

### What's going on this week?

SpaceX founder, Elon Musk, has a dream of providing the whole world with high speed internet using satellites in the sky. Mr Musk recently announced on Twitter that the firm's Starlink service will be available to certain locations in six months. The project aims to have the devices form a constellation around the planet from a distance of 200 miles to 700 miles above the surface and transmit data to stations and customers on the ground.

### Main question: Who does outer space belong to?

### Listen, think, share

- Look at this week's poster and talk about what we can see. Does anyone know what's happening? Explain that a company called SpaceX have been sending satellites into orbit to provide internet everywhere, including even in the most remote places like the Amazon rainforest! The photo was taken by someone who spotted them flying across the sky!
- Read through the information found on the assembly resource, which provides an overview of what SpaceX do. Do you think the project is a good idea?
- Explain that some people do not think the project should have been allowed to go ahead for reasons such as satellites causing light pollution.
- Watch this week's useful video which shows the satellites flying through space as seen from in the UK. Did you see them? Lots of people noticed them and didn't know what they were! If you had noticed them and not known what they were, what might you have thought?
- Tell the children about the Outer Space Treaty, this is an agreement made by 109 countries to protect outer space and allow anyone to explore. All the countries are in agreement that outer space doesn't belong to one country. As technology gets better and more people are able to send things into space, do you think the treaty may need to change, considering objects we may send, such as satellites, to outer space?

#### Reflection

Outer space doesn't belong to any one of us, but to the universe! Just like we take care of our own planet, Earth, it's important we encourage and support others to ensure the protection of outer space and the wider universe! Picture News

# KS1 Focus

## Question: What are stars?

### Listen, think, share

- Explain that lots of people thought that the Starlink's satellites were stars, as that's what they looked like in the night sky! Do we know what a star is?
- Think about when and where you last saw a star. Can you describe what it looked like?
- Look at resource 1, which gives more information about stars. Does anything surprise you? Did you know that the sun is a star? Do you have any questions or anything else you would like to find out about stars?
- There are many stories we read and songs we sing that feature stars. Can you think of any? Have you heard of Twinkle, Twinkle, Little Star? Can you sing it?
- Stars do not actually twinkle! They only look like they do because the light from the star is deflected (changes direction) before it reaches our eyes.
- Think about how else we might use the word star. Have you ever heard a person being called a star? The word star can be used to describe someone who is famous or incredibly talented e.g. he is a sports star! Have you ever been called a star?

## Reflection

Stars are huge balls of gas, which give off light. Many people think they are wonderful and amazing so sometimes call the people they think are wonderful and amazing a star!



# KS2 Focus

### Question:

What do regulatory bodies do and should we have one for outer space?

### Listen, think, share

- Write the words 'regulatory body'. Have you ever heard of this before? What do you think a regulatory body is? Do you know what regulate means?
- Explain that a regulatory body is a public organisation or government agency that regulates (controls by rules and regulations) an area of human activity. They may set standards for activities and decide requirements, conditions or restrictions.
- There are many regulatory bodies focussing on different areas such as education, transport, health, finance, housing etc. Have you heard of any of the following: Environment Agency, Food Standards Agency, Ofsted (Office for Standards in Education, Children's services and Skills), WHO (World Health Organisation)?
- At the moment, there is no regulatory body for outer space but there is an Outer Space Treaty. Look at resource 2, which shares more information about the treaty. Do you think the 1967 Outer Space Treaty is enough? Should there be a regulatory body?
- Look at some of the newer space activities such as space tourism, lunar and asteroid mining. Should there be clearer guidelines on newer space activities? Why do you think this?

### Reflection

Regulatory bodies are often in place to set and then enforce standards. They can help keep us safe, make things fair and provide us with guidelines.



# KS2 Follow-up Ideas

**Option 1:** Look at the statement 'SpaceX should be able to send satellites into orbit to provide internet to the world'. Do you agree or disagree? Why? Record a list of reasons for and against the statement. Use the information found on the assembly resource and the following to help:

- How would having internet available to the world improve things? How would it help people?
- Would it mean people could be traced and found more easily? Is this a good or bad thing?
- Do you think everyone in the world wants internet?
- Will one company sending satellites into space mean other companies will follow?
- Will it make internet cheaper?

You could use your points to have a debate/discussion at home or write a persuasive letter, sharing your viewpoint.

**Option 2:** Space Art! Create your own space picture. Think about:

- What will be the subject of your picture? A satellite, a star, a rocket, a planet, a constellation?
- What view will you use e.g. looking up into space or down, back at Earth?
- What colours will you use?
- Will you use pencil, crayon, paint or materials or could you create your piece of art using a computer program?



# KS1 Follow-up Ideas

**Option 1:** If you can, look at the sky on a clear night and see if you can see a star! If not, close your eyes and imagine one. Think about the following:

- Can you think of four words to describe your star e.g. bright, shimmering, beautiful, luminous?
- How does the star make you feel e.g. happy, hopeful, sleepy, special?
- Can you think of four words to describe the night sky e.g. dark, huge, black, spooky?

Draw a picture of your star and either record your words around it or use them to write a sentence or even a star poem!

**Option 2:** Use the star maths sheet, cut out the stars and complete the following challenges:

- Order the stars smallest to largest use them to count up to 20 and back from 20.
- Sort them into odd and even numbers.
- Look at the even stars and use them to count up and back in twos.
- Match them to make number bonds to 20.
- Select one star and say the number one more or one less.
- Select one star. What is three more?
- Find the stars that are in the five times tables. What do you notice about them?

You can repeat some of the activities and see if you can complete them faster or use the stars to create your own maths challenges!



This Week's Useful Websites This week's news story www.bbc.co.uk/news/technology-52391758



This Week's Useful Videos Space X's Starlink satellites https://youtu.be/h-S67Y7gEeY



\*\*NEW\*\* This week's Virtual Assembly www.picture-news.co.uk/discuss

# This Week's Useful Vocabulary

Satellite – an object that is sent into space to collect information or for communication. Constellation – a group of stars that form a pattern or shape and have a name.

**Remote** – somewhere that is far away from the places where most people live.

**Treaty** – a written agreement between countries.

**Location** – a place where something happens or is situated.

**Devices** – objects that have been invented for a particular purpose, especially a mechanical or electronic piece of equipment.