

World Space Week UNITED KINGDOM



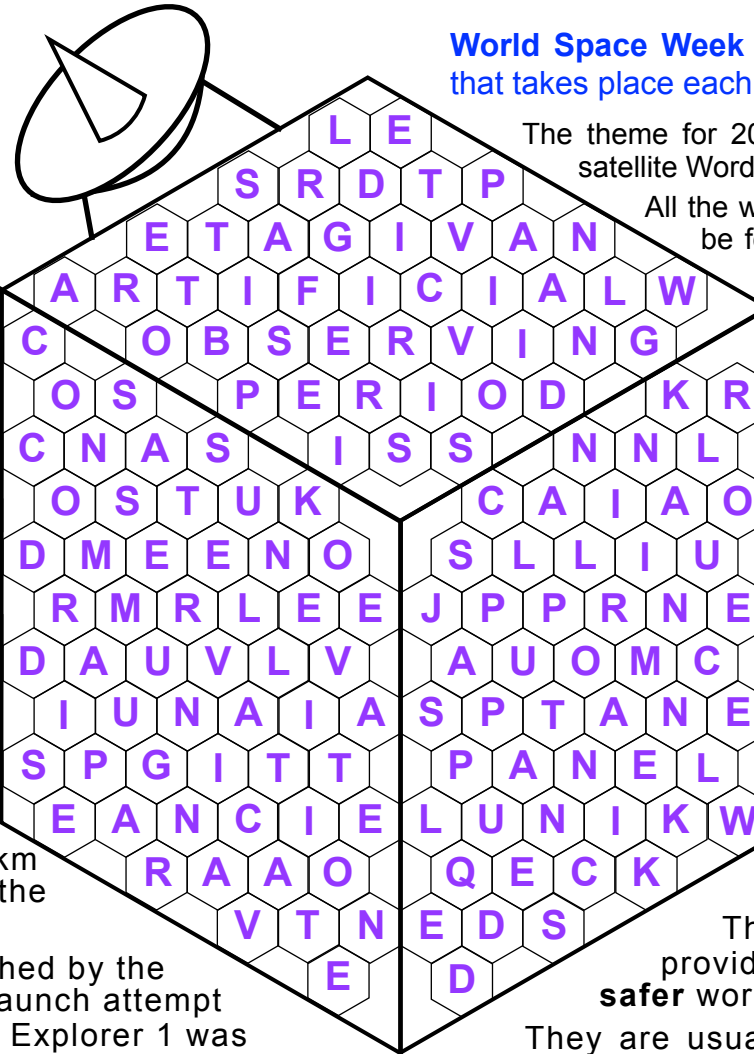
Visit www.bis-space.com/wsw

World Space Week is a global celebration of space exploration that takes place each year from October 4 - 10.

The theme for 2020 is “**Satellites Improve Life**”, so here is a satellite Word-Search.

All the words that are in **bold type** in the text below can be found in the grid - across, down or at an angle - sometimes reading backwards!

When you have found them all, re-arrange the letters that are left over to make something extra!



	U	T	P	C	A	R	T	E
	N	F	O	R	R	A	I	C
	I	A	W	O	T	L	B	A
	O	R	E	P	S	O	R	P
	N	C	R	S	A	P	O	S

S	A	R	L	P	R	H	O
I	N	A	E	R	A	T	I
X	I	D	I	O	L	R	D
T	H	A	R	B	O	A	A
H	C	R	A	E	S	E	R

An **artificial satellite** is a **space craft** in **orbit** around the **Earth**. It could be in Low Earth Orbit (**LEO**), or all the way out to geostationary orbit, 36,000 km high, where its orbital **period** matches the rotation of the Earth.

The first satellite was **Sputnik 1**, launched by the Soviet **Union** in 1957. America’s first launch attempt with its **Vanguard** rocket failed, though Explorer 1 was successfully launched on a Juno rocket in January 1958.

The USA launched the UK’s first satellite, called **Ariel**, in 1962, and then, after France, **Japan** and **China**, the UK became the **sixth** nation to launch its own satellite, called **Prospero**, on 28 October, 1971.

We use satellites in many ways; to **communicate** - e.g. the **TDRS** system, and SKY TV uses the **Astra** series; helping us **navigate** - such as with the **GPS** system; to carry out **research**

in many branches of **science**; and by **observing** the Earth - showing the weather, monitoring **crops** and helping with **conservation**. They also use **RADAR** to make measurements.

They monitor the Earth on a daily basis, providing **rapid** information to help give us a **safer** world.

They are usually placed in **equatorial** orbits, though some are in **polar** orbits. We **uplink** commands and receive data by **radio**. They usually use **solar panels** to charge on-board batteries for **power**.

We have also sent **unmanned probes** to the Moon - such as the **Lunik** series - and to the planets, such as **Venus**.

There are over 2,000 **active** satellites orbiting the Earth. The biggest is the International Space Station - the **ISS** - and we **plan** many more.