Grid references are a tool for identifying specific locations on a map. A simple grid reference consists of two pieces of information, sometimes a letter and a number, sometimes two numbers. Horizontal lines on a grid will have each square labelled with a letter or number. Horizontal lines on a map are called eastings. The number on each horizontal line increases to the east. The vertical lines are called northings as the numbers increase to the north.

There are two parts to a grid reference:

- The 1st **letter** or **number** tells you how far across the map something is.
- The 2nd **letter** or **number** tells you how far up the map something is.



Four-figure grid references can be used to pinpoint a location to within a square. To find the number of the square:

Start at the left-hand side of the map and go east until you get to the bottom-left-hand corner of the square you want. Write this number down.

1. Move north until you get to the bottom-left corner of the square you want. Look at the number of this grid line and add it to the two-digit number you already have. This is your four-figure grid reference.

In this case, the tourist information office is in grid square 4733.

Lesson 4

Our Local Area

"I can think of few better ways to help young people become more knowledgeable, engaged with and perhaps respectful of their local environments and communities than to get them studying their local area – from its historical geography to the current social, environmental and economic processes shaping the places they live in." Dr Rita Gardner, Director, Royal Geographical Society



Our local area is called Walsoken. It is a settlement and civil parish which is conjoined as a suburb of Wisbech. The name Walsoken is thought to originate from the [Old English](#) meaning *the district under particular jurisdiction by the wall*^[3] which refers to the villages proximity to a [Roman](#) sea wall or defence.

The village and parish of Walsoken is situated in the west of Norfolk on the border with [Cambridgeshire](#) – most of the original village now lies in Cambridgeshire but All Saints Church lies in Norfolk.^[11]

The village is a suburb of the fenland town of [Wisbech](#) and its ancient character and historic core have been surrounded by modern housing.^[12] The parish is south of [West Walton](#), north of [Emneth](#) and west of [Marshland St James](#).

Walsoken is approximately 47 miles (80 km) west-north-west of [Norwich](#), 11 miles (20 km) west-south-west of [King's Lynn](#) and 80 miles (100 km) north of London. The suburb and parish is 1 mile (1.6 km) east-north-east of the centre of Wisbech. Walsoken is to the east of the [B198](#) which was the old A47 renumbered in 1984 with the opening of the Wisbech bypass.^[13]

The nearest railway station is at [Downham Market](#) for the [Fen Line](#) which runs between [King's Lynn](#) and [Cambridge](#). The nearest airport is [Norwich International Airport](#).



Lesson 5

Our Local Area- Changes over Time



Roman settlement

Archaeological evidence has found that much of the land of Walsoken of pre-Roman occupation was completely submerged beneath the Iron Age silts. It is thought that some dry land existed within the parish in the Bronze Age as several artefacts from that time period were uncovered in the 19th century. There has been a lot more archaeological evidence found to attest to Roman occupation in the parish, including a dispersed hoard of 300 to 400 Roman coins.

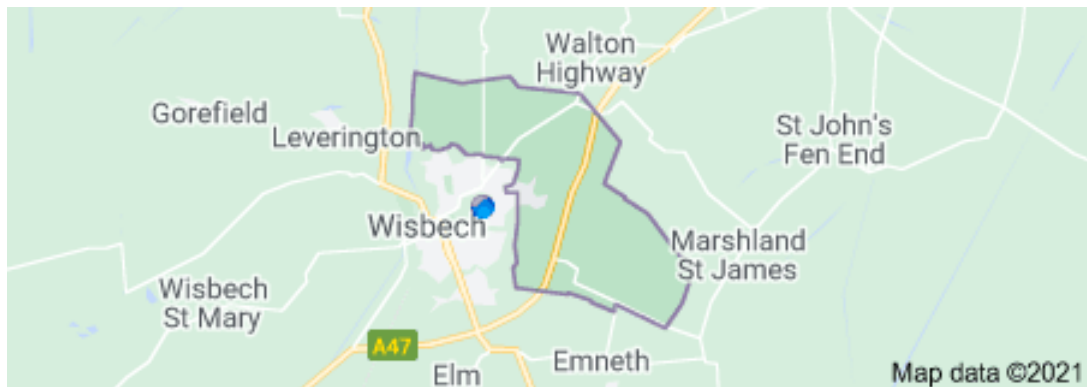
Medieval period

Ailwin (or Aethelwine), earl of East Anglia, gave 5 hides at Walsoken to Ramsey Abbey.

The settlement's population, land ownership and productive resources were detailed in its entry in the *Domesday Book* of 1085. In the great book, Walsoken is recorded by the name 'Walsocam', which was held by the Benedictine Order based at Ramsey Abbey before and after 1066. The survey also records the presence of a fishery.

Amalgamation with Wisbech

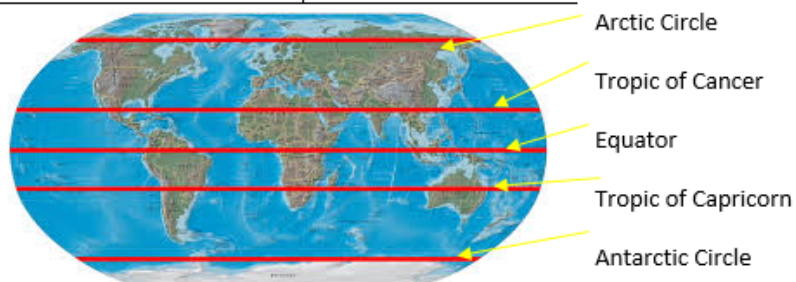
The county boundary between Norfolk and the Isle of Ely based on the old course of the Welle Stream through the built-up area, dividing up roads and streets haphazardly. Wisbech and Walsoken were amalgamated in April 1934 – a boundary marker stone in Wisbech Park



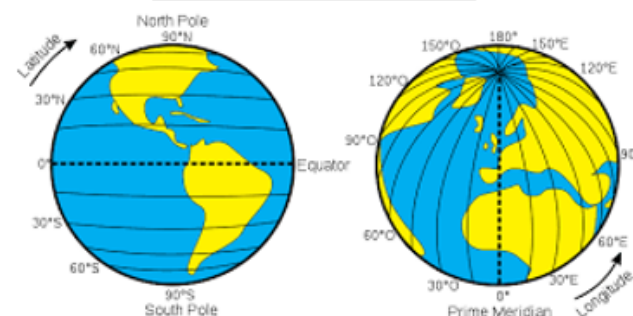
records the event and bears the names - Joseph Smith, Mayor of Wisbech and Thomas Burling, Warden of Walsoken. Part of the ecclesiastical parish was transferred to the Isle of Ely from Norfolk. As a result the church remains in Norfolk and the village hall, cemetery, schools and most shops are now in the New Walsoken part of Wisbech.

Knowledge Organiser- Spatial Sense (Geography Year 4)

Key Vocabulary	Definition
Lines of Latitude	Imaginary lines that help us identify how far north or south of the equator a location is.
Lines of Longitude	Imaginary lines that help us identify how far east or west of the Prime Meridian a location is.
Equator	An imaginary line that shows us the locations that are half way between the north and south pole. The Equator divides the earth into the Northern Hemisphere and the Southern Hemisphere.
Prime Meridian	The line of longitude that measures 0° and runs through Greenwich in London.
Tropic of Cancer	The most northern line of latitude where the sun can be directly overhead. Named after the constellation of Cancer.
Tropic of Capricorn	The most southern line of latitude where the sun can be directly overhead. Named after the constellation of Capricorn.
Scale	The representation of distance on a map.



Lines of Longitude and Latitude



Map Scale

a) (1 centimeter represents 250 meters)

b) 1: 25 000

