

## Year 5 Home Learning (Sheet 12)

I hope you are enjoying our topic and learning all about space. We are continuing the topic - this week we are answering the question 'Do aliens exist?'

Maths

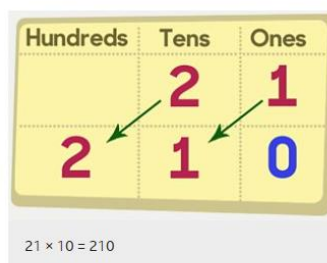
I can multiply and divide by 10, 100, 1000

Maths starter: Play 'Archery Arithmetic' and select Year 5 and 6 objectives.



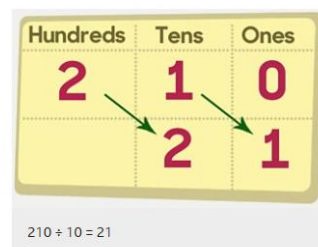
### Multiplying by 1, 10, or 100

- When you multiply by 1 the answer stays the same.  $21 \times 1 = 21$
- When you multiply by 10, move all the digits one place to the left, putting a zero in the empty space.  $21 \times 10 = 210$
- When you multiply by 100, move all the digits two places to the left, putting a zero in the empty spaces.  $21 \times 100 = 2100$



### Dividing by 1, 10 or 100

- When you divide by 1 the answer stays the same.  $21 \div 1 = 21$
- When you divide by 10, move all the digits one place to the right.  $210 \div 10 = 21$
- When you divide by 100, move all the digits two places to the right.  $2100 \div 100 = 21$



Answer the following questions. Remember to use a place value grid to help you move the digits to the left and the right depending on whether you are multiplying and dividing by 10, 100 or 1000:

Play <https://mathsframe.co.uk/en/resources/resource/399/Archery-Arithmetic-Multiplication>

<https://www.bbc.co.uk/bitesize/topics/z36tyrd/articles/z2fwkxw>

$874 \times 10 =$ _____	$2264 \div 10 =$ _____
$275 \times 100 =$ _____	$765 \div 10 =$ _____
$3873 \div 10 =$ _____	$817 \times 100 =$ _____
$673 \times 10 =$ _____	$734 \times 10 =$ _____
$3802 \div 100 =$ _____	$403 \times 100 =$ _____
$204 \times 10 =$ _____	$1864 \div 10 =$ _____
$309 \times 100 =$ _____	$3908 \div 100 =$ _____
$3002 \div 10 =$ _____	$8764 \times 10 =$ _____
$4000 \div 100 =$ _____	$201 \times 100 =$ _____

Fill in the missing numbers:

$467 \times$ _____ $= 4670$	$683 \div$ _____ $= 68.3$
$536 \div$ _____ $= 5.36$	$855 \times$ _____ $= 85\ 500$

Fill in the space with either  $\times$  or  $\div$  so that the calculation is correct:

$742$ _____ $10 = 74.2$	$4230$ _____ $10 = 42\ 300$
$873$ _____ $100 = 8.73$	$767$ _____ $10 = 7670$

True (T) or False (F):

$287 \times 100 = 28\ 700$ <input type="checkbox"/>	$209 \div 10 = 2.09$ <input type="checkbox"/>
$176 \div 100 = 600$ <input type="checkbox"/>	$602 \times 10 = 6200$ <input type="checkbox"/>

Reading

I can understand a piece of text and complete follow up activities.

Read the extract below:



*The sun slipped behind the distant hills, painting the mountains red and black. Shadows lengthened, deepening the darkness. Wind whispered through the grass as if praying. Wearily, Tom and Jez picked up their fishing gear. It was late and they knew that they would be in trouble. But holidays only came once a year and they were just a mile from the cottage where they were staying. "Come on," mumbled Jez, picking up his rod and turning to go.*

At that moment, the boys froze. From somewhere overhead they heard a low whirring sound. Half a mile away a glowing light appeared. It streaked towards the forest and then hovered, casting beams of brilliant light down into the dark trees. The boys turned to stare at each other. They were both thinking the same thing... aliens! Tugging them deeper and deeper into the forest, the strange lights shone down like silvery ropes. Without warning, there was a rush of roaring wind that tore at the trees. Then the lights began to flicker in a mesmerising pattern.

Half stumbling, Tom and Jez staggered through the thicket, drawn towards the light. As they drew closer, they could see that it was an enormous spaceship. Crouching behind a bush, hearts thumping, they waited and watched. The ship was larger than a bus and circular. It hovered just above the ground. Lights shimmered and a door opened. Out of the dark interior, a shadow began to move...

It was twenty-four hours later that Tom woke with a start, though at that point he didn't realise how much time had passed. He was cold and at first couldn't remember where he was or what had happened. Beside him, Jez lay curled up. Fast asleep with his thumb stuck in his mouth. Tom stared around him. They were still in the forest and the bushes and grass had been flattened down. Trees were scorched. Of course, the spaceship!

No one believed them and what was worse they couldn't remember what had happened after the ship's door had opened. The doctor said that it was amnesia brought on by shock. They both knew that the space ship had landed and an alien had begun to appear but after that, the next 24 hours were a complete blank. In the end, the police went away muttering about time wasters - and left them to get on with the rest of their holiday.

It was only when he went to bed that night that Tom found it. In his pocket there was a jet black pebble. It was shiny and comforting to hold. He rubbed the smooth surface and as he did so, it began to warm and then it glowed. Weirdly, Jez had also found a stone in his pocket. A present perhaps - a present from another world. But what were the stones for? Tom wasn't too sure if he wanted to know.

#### Activities

What do you like about this extract?

Pick out 5 of your favourite adjectives

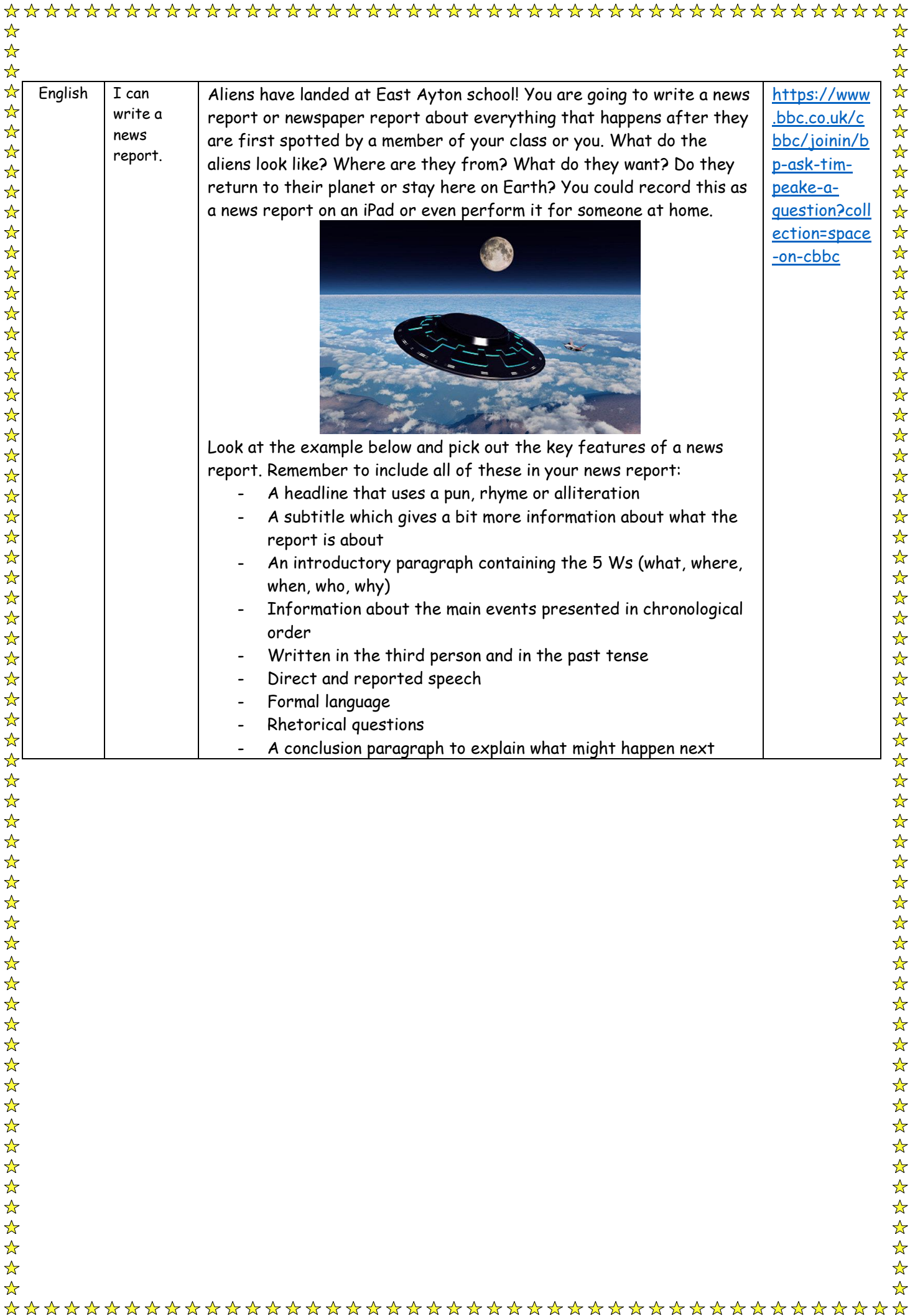
Pick out all the fronted adverbials.

Highlight the speech marks.

Turn this extract into a comic strip with illustrations.

Turn this extract into a play script.

Write what happens next...



## BACK TO EARTH WITH A BUMP!

Reported by Amanda Kelper, Media Correspondent, London

After a six month stay on the International Space Station (ISS), astronauts Tim Peake, Yuri Malenchenko and Timothy Kopra have finally returned home to Earth.

Last week, British astronaut Tim Peake returned home from an incredible six month stay aboard the ISS, alongside his crewmates Yuri Malenchenko and Timothy Kopra. He is the first British astronaut to have lived on the ISS.

The International Space Station is a large spacecraft that travels around the Earth. It is a home where astronauts can live while in Space. The Space Station was built in pieces and many nations were involved in its construction. For example, the first piece was launched in November 1998 by the Russians. Construction of the space station was finally completed in 2011.

The men were launched into space on 15<sup>th</sup> December 2015. The mission involved conducting experiments, testing out new technology and inspiring the next generations of space travellers. Peake told reporters that the best part of his mission was a spacewalk where he had to make a repair on the space station.

Having circled the planet nearly 3,000 times, the crew returned home to Earth in a capsule, which reached speeds of up to 28,000 kilometres per hour. The touchdown was bumpy due to high winds, however the astronauts landed safely in Kazakhstan, all returning in good health. Having arrived back on solid ground, the astronauts were pulled out of the capsule and carried as their leg muscles were too weak to walk. While sitting in their space suits, the men were checked over by medical staff. During these checks, Peake



Landing with a bump! Tim Peake lands safely in Kazakhstan. was asked how it felt to be home. 'The smells of Earth are so strong and it's wonderful to be back in the fresh air'.

Tim later flew from Kazakhstan to the headquarters of the European Space Agency in Germany where he is getting used to life back on Earth. Scientists and doctors are carrying out tests to see how his body has been affected by his time in space. Being in space can have a serious impact on the human body. When astronauts return home, they have to readapt to the gravity on Earth as the lack of gravity in space can also cause your bones and muscles to weaken.

Peake recently commented on how he'd missed family and friends, and even the rain. Tim said he was now looking forward to spending some quality time with his family. When asked if he'd return to space in the future, he replied, "...in a heartbeat".

Having been recognised by the Queen for his services to science, Tim is now a CMG, or Companion of the Order of St Michael and St George. He dedicated this award to his entire team.

Photo courtesy of NASA HQ PHOTO: (Public domain) - original under various names: Space - Attribution

Art

I can design and make a spacecraft

UFO stands for "Unidentified Flying Object". There have been many claims of UFO sightings since the 1940's. Some say a UFO sightings occur somewhere on the planet every three minutes. Watch the video to find out about some of the most famous UFO sightings.

Try making your own UFO with an alien to go inside. What do you think aliens would look like if they were found on another planet? How do you think they might travel here? Be as creative as you can. Plan this out first by sketching it lightly on a piece of paper. You could use things from home and recycling to make your UFO.



<https://www.youtube.com/watch?v=5dkZseelDN4>

Science

I know the different phases of the moon

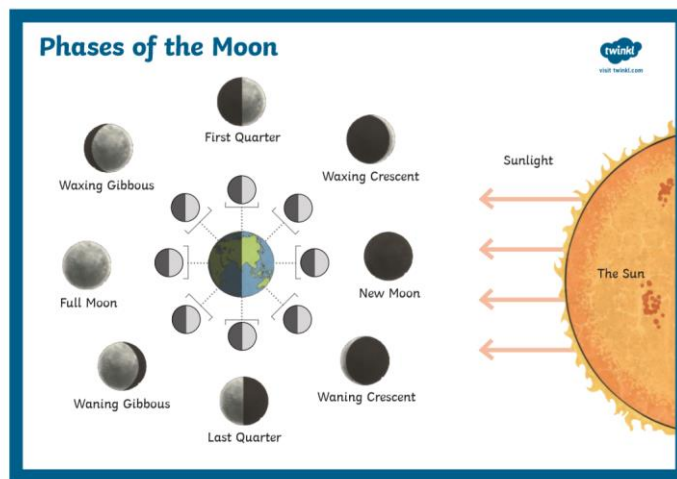
*The Moon is lit by the Sun. Half of the Moon is lit and half is dark. When the dark side of the Moon is facing Earth we cannot see it; this is called a new moon. As the Moon starts to orbit Earth we can see more and more of the lit side. At various stages in its orbit it is called a crescent moon, a quarter moon and a full moon. It is called a full moon when we can see all of the sunlit side of the Moon. Watch the videos to find out more.*

<https://www.bbc.co.uk/bitesize/clips/z3jd7ty>

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If you have some chalk, try drawing this out on either paper or even outside on an area an adult has said you could use. You could use paints, pens or pencils to create your own version of this - don't forget to label it.

Look up at the sky everynight for a month or a week and record the shape of the moon that you can see. Which phase can you see?



Theme

Creative thinking

The universe is ENORMOUS! We use light years to measure the distance in space because it is so big. The universe is so big that we only actually know what exists in about 4% of it.

1 light year = 6 trillion miles

The universe is 93 billion light years in diameter!

Challenge - can you work out how many miles long the universe is? (the answer is at the bottom of this page upside down!).

Do you think it is possible that there is alien life somewhere out there? Do some more research and watch the videos (if you can) to answer this question in more detail 'Do aliens exist?'



<https://www.bbc.co.uk/programmes/p00xq8wy>

<https://www.bbc.co.uk/newsround/43315746>

<https://www.youtube.com/watch?v=PpWP7GGjJ6k>

544,887,000,000,000,000,000 Miles Wide