

# SCIENCE MUSEUM

# EXHIBITION GUIDE

## THE SUN: LIVING WITH OUR STAR

INFORMATION <b>i</b>	Ages	9-11 11-14	Topics SCIENCE AND TECHNOLOGY, MATHEMATICS, HISTORY
	Location	LEVEL 1, SCIENCE MUSEUM, LONDON	

***The Sun: Living With Our Star*** tells the story of humankind's ever-changing relationship with our closest star and how it shapes many of the most fundamental aspects of our daily lives.

As you move through the four sections ('Days and Years', 'Sunshine and Health', 'Power from the Sun' and 'Observing the Sun') you can explore over 150 intriguing objects and 20 digital exhibits, from health to timekeeping. Find out how science and technology have altered the way we think of, experience, use and are affected by our nearest star.

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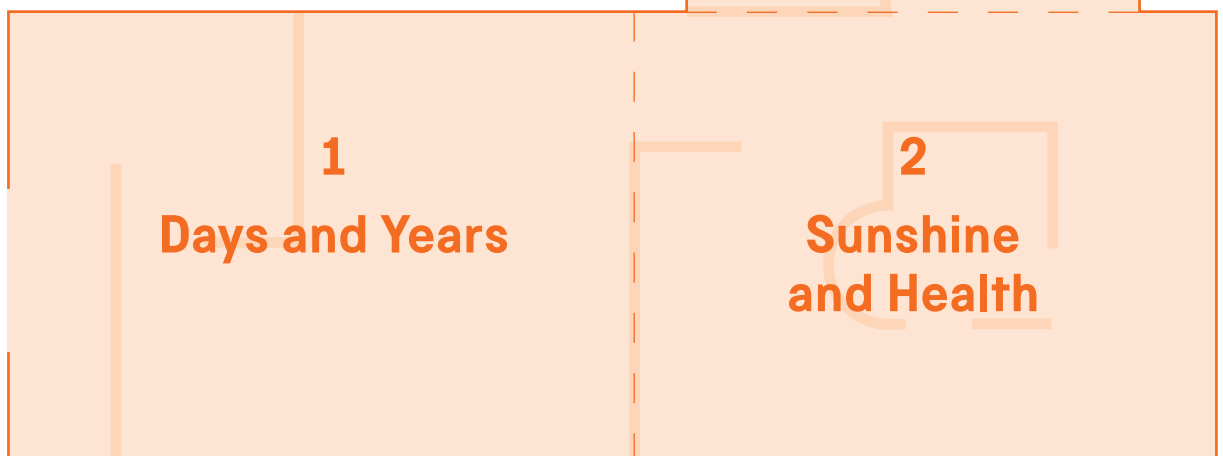
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ENTRANCE



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# 1 Days and Years

The motion of the Earth around the Sun gives us time: our days, years and seasons. Throughout history, people have created models and instruments to understand the Sun's journey across the sky and organise their lives.

**Don't miss: Orrery clock, about 1830  
(and the film showing it working)**

The gears of this clock are connected to the model of the Solar System above it. As time passes, the Earth rotates once each day and orbits the Sun once each year.



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# 2 Sunshine and Health

The Sun has a profound effect on our bodies and health. It can help to fight disease and improve our physical and mental wellbeing. Today, we are increasingly aware of the damaging effects of sunlight, including skin cancer.

**Don't miss: Child's spinal carriage, 1890–1920**

This carriage wheeled children with tuberculosis into sunlight. By removing them from unsanitary slums, sanatoriums gave children access to much-needed fresh air and nutritious food.

**Don't miss: Prototype body cooling unit, 1978–1981**

Designed for people suffering from sunstroke during the pilgrimage to Mecca, this bed uses a combination of cold mist and warm air to lower body temperature.



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# 3 Power from the Sun

Our planet basks in a steady stream of energy from the Sun. Throughout history, we have used that energy by transforming it into electricity, trapping sunlight as heat and even attempting to re-create the Sun's power here on Earth.

**Don't miss: Solar cooker, 1953**

In areas with limited access to electricity you can use the Sun's rays to cook food. This cooker focuses sunlight, creating temperatures high enough to make a hot meal.



## 4 Observing the Sun

Throughout history, people have explored the secrets of the Sun, using observation and scientific instruments to discover new knowledge. Today, we are striving to better predict the behaviour of the Sun and understand the impact it has on our lives.

### **Don't miss: Tinfoil hat – part of the solar storm survival kit, 2018**

If a solar storm hit Earth it would disrupt the technology that we rely on every day. Explore which items you would need to survive.

### **Don't miss: Norman Lockyer's seven-prism spectroscope, 1868**

Lockyer used this instrument to split light and discover a new element in the Sun, which he named helium after Helios – the Ancient Greek god of the Sun.



### Talk about...

As you explore the exhibition, or back at home or school, think about how the Sun connects to our everyday lives:

- What interests or surprises you about what you have seen in the exhibition?
- What words would you use to describe the Sun?
- What would your life be like if there were no clocks?
- How does being out in sunshine make you feel?
- Would you like your toys or video games to be powered by the Sun's energy?
- What items would you choose to survive a solar storm?

### Make the most of your visit

The finale to the exhibition features floor-to-ceiling footage of the Sun taken from a NASA spacecraft. Throughout the exhibition there are hands-on exhibits to explore: take a selfie with digital sunglasses, light up a tower using solar energy, or even predict and survive a solar storm. Think about the impact of the Sun on your life and use the questions in the 'Talk about' box to generate discussion.

### Explore more...

Your journey of discovery does not stop when you leave the exhibition. See how the Sun has impacted on our everyday lives. Visit the hands-on *Wonderlab* gallery to explore the properties of light in the Light zone, then marvel at a miniature Solar System with the Orbits exhibit in the Space zone.

See a solar-powered car from 1998 in the *Making the Modern World* gallery. Or visit the Wellcome Wing to discover the story of BepiColombo, a mission to Mercury which uses the power of the Sun for energy and a spectroscope to study the planet.