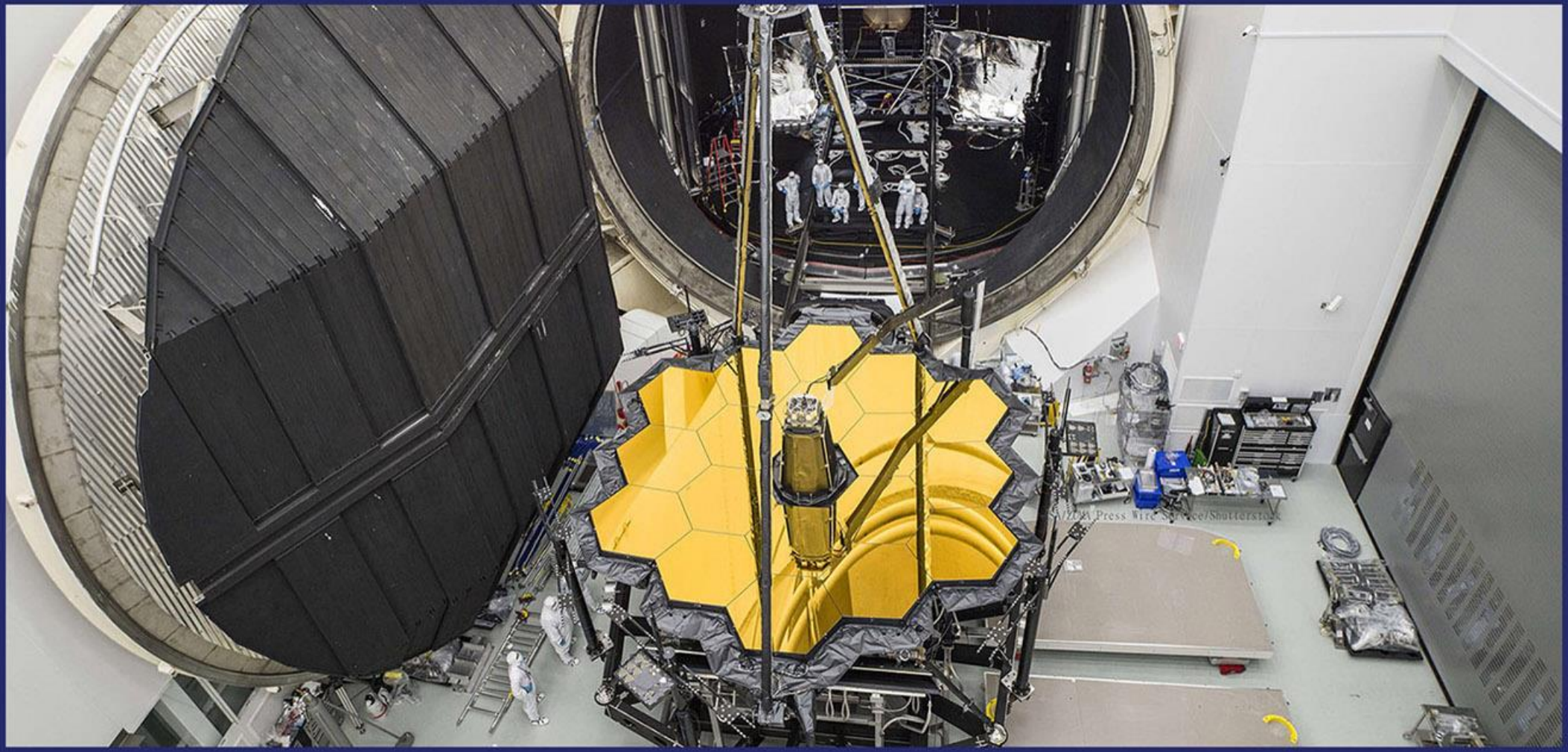
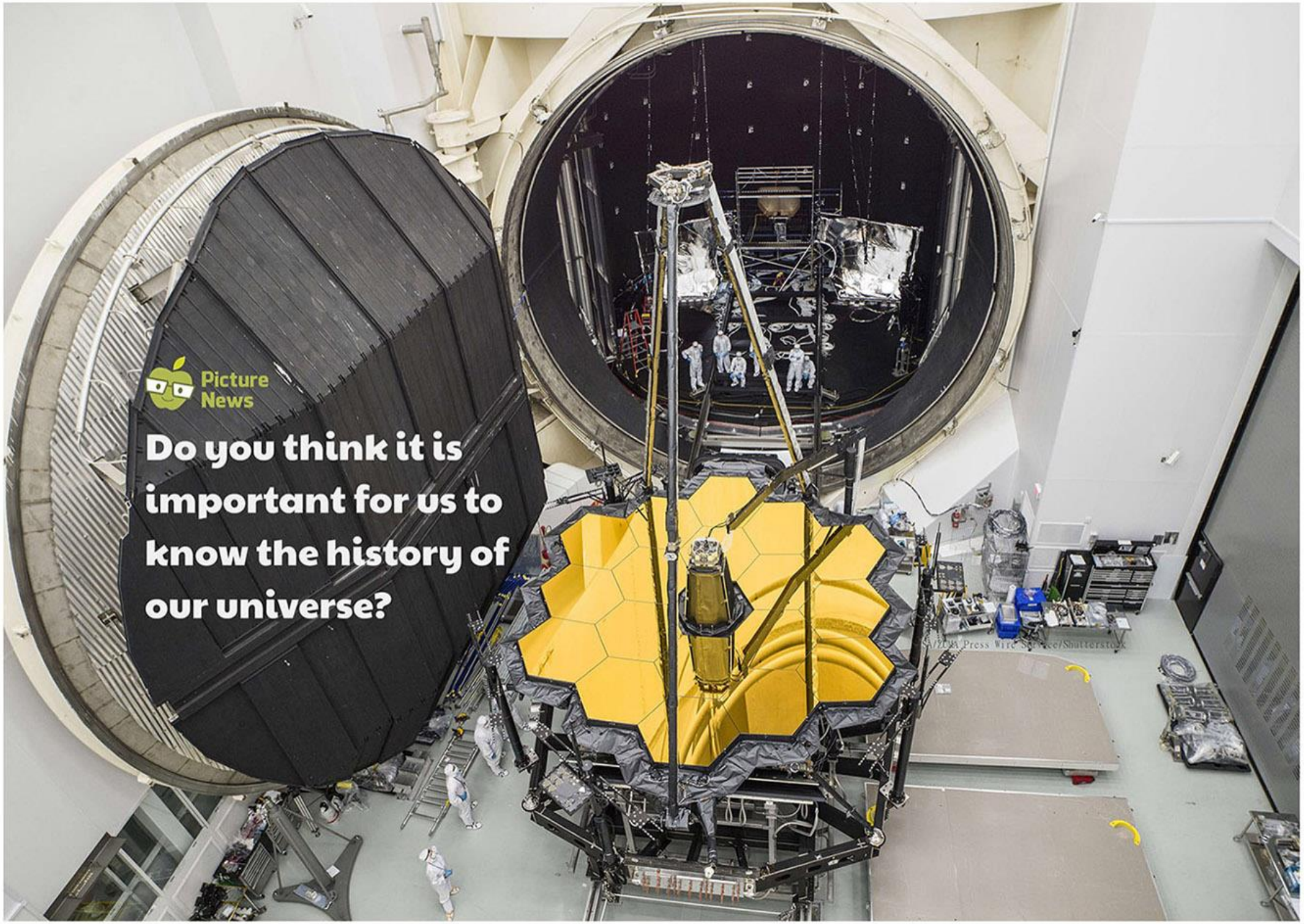
What's happening in the news this week?

Picture News



Let's have a look at this week's poster!

10th - 16th January 2022


Picture News
Do you think it is important for us to know the history of our universe?

Let's look at this week's story

The $10bn (£7.45bn) James Webb Space Telescope, thought to be one of the most impressive and ambitious, has been sent into space on top of a huge rocket. On Christmas Day, scientists confirmed that the observatory, which has faced many delays, was operating well following a nerve-wracking lift-off. Described as a time machine by scientists, the telescope will allow astronomers to study the beginning of the universe shortly after the Big Bang, 13.8 billion years ago, and to hunt for signs of life-supporting planets in our own galaxy.

Learn more about this week's story here.
Watch this week's useful video here.
This week's Virtual Assembly here.

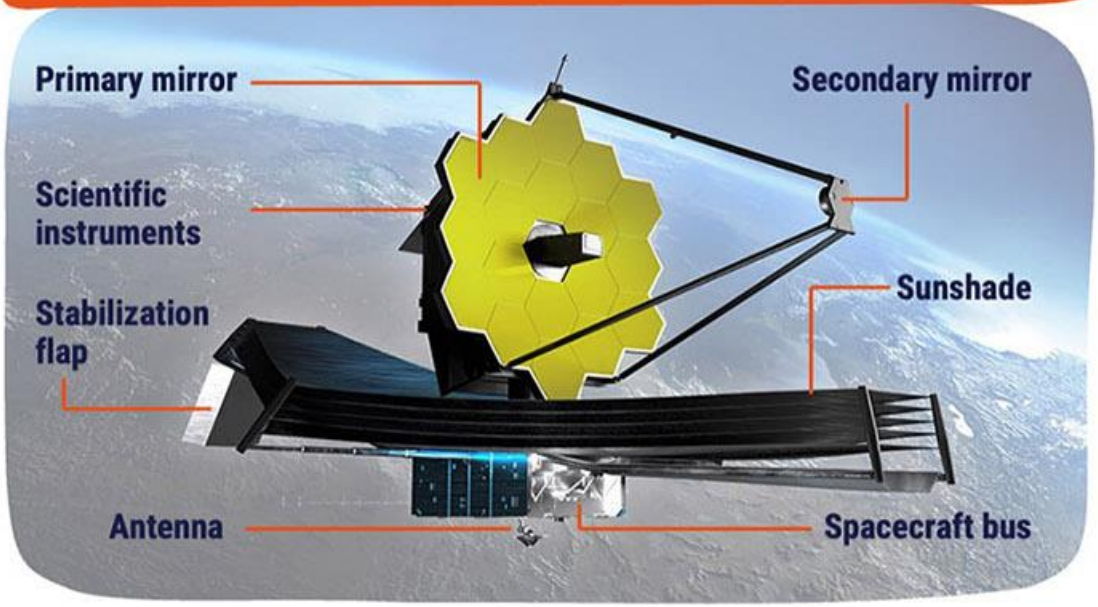
How does it make me feel?

sad	angry	happy	confused	excited	worried	shocked	afraid
despondent	aggrieved	beaming	addled	animated	agitated	astonished	alarmed
disconsolate	annoyed	buoyant	baffled	elevated	anxious	astounded	apprehensive
dismal	discontented	cheery	bemused	enlivened	apprehensive	disconcerted	daunted
doleful	disgruntled	contented	bewildered	enthusiastic	concerned	distressed	fearful
downhearted	distressed	delighted	disorientated	exhilarated	disquieted	dumbfounded	frantic
forlorn	exasperated	enraptured	indistinct	exuberant	distraught	horrified	horrified
gloomy	frustrated	gleeful	muddled	thrilled	distressed	staggered	petrified
melancholic	indignant	glowing	mystified		disturbed	startled	terrified
miserable	offended	joyful	perplexed		fretful	stunned	
woeful	outraged		puzzled		perturbed	surprised	
wretched	resentful				troubled		
	vexed				uneasy		

ASSEMBLY RESOURCE

Read the information below, which provides further details about the James Webb Space Telescope.

What is the James Webb Space Telescope?



> **The James Webb Space Telescope represents the ambition that NASA and our partners maintain to propel us forward into the future. The promise of Webb is not what we know we will discover; it's what we don't yet understand or can't yet fathom about our universe. I can't wait to see what it uncovers!**
>
> **NASA Administrator Bill Nelson**

What kind of things do you think we might learn from the telescope?

The James Webb Space Telescope is a space telescope developed by NASA, the European Space Agency and the Canadian Space Agency.

One goal involves observing some of the most distant events and objects in the universe, such as the formation of the first galaxies. These types of targets are beyond the reach of current ground and space-based instruments. Some other goals include understanding the formation of stars and planets.

It is a replacement for the Hubble Space Telescope, (pictured right) which was launched in 1990. The telescope is named after James E. Webb, who was a director at NASA and created the Apollo program that put astronauts on the moon.

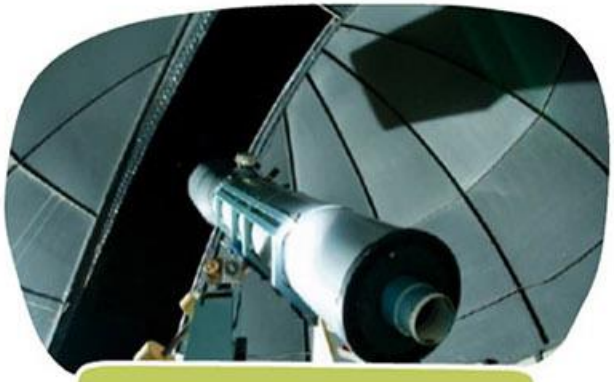
Resource one

Look at the resource below, which shares some information about telescopes.

A telescope uses lenses or curved mirrors to help you see objects that are far away such as planets or stars. There are many different types of telescopes; some are more powerful than others.

These stars were photographed at Bolton Abbey, North Yorkshire. If they were viewed through a telescope, they would appear closer and could be seen in more detail.

Telescope on a tripod



Space telescope

Here we can see a telescopic view of a quarter moon.

Handheld telescope (monocular)

What does the Moon look like when you look at it? Do you think it looks different through the telescope?

Resource two

Look at the resource below, which shares some information about different types of telescopes.

Hubble Space Telescope

The Hubble Space Telescope was launched into space in 1990. It orbits the Earth and collects light using a mirror that is 2.4m in diameter. It can see visible, infrared and ultraviolet light.

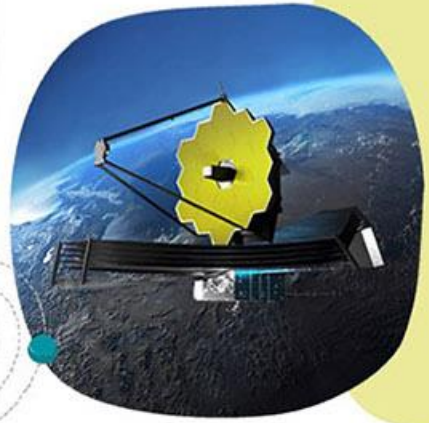
It is 13.2 metres long.

Reflector Telescope

This telescope is a small reflector telescope. A reflector telescope uses one or more curved mirrors to form an image by reflecting light. The lens diameter on this telescope is 7.6cm. Many people buy telescopes like this to use at home. It can be easily transported and the tripod it sits on adjusted.

Astronomy Observatory Telescope

Many telescopes can be found in observatories (a room or building housing a telescope or other equipment for observing natural phenomena). The public can pay to visit this observatory and use the 12-inch (30.48 cm) refracting telescope. It uses a combination of lenses to provide an image of a distant object.



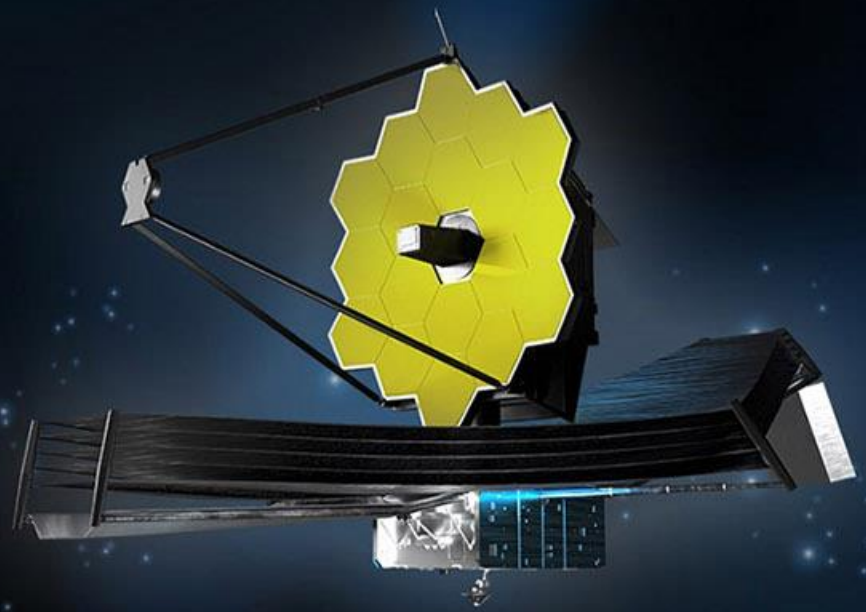
James Webb Space Telescope

This telescope is the largest and most powerful telescope ever built. It is as tall as a three-storey building and as long as a tennis court and it orbits the Sun. It can detect light no other telescope has before using a mirror that is 6.5m in diameter. It will primarily be observing infrared light.

What is similar about each telescope? What is different?

Reflection

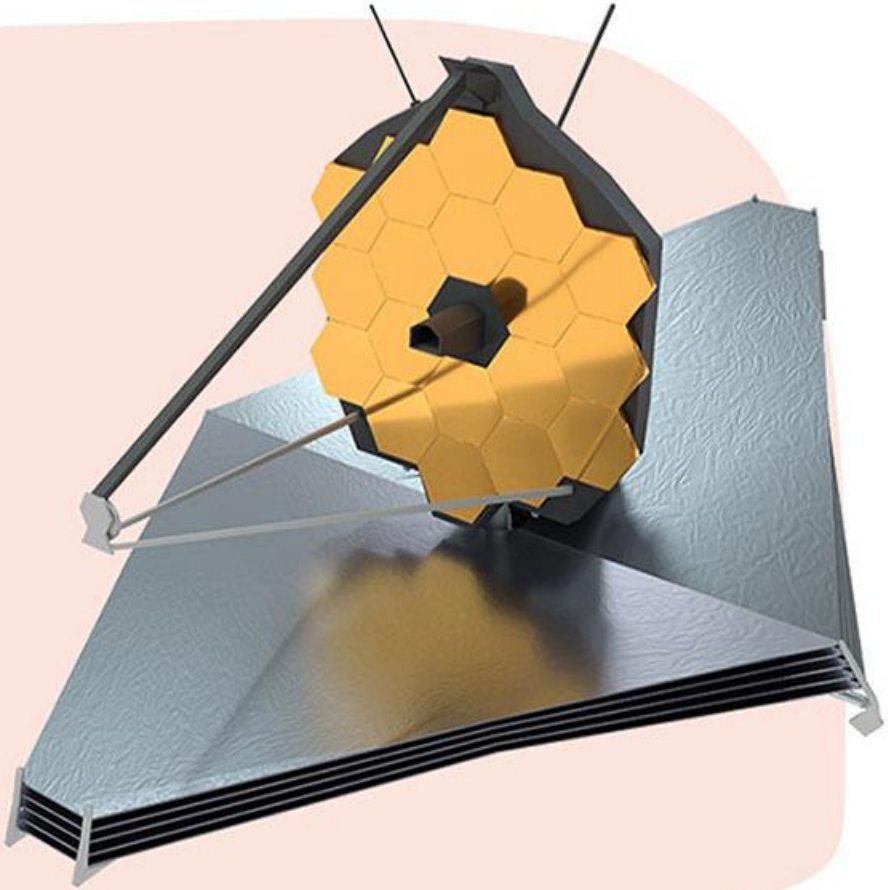
There is so much more we can learn about the universe and the James Webb Space Telescope hopes to shine a light on the past and the history of the universe in which we live.



British Values

Individual liberty

We all have the right to learn about the universe if we choose to. The James Webb Space Telescope may help us discover more than we ever have before!



UN Rights of a Child

We all have the right to get information from the Internet, radio, television, newspapers, books and other sources. These can all help us learn more about our universe.

Useful vocabulary

Ambitious

Needing a great amount of skill and effort to be successful or be achieved.

*The James Webb Space Telescope, thought to be one of the most impressive and **ambitious**...*

Impressive

If an object is impressive, you admire or respect it because it is special, important or large.

*The James Webb Space Telescope, thought to be one of the most **impressive** and ambitious...*

Launched

Sent into space.

*The James Webb Space Telescope, which was **launched** into space on Christmas day.*

Observatory

A location for housing equipment, such as telescopes, used for observing natural phenomena.

*Scientists confirmed that the **observatory**, which has faced many delays, was operating well following a nerve-wracking lift-off.*

Telescope

A cylinder shaped device, that uses either lenses or mirrors, to make distant objects look closer and larger.

*It is the most expensive **telescope** ever made.*

Universe

Everything that exists.

*There is so much more we can learn about the **universe**.*

Can you use them in your writing this week?

IN THE SPOTLIGHT
10th–16th January
YOUR WEEKLY NEWSPAPER

'Fogbows' spotted across the UK

A rare weather phenomenon has been captured in stunning images, published by thrilled visitors to the east coast of England across social media. A fogbow is similar to a rainbow, produced by sunlight shining on fog. Fog is a cloud that touches the ground. Fog can be thin or thick,

> **"The water droplets in mist are nearly always less than 0.1mm in diameter"**

meaning people have difficulty seeing through it. Fogbows are created by the same process of refraction and reflection that creates rainbows, but formed instead by the water droplets in fog, mist or cloud, rather than raindrops. The water droplets in mist are nearly always less than 0.1mm in diameter, much smaller than raindrops, which are typically 1–2 mm across. Due to the smaller water droplets, fogbows appear mostly white, with a red outer edge and blue inner edge. BBC weather forecaster, Dan Holley, said: "...the low cloud and fog thinned along parts of our coast, allowing the sun to break through, while fog persisted inland. This created ideal conditions for fogbows."

Pictured: A stunning fogbow.
Source: BBC Weather Twitter page #WeatherWatchers uWhoAndyR.

Solar parks could boost bee numbers

Researchers at Lancaster University, who have been looking in to how we can help to support our ground-nesting bumblebee populations, have suggested that solar farms could be the perfect new home for the pollinators. They calculated that solar parks, managed as meadows, would support four times as many bumblebees as turfed solar parks. They could also provide other advantages: the owners of the parks that house solar panels would save on maintenance costs as they would have less grass to mow. It is also estimated that the move could help farmers living in a 1km radius by boosting bee numbers on their land too. PhD researcher, Hollie Blaydes, says: "Our findings provide the first quantitative evidence that solar parks could be used as a conservation tool to support and boost pollinator populations. If they are managed in a way that provides resources [such as wildflowers], solar parks could become valuable bumble bee habitat."

Pictured: A typical Bee. **Source:** Canva

Pictured: Professor Homei Miyashita pictured with the TTTV. **Source:** Professor Homei Miyashita's Twitter page

Professor invents lickable 'Taste the TV'

Professor Homei Miyashita, from Meiji University School of Science and Technology in Tokyo, has developed a prototype 'Taste the TV' and hopes that people will soon be able to 'download and enjoy the flavours of the food from the restaurants they fancy'. The device, called Taste the TV (TTTV), is a 'lickable' TV screen that can imitate food flavours. The invention uses a carousel of 10 flavour canisters that spray out in different combinations to create the taste of a specific food. The flavour sample then rolls on hygienic film over a flat TV screen for the viewer to try. Previously, Prof Miyashita and his students have produced several devices related to taste, including 'a fork that makes food taste richer'. A Meiji student demonstrated the TTTV, multisensory experience device by telling the invention she wanted to taste 'sweet chocolate'. An automated device repeated the order and after a few tries, the TV spritzed the sample onto a 'lickable' sheet. "It's kind of like milk chocolate," she said. "It's sweet like a chocolate sauce."

Last week's topic:

Who are school performances for?

I think they are for children to learn how to be more confident.

Eve

I think they are for parents mostly! Some children are nervous.

Millie

I think that everyone can watch a school performance as it could make children feel happy as people are seeing their amazing talent. I also think everyone can see if they are having rough times and if they see children's smile it will make them have happiness.

Angela – age 9

Let us know what you think about this week's news?

www.picture-news.co.uk/discuss

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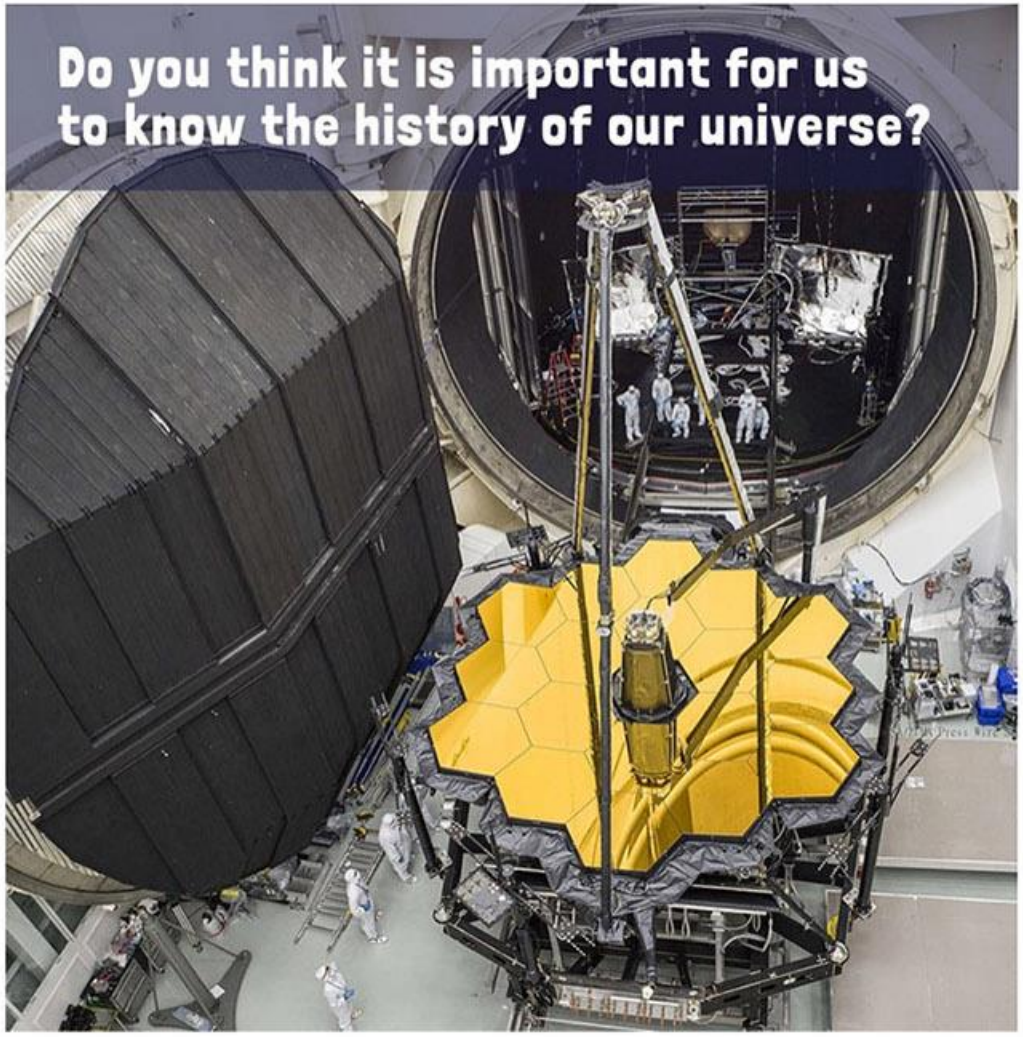
TAKEHOME

10th – 16th Jan



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Things to talk about at home ...

- Have you ever used a telescope? If so, what did you see?
- Does space and the wider universe interest you?
- Do you think it's important for us to learn more about our universe?

Please note any interesting thoughts or comments

Share your thoughts and read the opinions of others www.picture-news.co.uk/discuss