SCIENCE NEWS

AT LAST BLAST OFF!

The SpaceX craft blasts into space to link up with the ISS

THE SpaceX Crew Dragon spacecraft finally launched on Saturday, and has successfully docked with the International Space Station (ISS).

Crowds had gathered in Florida for a second time, following a postponed launch earlier in the week due to bad weather. They were rewarded with a spectacular sight as the craft soared into the sky. The company that created SpaceX, owned by the billionaire businessman Elon Musk, has been sending rockets into space for a number of years, but this was a special and historic flight. The two NASA astronauts aboard, Doug Hurley and Bob Behnken, were the first to go into space from US soil in almost ten years. It was also the first time that a manned spacecraft has been launched by a private company rather than a country or group of countries, who have until now paid for all space travel. NASA, the US space organisation, bought the seats for the astronauts in the same way that we buy seats on aeroplanes – except the cost is thought to be around $55 million (about £43m) per seat!

On Sunday, the spacecraft successfully docked with the ISS, which orbits the Earth 250 miles above us while travelling at 17,000mph. The astronauts will stay there with other scientists for about three months, carrying out experiments. They will then return in a Crew Dragon capsule that will enter the Earth's atmosphere and parachute into the Atlantic Ocean.

Doug Hurley (far right) and Bob Behnken (second right) with other crew on board the ISS

A FLYING FUTURE

THE world's largest electric plane has made its first flight.

The all-electric eCaravan, which can carry nine people, took off from a Washington airport and managed to stay in the air for 28 minutes.

The plane is more environmentally-friendly and costs less to operate than normal planes. It's hoped it will be in commercial use in 2021.

LICENCE TO DRILL

PICTURES of the HS2 tunnel boring machines have been unveiled. They will help create the route for HS2, Britain's next high-speed railway. The giant machines will drill under areas of natural beauty, like the Chiltern Hills. They are as long as five football pitches and will run non-stop for three-and-a-half years.

SCIENCE MUSEUM GROUP

This report is from the Science Museum in London

A LOT has changed since humans first travelled to the moon in an Apollo command module, but the new Crew Dragon spacecraft (right) looks surprisingly similar to those used more than 50 years ago.

Crew Dragon craft and the Apollo command module (inset)

The Crew Dragon designed by SpaceX took off on NASA's Demo-2 mission on 30 May.

Like the famous Apollo capsules, the new spacecraft has a cone-shaped design but is more elongated (stretched). It is also larger and can carry up to seven astronauts, while the Apollo 11 command module only had room for a cosy three. And unlike the Apollo 10 capsule that was brought to the Science Museum shortly after its mission, the Crew Dragon will be reused!

Find out more at blog.sciencemuseum.org.uk/crew-dragon.

GLOSSARY		
	commercial – Money-making Chiltern Hills – A range of chalk hills in southeast England running through Oxfordshire, Buckinghamshire, Hertfordshire and Bedfordshire docked – When a craft joins with another	HS2 – High speed railway NASA – National Aeronautics and Space Administration postponed – Re-arranged tunnel boring – Digging out tunnels unveiled – Shown in public

SCIENCE NEWS

1. Match the **headline** to the **type of transport** being reported in the news story. Then identify the **headline technique** the journalist has used.

Rail travel	At last blast off!	Alliteration – where words start with the same sound
Space travel	Licence to drill	Rhyme
Air travel	A flying future	Pun – changing a word in a well-known phrase

● Look at the article 'Licence to drill'.

2a. Explain what a tunnel boring machine is.

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2b. How does the journalist explain just how big these machines are?

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3. If you were interviewing a member of HS2 about the tunnel boring machines, what questions would you like to ask? Write three questions.

1. .....

2. .....

3. .....

● Look at the article 'A flying future'.

4. The plane called the eCaravan is powered by electricity. Identify **pros** and **cons** of this plane compared with normal planes.

Pros	Cons

● Look at the article 'At last a blast off'.

5. The SpaceX Crew Dragon spacecraft launched on Saturday. Why was this a special and historic flight? Give two reasons.

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6. Why did the journalist use the word '**finally**' in the sentence below?
'The SpaceX Crew Dragon spacecraft ***finally*** launched on Saturday'

7a. Fill in the missing numbers about this mission.

_____ astronauts travelled in the spacecraft, they were the first to go into space from US soil in almost _____ years. NASA bought seats for the astronauts at _____ pounds each.

The spacecraft docked at the International Space Station which travels at _____ mph orbiting _____ miles above the Earth.

The astronauts will be carrying out experiments at the International Space Station for approximately _____ months.

7b. Are you surprised at the price of a seat on the spacecraft? Explain your reasons.

8. Explain how the two NASA astronauts, Doug Hurley and Bob Behnken, will return to Earth.

● Look at the article 'Report from the Science Museum London'.

9. The article compares the New SpaceX Crew Dragon spacecraft with the Apollo capsules from the 1960s. Identify the **similarities** and **differences** between the new 'SpaceX Crew Dragon' and the Apollo capsules.

Similarities	Differences

10a. Which new method of transport would you most like to travel on and why?

- ☐ HS2 railway (High speed railway)
- ☐ eCaravan (all-electric aeroplane)
- ☐ SpaceX Crew Dragon (Privately owned spacecraft)

10b. These articles are all about new approaches to transport. What do you think the transport of the future will be like?