SCIENCE MUSEUM

GALLERY GUIDE

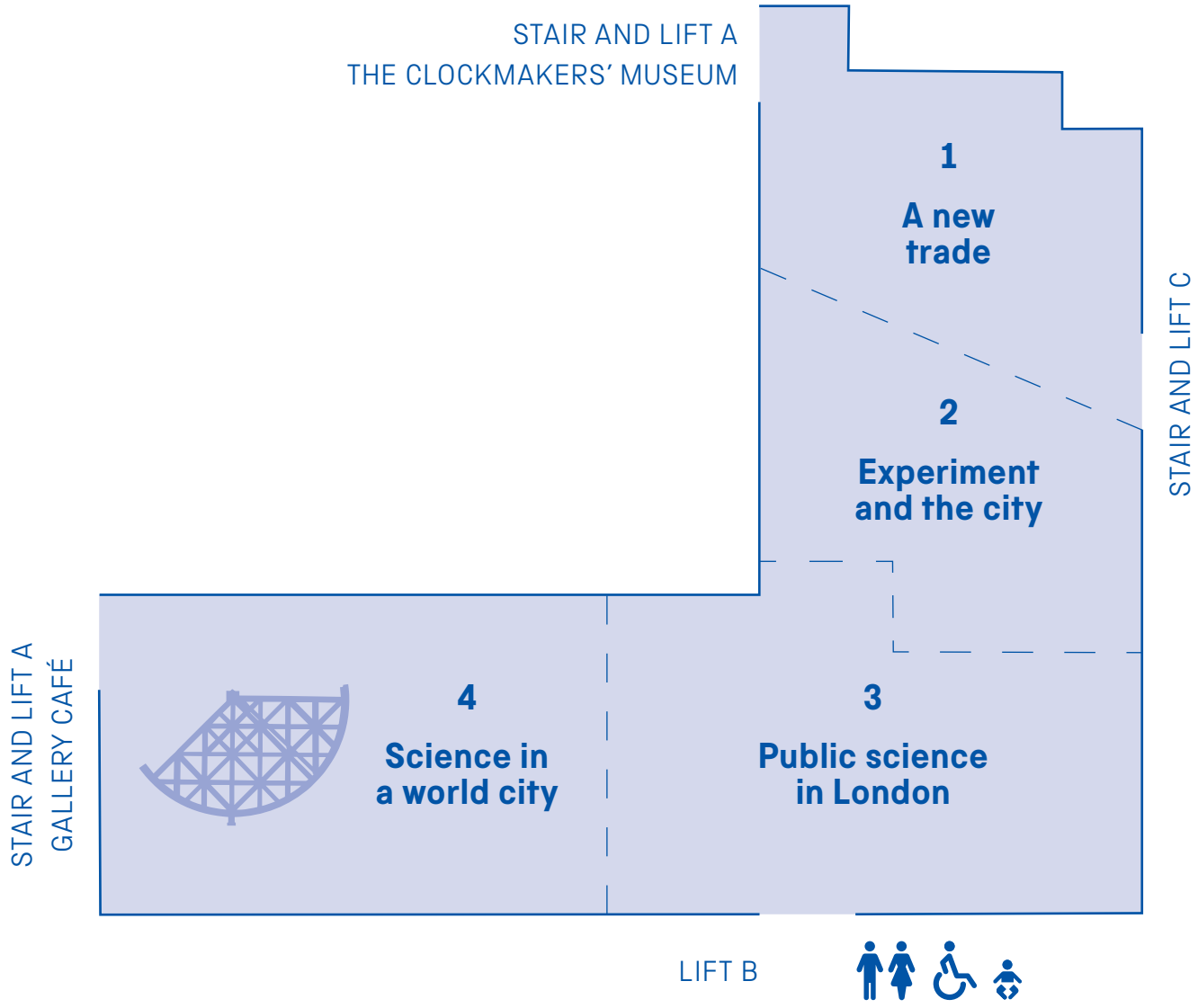
SCIENCE CITY: 1550–1800
THE LINBURY GALLERY

INFORMATION	Ages	Topics
i	14–16	SCIENCE AND TECHNOLOGY HISTORY
	Location	LEVEL 2, SCIENCE MUSEUM, LONDON

Science City 1550–1800: The Linbury Gallery explores how science shaped London, and London shaped science.

In 1550 London was a modest commercial centre. But by 1800 it had become a powerful world city. This gallery reveals how science was at the heart of this transformation.

Over this period, science changed dramatically too. We now take for granted that experiment and precision measurement are powerful ways to understand the world, but this wasn't always the case. Over these 250 years, science became much more like the modern science we are familiar with today – and London played an important role in these changes.



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1 A new trade

Mathematics was key to much of the practical business of commercial London – including for taxation and trade, surveying, navigation and architecture. It was during the 1500s that calculating and measurement devices could be purchased from London-based craftsmen for the first time.

Don't miss... Compendium by Elias Allen, 1630–1653
Elias Allen was the first instrument-maker in London to earn a living solely from his craft. This multifunctional instrument combined a sundial, compass and calendar.

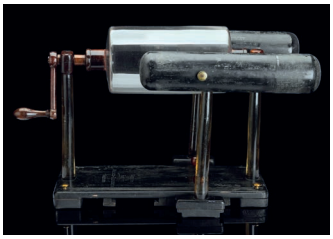
2 Experiment and the city

The Royal Society, founded in London in 1660, championed experiment as a way of investigating nature. However, some people believed these new scientific instruments were not reliable and could create false knowledge about the world.

Don't miss... Air pump by Francis Hauksbee, 1708–1709
Anything from live animals to glasses of beer were placed inside the glass chamber. By cranking the handle, air was pumped from the chamber, creating a vacuum.

Don't miss... Micrographia by Robert Hooke, 1665
People were amazed by the detailed illustrations in Robert Hooke's book Micrographia, which showed the plants, animals and objects he had studied with his microscopes.

3 Public science in London



During the 1700s science became a popular and fashionable pastime. People flocked to lectures and bought books and instruments for their education and entertainment. Electricity and ballooning were among the new scientific developments that fascinated audiences in London and elsewhere.

Don't miss... Grand Orrery by Thomas Wright, modified in 1733
This mechanical planetarium was owned by Queen Caroline. It was used to teach people about the motions of planets, the phases of the Moon, and solar and lunar eclipses.

Don't miss... Electrical machine, 1782–1793
This instrument used friction to charge the glass, which could then generate sparks and shock bemused spectators. People viewed electricity as a mysterious but potentially very useful phenomenon.

4 Science in a world city

By 1800 London was a major hub of international trade and a world-leading centre of science. Ambitious scientific projects, administered from the city and equipped with innovative instruments from London's workshops, revealed new knowledge about the world.

Don't miss... Three-foot geodetic theodolite for measuring horizontal and vertical angles, 1791
In 1791 surveyors began to accurately map Britain for the first time – a project known as the Ordnance Survey. They used this instrument and the principles of trigonometry to work out precise locations.

Don't miss... 'Selenographia' Moon globe, 1797
This was produced by an artist called John Russell. One side is completely blank because the Moon's rotation means one side is always invisible from Earth.

Talk about...

As you explore the gallery, think and talk about how science developed in this period and how was different to the science you study at school.

- What interests or surprises you about what you've seen in the gallery?
- Can you think of any everyday items that are linked to a discovery seen in the gallery?
- What would the world be like without science?
- How is science still developing now?

Make the most of your visit

There are scenes featured in all four sections of the gallery that are designed to give you a snapshot of that moment in time. Have a closer look at the hands and shadows and build an image of what people at that time may have looked like. There is also a video of makers today using their craft to produce some objects, a few of which are available to touch.

Explore more...

Your journey of discovery doesn't have to stop when you leave the gallery. Head to *The Clockmakers' Museum* nearby on level 2 to learn about the history of innovation in watch- and clockmaking in London from 1600 to the present day.

Continue your experience back in the classroom and at home. The Science Museum website features a range of hands-on activities which you can use to investigate the science in your world.