Welcome to Team Webb! You are about to embark on one of the most difficult space missions of all time. You will oversee the design, engineering, construction and launch of the most powerful space telescope that has ever existed. And that’s just the beginning...

Your groundbreaking telescope will be able to spot the first galaxies ever formed, peer inside dusty cocoons where new stars are born and even study the air around alien planets. Once you have safely launched it, you will use your telescope to collect data and report back on what you discover.

Go forth, brave explorer. We are waiting to see the Universe through your eyes!

GOOD LUCK!
Olivia Johnson
and the Space Crew
TO SPACE AND BEYOND...

Do you ever wonder what’s out there in the Universe?

Hi space explorers, ESA Astronaut Tim Peake here!

When I was on the International Space Station, I’d look out of the window and imagine what we might find if we could travel into deep space. If you had the power to see more of the Universe than anyone has before, what would you want to discover?
**The Sky at Night**

Long before there were telescopes, humans observed stars and planets with the naked eye. What can you see when you look up at the night sky? Plot the coordinates below to reveal a star formation you may recognise!

<table>
<thead>
<tr>
<th>Star Name</th>
<th>Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dubhe</td>
<td>x -3, y -3</td>
</tr>
<tr>
<td>Merak</td>
<td>x -5, y -1</td>
</tr>
<tr>
<td>Phecda</td>
<td>x -3, y 1</td>
</tr>
<tr>
<td>Megrez</td>
<td>x -1, y 0</td>
</tr>
<tr>
<td>Alioth</td>
<td>x 1, y 1</td>
</tr>
<tr>
<td>Mizar</td>
<td>x 3, y 2</td>
</tr>
<tr>
<td>Alkaid</td>
<td>x 4, y 4</td>
</tr>
</tbody>
</table>

Use these symbols to mark each star on the grid.

Do you recognise this star pattern?

Zap for the answer.
Throughout history, humans have used the night sky as a map, a clock and a calendar. But before telescopes were invented we didn’t always understand our Solar System, especially where Earth was in relation to other planets...

Ancient Diagram of our Solar System

Modern Diagram of our Solar System

What do you notice about the diagram on the left? Can you draw your own diagram of the Solar System based on our knowledge of it today? What have we learnt?
Throughout the history of astronomy, each new technology has enabled us to discover more and more about the Universe. Travel back in time and draw what each telescope has shown us.

Hi space explorers, I’m Gillian Wright and I lead a team working on the James Webb Space Telescope. Webb has the potential to see the most distant galaxies in the Universe. Can you imagine what astronomers saw, or might see, through each of these breakthrough telescopes?
What have you learnt about the history of space observation? Create your own true or false quiz and test your friends!