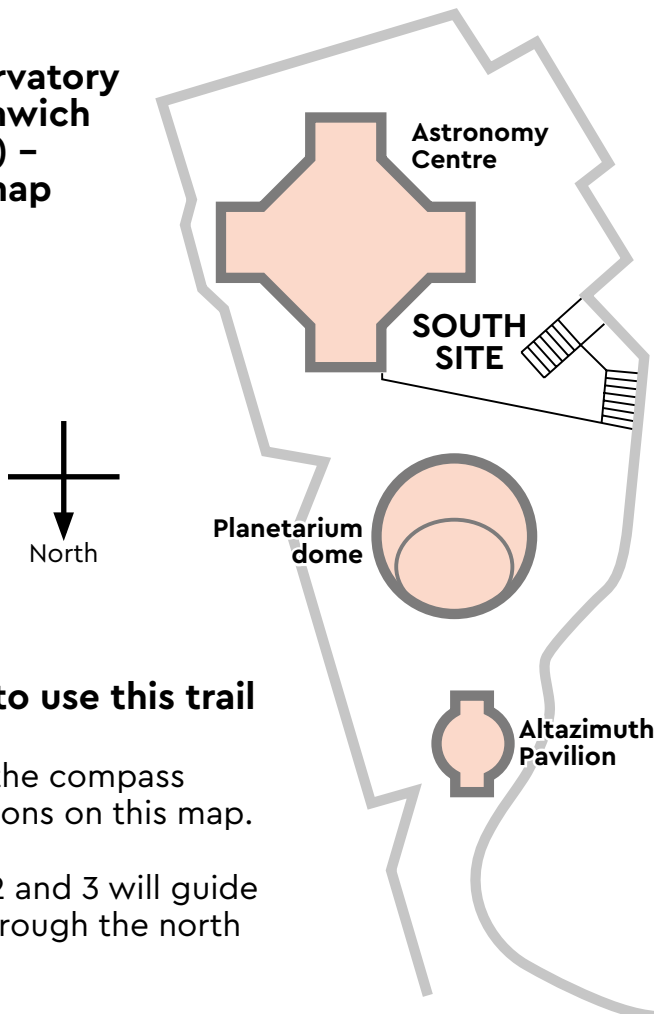


# KS3 School Trail



## Royal Observatory Greenwich (ROG) – site map



## How to use this trail

Fill in the compass directions on this map.

Page 2 and 3 will guide you through the north site.

Read the instructions to each section carefully and then try the outlined activities.



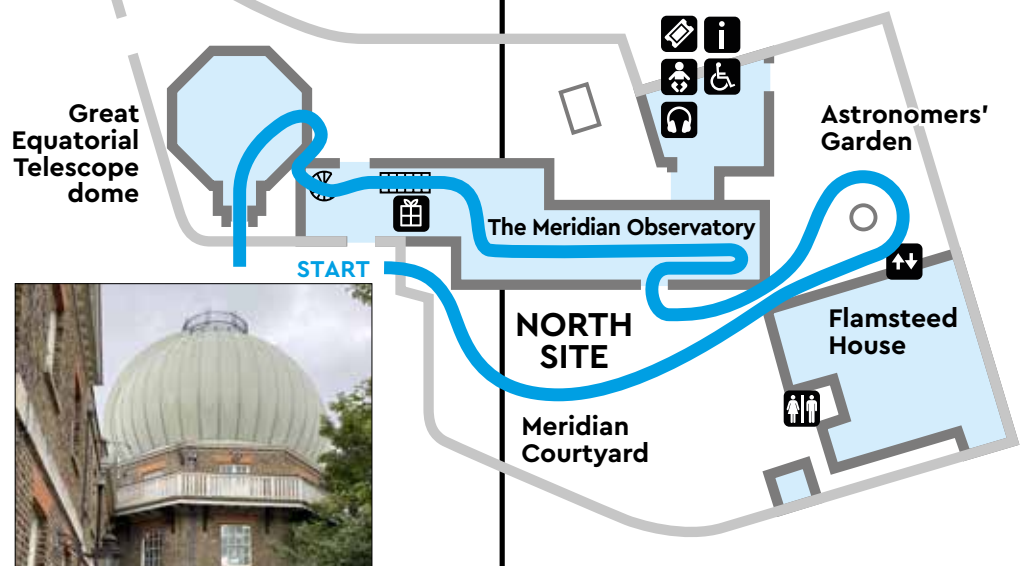
PRIME MERIDIAN

## Telescopes and mapping the skies

King Charles II founded the Royal Observatory in 1675 to help people all over the world find out where on Earth they were.

It all began by mapping the skies to work out the motion of things like the stars, Sun and Moon. Telescopes allowed astronomers to see what our eyes couldn't and have helped us make some very important discoveries.

This trail will highlight many of the Royal Observatory's telescopes and show how they were used to map the skies and discover incredible things!



# KS3 School Trail – NORTH SITE

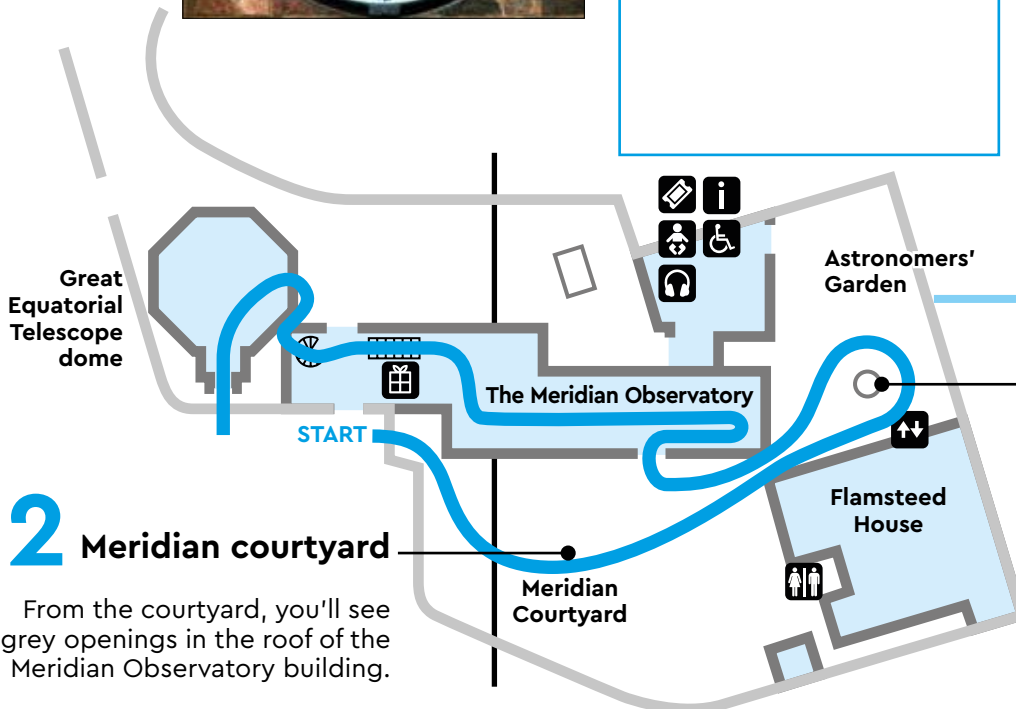


1

Before you enter the site, you'll see the Shepherd Gate Clock. Can you work out what's unusual about the dial?

## Fun Fact

This public clock was important as not everyone had their own accurate watch. If you didn't have access to the time you could even sometimes pay someone to tell you the time! This was the job of Ms Belville until 1940. You can learn more about her in the Time and Greenwich gallery



2

## Meridian courtyard

From the courtyard, you'll see grey openings in the roof of the Meridian Observatory building.

Do the openings in the roofs run north to south or east to west?

Telescopes were later built inside domes. The opening could then be rotated making observations easier!

The Sun seems to move across the sky throughout the day and, at night, the stars appear to move too. But they're not actually moving! Can you explain why?



Look around – how many telescope domes can you spot?

3

## Dolphin sundial

Look out for the Dolphin Sundial. Sundials are used to tell the time by using the shadow cast by the sun.



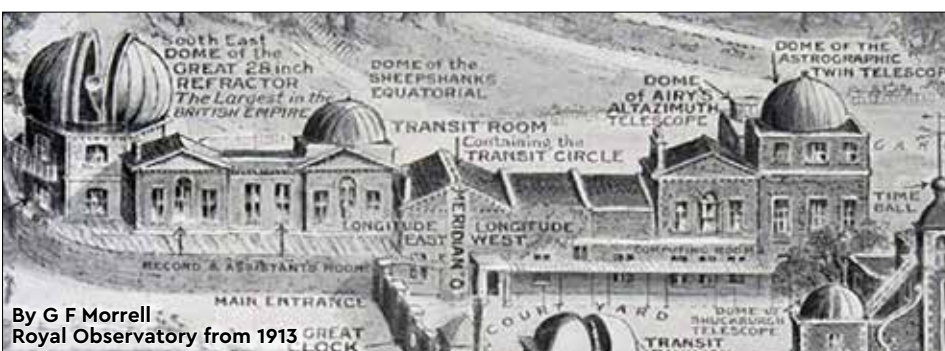
Find the time, by looking at where the gap in the shadow falls on the curved plate (where the shadows of the dolphins' tails almost meet).

Dolphin Sundial time

Watch / phone / clock time

The Sun is currently in the direction of:

(Use the compass/map on page 1 of this trail to help you).



By G F Morrell  
Royal Observatory from 1913

Circle on this diagram, all the domes you can see which still exist today.

# KS3 School Trail – NORTH SITE



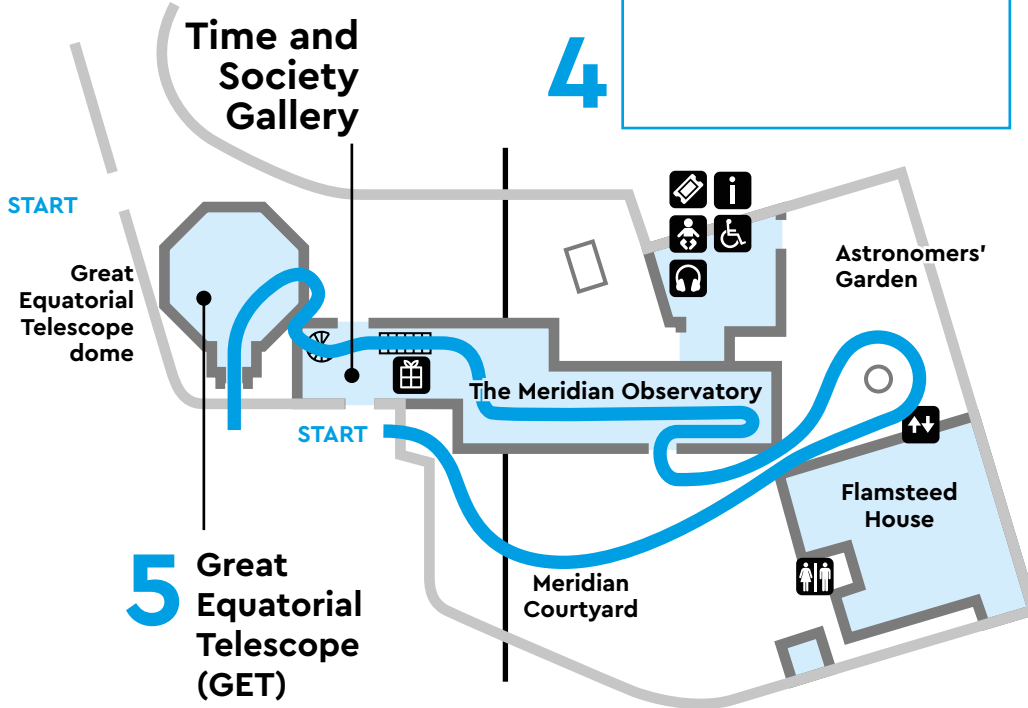
Walk through the Meridian Observatory Building until you reach the gift shop. Go up the stairs to the **Time and Society Gallery** – look for a telescope dome.

This telescope dome is called:

It once housed the **Sheepshanks Equatorial telescope** – it's now in storage, but in its glory days:

It helped to observe...

It helped to measure...



From the Time and Society Gallery – walk up the spiral staircase to the **GET** dome!!

A surprising fact about the GET is...

Sketch the GET and add the following labels:  
28-inch lens, equatorial mount, eyepiece, finderscope, main telescope tube.



## Fun Fact

Notice that the telescope mount is angled – it's angled at 51 degrees – the same as the latitude of London – we're 51 degrees North of the Equator! Equatorial telescope – mount is angled to match its latitude.

