Timetable for home learning pack- Space

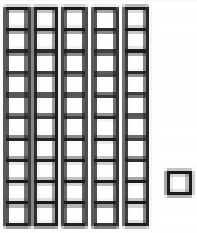
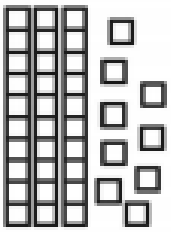
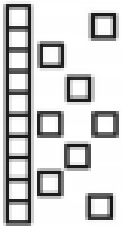
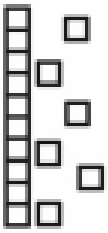
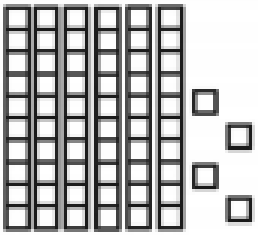
	9 am Calculation	9.20 am Maths	10.20 am Break	10.30 am Spelling	11 am English	12 pm Lunch	1 pm Rockstars	1.30 pm Topic	2.30 pm Reading
Monday	2-digit place value	Read and write numbers to 100		Prefixes Dis-, mis-, un-	Journey into space		Log onto rockstars and work on your maths recall https://ttrockstars.com/	Space timeline	Reading comp
Tuesday	Ordering 2-digit numbers	Read and write numbers to 1000		Prefixes Dis-, mis-, un-	Plan a story about planet		Log onto rockstars and work on your maths recall https://ttrockstars.com/	Astronauts	
Wednesday	3-digit place value	Time to nearest 15 mins		**Prefixes Re-, sub-, inter-**	Write story		Log onto rockstars and work on your maths recall https://ttrockstars.com/	Apollo 11	Reading comp
Thursday	Ordering 3-digit numbers	Time- 5 minute intervals		**Mixture of prefixes**	Newspaper report plan (Apollo 11)		Log onto rockstars and work on your maths recall https://ttrockstars.com/	**Naming the planets**	

Timetable for home learning pack- Space

	9 am Calculation	9.20 am Maths	10.20 am Break	10.30 am Spelling	11 am English	12 pm Lunch	1 pm Rockstars	1.30 pm Topic	2.30 pm Reading
Friday	Addition	Converting 12 hour to 24 hour time		Prefix and suffix word search	Newspaper report writing		Log onto rockstars and work on your maths recall https://ttrockstars.com/	Exploring Mars	Reading comp

Monday- calculation

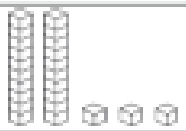
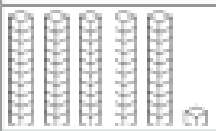
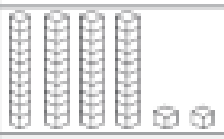
Write how many groups of tens and ones there are.

	_____ tens _____ ones _____ + _____= _____
	_____ tens _____ ones _____ + _____= _____
	_____ tens _____ ones _____ + _____= _____
	_____ tens _____ ones _____ + _____= _____
	_____ tens _____ ones _____ + _____= _____

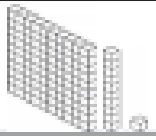
Monday- maths

Reading and Writing Numbers to 100 Worksheet

Can you fill out any missing boxes for each of the numbers below? The first one has been done for you to show you what to do.

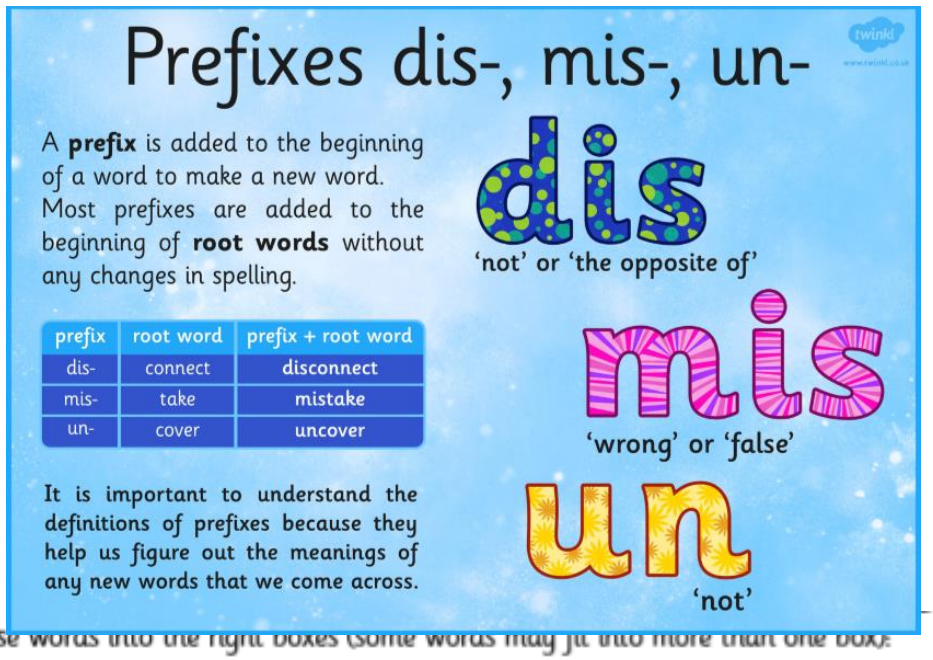
Numerals	Number in Words	Tens	Ones	Illustration
23	twenty-three	2	3	
17	seventeen			
34				
	fifty-six	5	6	
		5	1	
49				
	eighty three			
				
		7	7	

Challenge

Numerals	Number in Words	Hundreds	Tens	Ones	Illustration
					

Monday- spelling

Prefixes- un, mis and dis



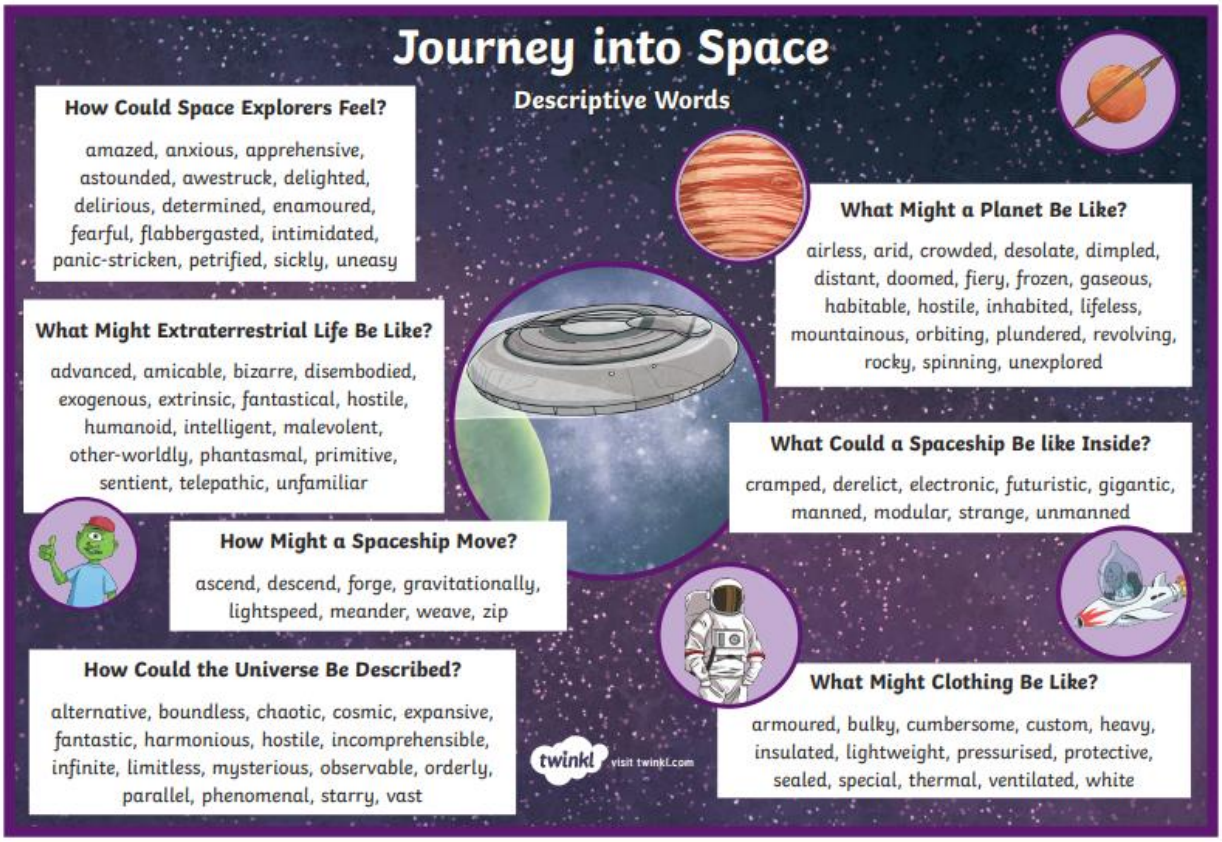
Sort these words into the right boxes (some words may fit into more than one box):

able	zip	well
behave	own	appear
happy	take	place

un-	mis-	dis-

Design and describe your own planet

Imagine you are travelling though space and you discover a new planet.

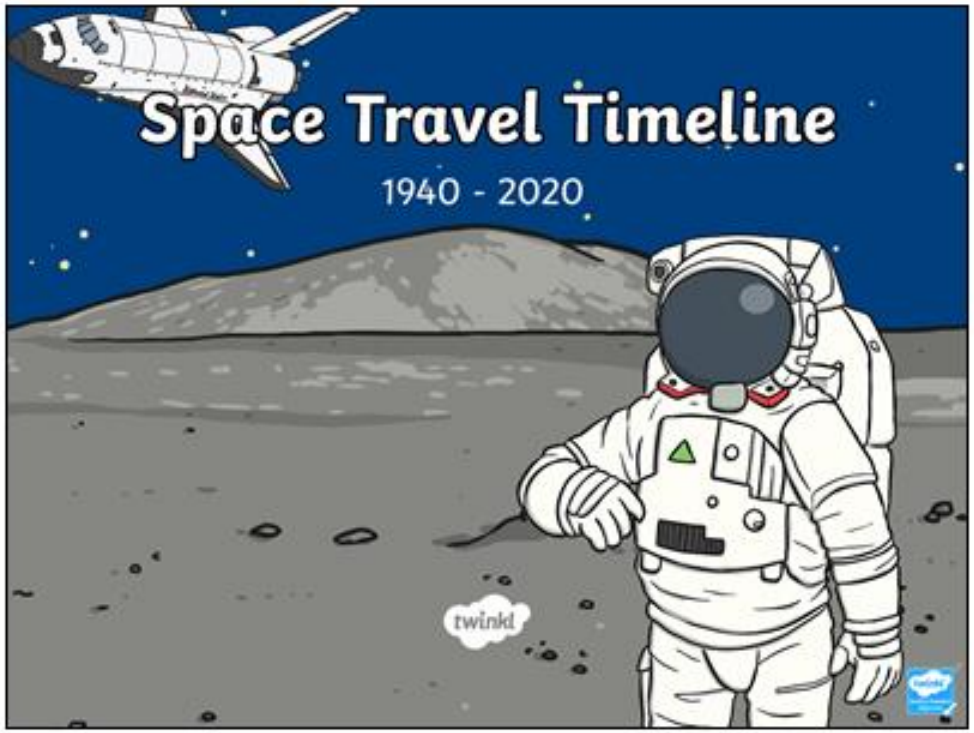


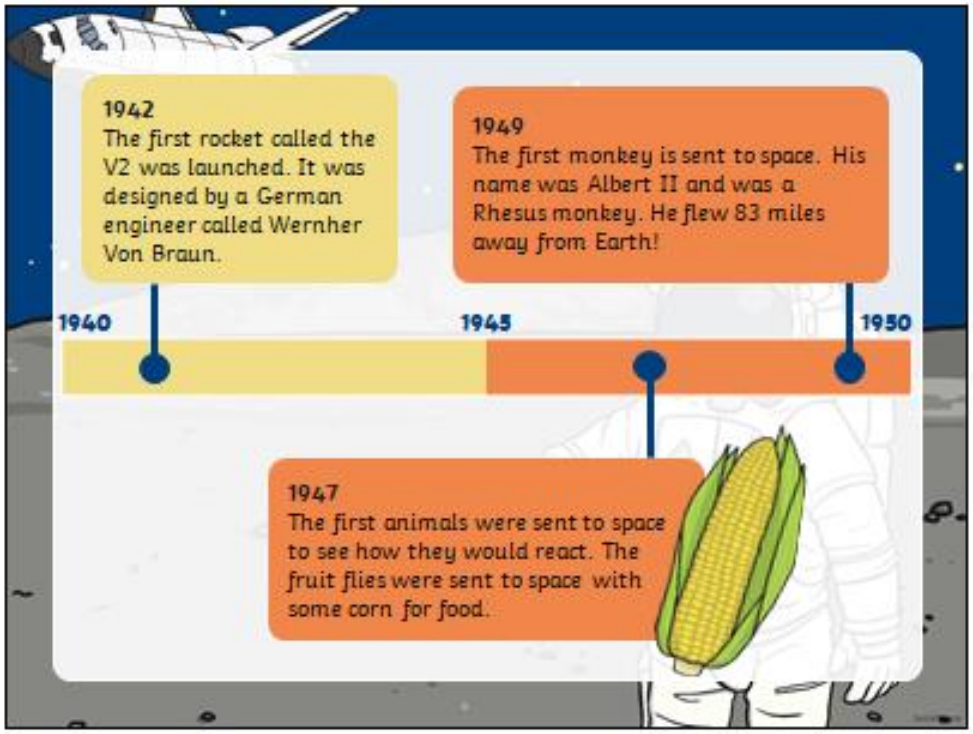
Draw and label your planet below. Think about the following things

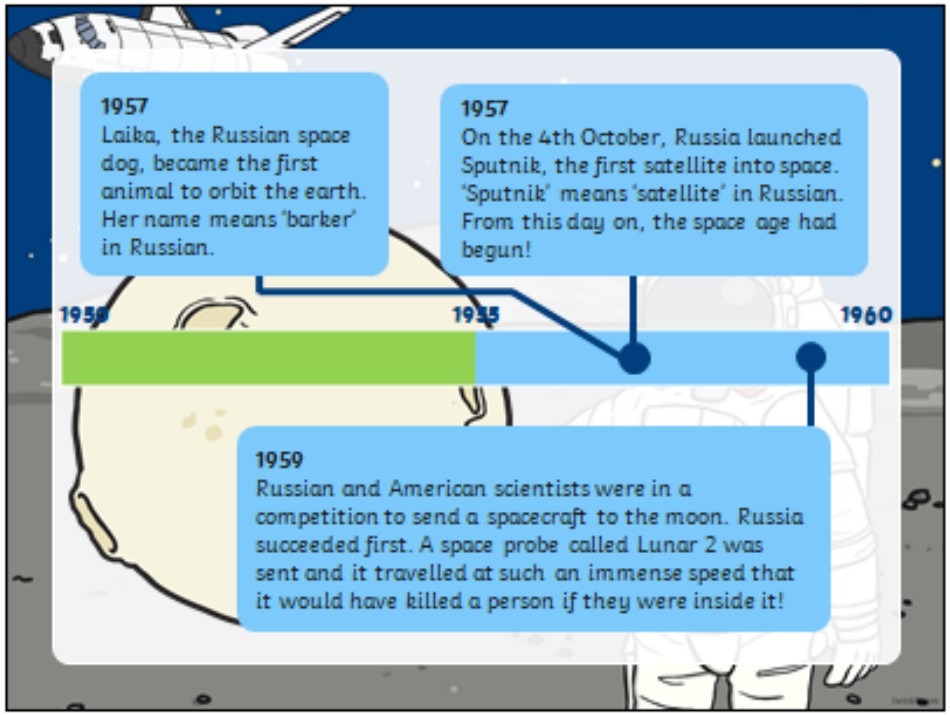
Now describe your journey! Make sure you include the following:

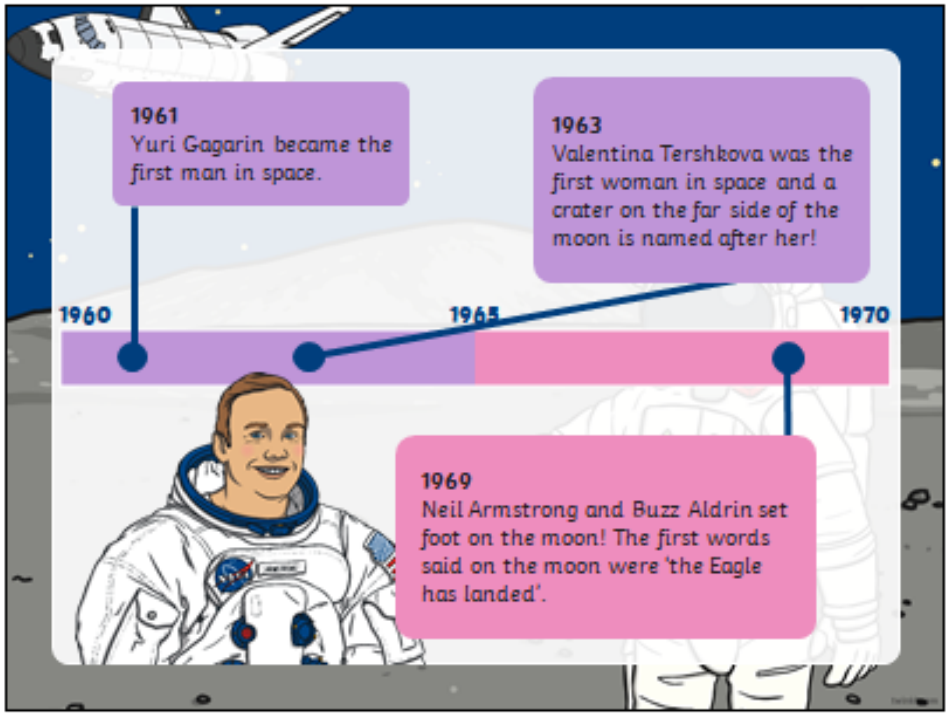
- Correct punctuation (including capital letters, full stops)
- Full sentences
- Adjectives
- Use your senses (describe what you can see, hear and smell as you travel around)

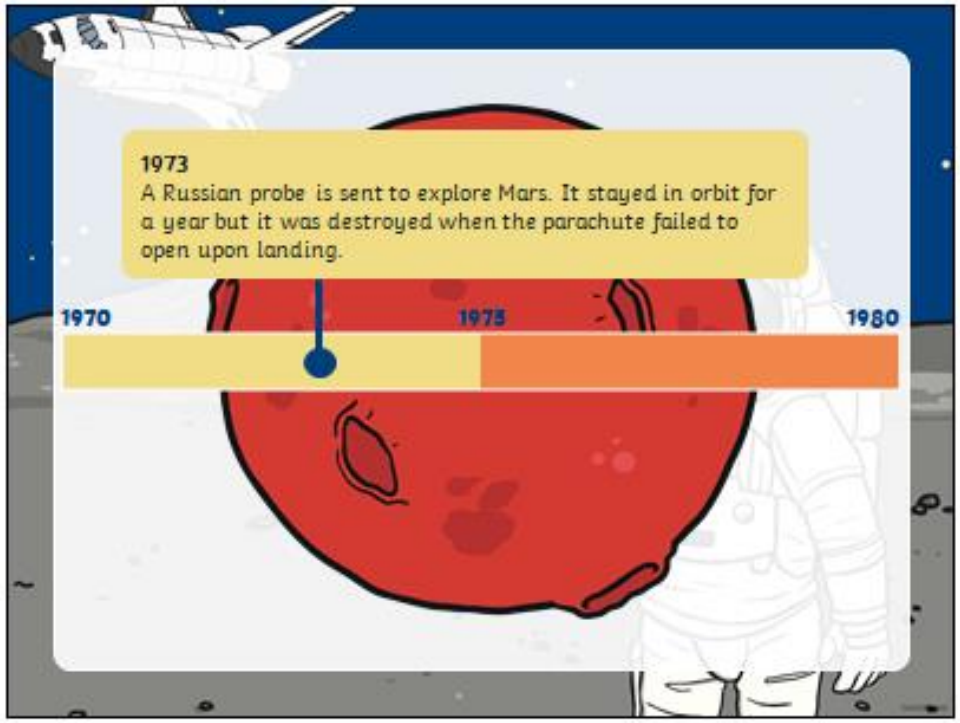
Monday- topic

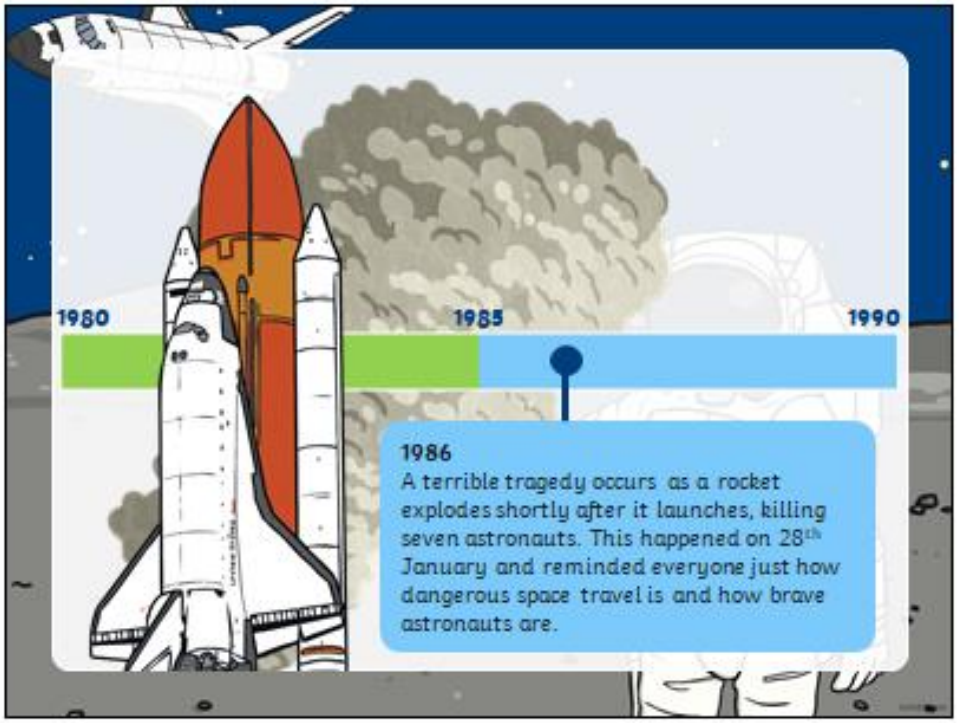


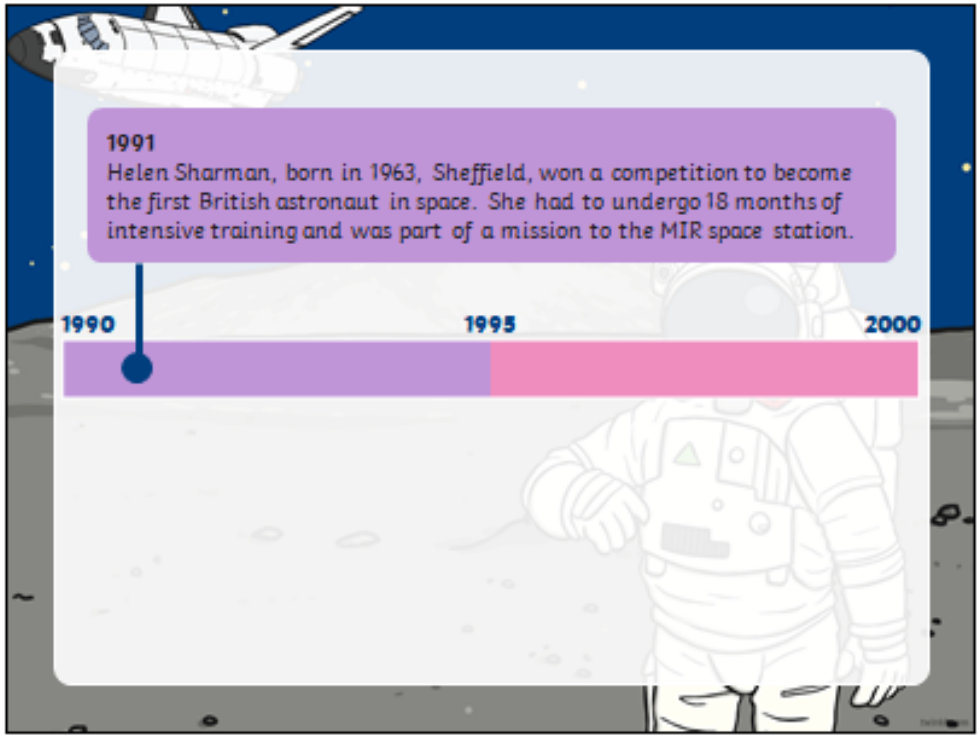


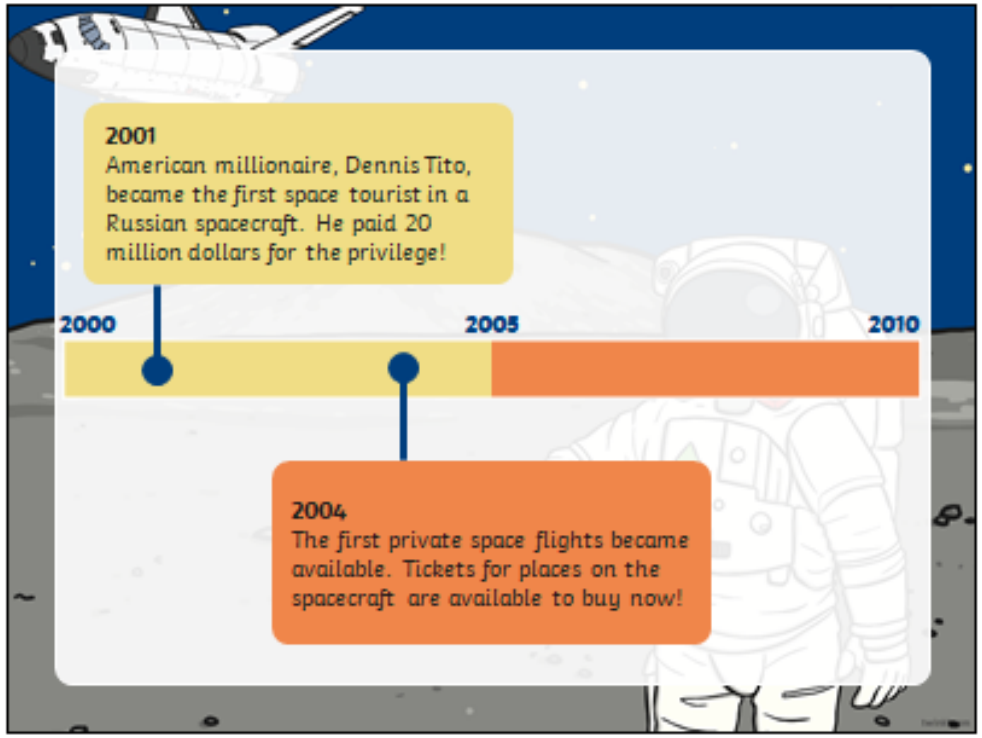

1957
Laika, the Russian space dog, became the first animal to orbit the earth. Her name means 'barker' in Russian.
1957
On the 4th October, Russia launched Sputnik, the first satellite into space. 'Sputnik' means 'satellite' in Russian. From this day on, the space age had begun!
1958
1960
1959
Russian and American scientists were in a competition to send a spacecraft to the moon. Russia succeeded first. A space probe called Lunar 2 was sent and it travelled at such an immense speed that it would have killed a person if they were inside it!

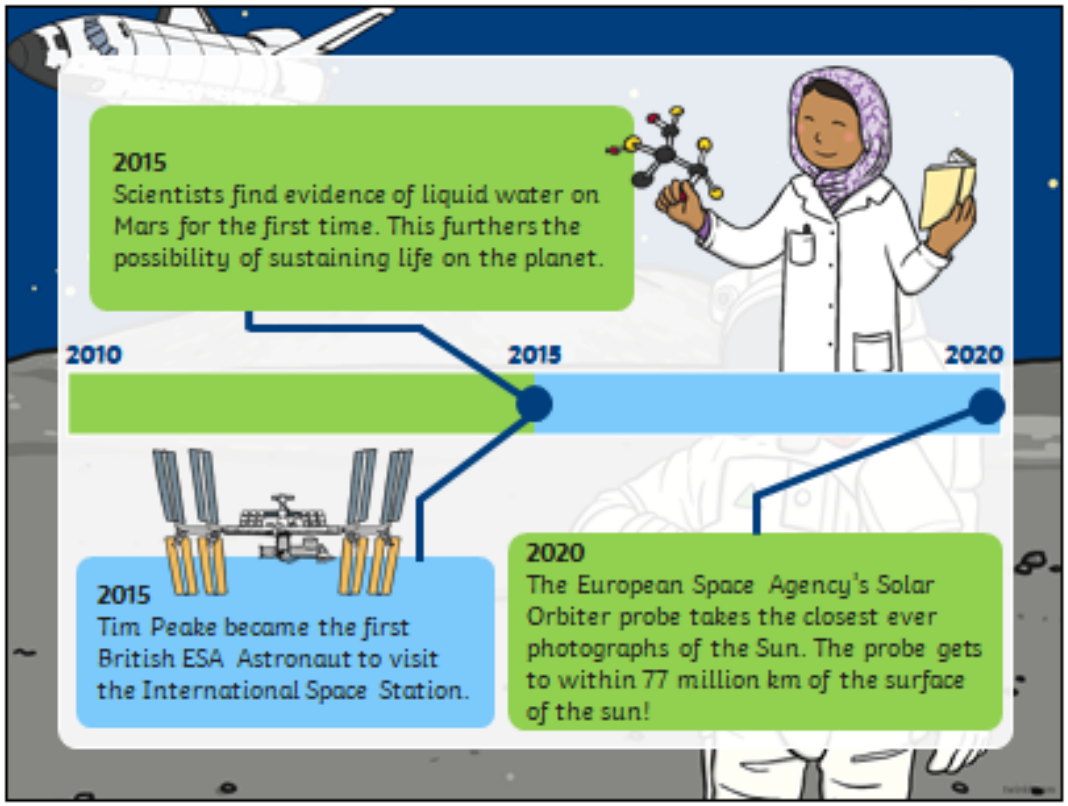

1961
Yuri Gagarin became the first man in space.
1963
Valentina Tershkova was the first woman in space and a crater on the far side of the moon is named after her!
1960
1965
1970
1969
Neil Armstrong and Buzz Aldrin set foot on the moon! The first words said on the moon were 'the Eagle has landed'.


1973
A Russian probe is sent to explore Mars. It stayed in orbit for a year but it was destroyed when the parachute failed to open upon landing.
1970
1975
1980


1980
1985
1990
1986
A terrible tragedy occurs as a rocket explodes shortly after it launches, killing seven astronauts. This happened on 28th January and reminded everyone just how dangerous space travel is and how brave astronauts are.


1991
Helen Sharman, born in 1963, Sheffield, won a competition to become the first British astronaut in space. She had to undergo 18 months of intensive training and was part of a mission to the MIR space station.
1990
1995
2000


2001
American millionaire, Dennis Tito, became the first space tourist in a Russian spacecraft. He paid 20 million dollars for the privilege!
2000
2005
2010
2004
The first private space flights became available. Tickets for places on the spacecraft are available to buy now!



Cut and stick the following events onto the timeline below.

1942

The first rocket called the V2 is launched.

1957

Laika the dog is sent to space.

1961

Yuri Gagarin is the first man in space.

1963

Valentina Tereshkova is the first woman in space.

1969

Neil Armstrong and Buzz Aldrin land on the moon.

1991

Helen Sharman becomes the first British astronaut in space.

2015

Tim Peake becomes the first British ESA Astronaut to visit the International Space Station.

Space Travel Timeline

1940 1950 1960 1970 1980 1990 2000 2010 2020

Monday- reading comprehension

First Man on the Moon

Neil Armstrong was an American astronaut who was famous for being the first person to walk on the Moon.

His Early Life

Neil Armstrong was born on 5th August 1930, in the USA. His passion for flying began at a young age. When he was two years old, his parents took him to Cleveland Air Race which was where he saw his first ever aircraft. At the age of six, Neil was taken by his dad for a ride in an aeroplane. He worked hard to achieve his dream of being a pilot: Armstrong was only 16 years old when he received his first pilot's licence, before he could even drive a car!

Fun Facts

- He was a keen Boy Scout.
- He suffered from travel sickness as a child, but was fine in space!

In September 1962, Neil Armstrong was accepted to the NASA astronaut corps, where he knew he might one day go in to space. Amazingly, during his career he flew over two hundred different aircraft!

The Moon Landing

Finally, everything was ready! On 16th July 1969, at 13.32, Neil Armstrong and his crew mates Edwin (Buzz) Aldrin and Michael Collins blasted off into space.

Neil Armstrong became the first man to walk on the Moon on 20th July 1969. It was shown all across the world on television. It is estimated that 600 million people watched the astronauts make history.

First Man on the Moon

During their moonwalk, Armstrong and Aldrin planted the flag of the United States of America. They also spent time collecting moon rocks from the surface. The astronauts returned home to Earth on 24th July 1969.

Later Life

After he had returned home, Armstrong retired from being an astronaut. However, his enthusiasm for space and aircraft continued and he became a professor in order to share his passion.

Famous Words

Neil Armstrong died on 25th August 2012 at the age of 82. He will always be remembered for his famous words: "That's one small step for man, one giant leap for mankind."

Did You Know...?

There is no wind on the Moon so the astronauts' footprints will still be there right now, nearly fifty years later!

Questions

1. Who was Neil Armstrong? Tick one.

   - ○ An American scientist
   - ○ A British pilot
   - ○ The first person to drive a car
   - ○ The first person to walk on the Moon

2. Where was he born? Tick one.

   - ○ In the UK
   - ○ In Cleveland
   - ○ In France
   - ○ In the USA

3. Number the events below from 1 to 4 to show the order in which they happened.

   - ☐ He went to Cleveland Air Race.
   - ☐ He was born on 5th August 1930.
   - ☐ He blasted off into space.
   - ☐ He was accepted to the NASA astronaut corps.

4. Why did the space mission Apollo 11 take months of practice and preparation? Tick one.

   - ○ NASA had to check that everything was safe.
   - ○ Armstrong was suffering from travel sickness.
   - ○ 600 million people watched.
   - ○ He received his first pilot's licence.

5. Which two activities did Armstrong and Aldrin do during their moonwalk?

   1. _____

   2. _____

6. **Find** and **copy** a word which shows that Neil Armstrong was no longer an astronaut after returning home.

   _____

Tuesday- calculation

Cut out the cards and order the numbers starting from the smallest to the biggest.

43	6	20	36	50
4	28	40	11	38

Tuesday- maths

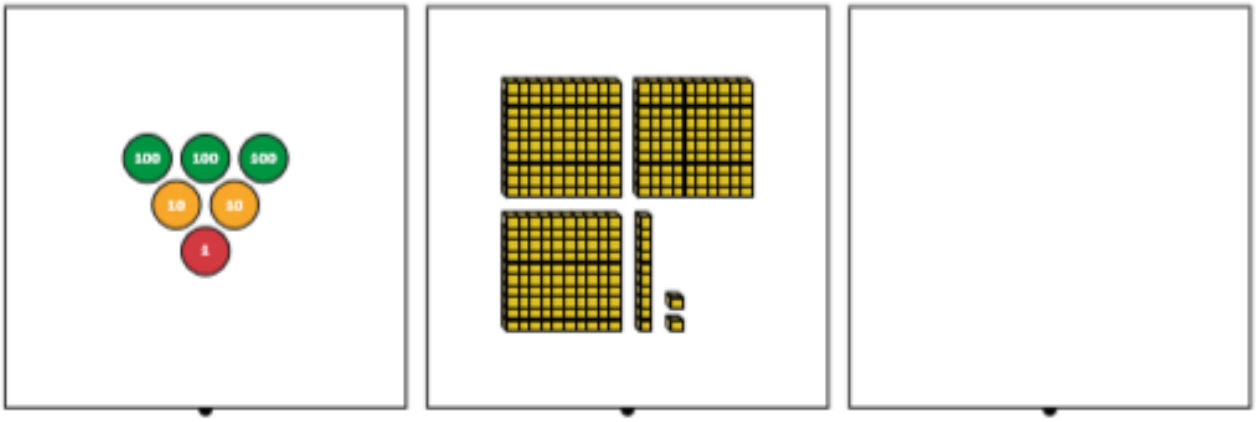
1) Match the words to the correct numeral.

four hundred and fifty	904
two hundred and sixty-six	266
nine hundred and four	450
two hundred and sixteen	216

2) Draw counters to show the number six hundred and seventy-nine.

Hundreds	Tens	Ones

3) Match up the picture to the number in words. Draw a picture for the number that is left over.



312	three hundred and twenty-two	three hundred and twenty-one

Tuesday- spelling

1. Can you join the root words to the prefixes that can complete them to make a valid word?

take

act

Re-

Mis-

appear

play

De-

place

Over-

Dis-

order

tract

Tuesday- English

Today you are going to plan to write a story all about your journey into space (the planet you discovered yesterday.

Use this checklist to help.

Space Story Writing Checklist

Did I include...

- a futuristic setting of a place in space? ☐
- a main character like an astronaut or alien who has a problem? ☐
- adjectives to describe characters and places, e.g. the slimy, green alien; a mysterious, blue planet? ☐
- a mysterious ending? ☐

You may want to use a story mountain to plan your story, draw a story map or a story board.

Use this page to plan your story.

Tuesday- topic

What is an Astronaut?

An astronaut is a person who is trained to travel into space.

To be an astronaut, you need to have lots of training and be very strong. Astronauts have to wear special spacesuits.

The spacesuits help them to breathe and protect them from very cold or very hot temperatures.

Famous Astronauts

Over 500 astronauts have gone on missions into space. Here are some astronauts that are famous for being significant in the history of space travel.

Yuri Gagarin

Valentina Tereshkova

Neil Armstrong

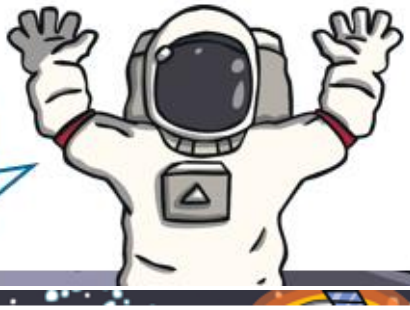
Tim Peake

Mae Jemison

Yuri Gagarin

Yuri Gagarin is famous for being the first human to travel into outer space and orbit the earth.

Yuri Gagarin was born in 1934 in Russia. On the 12th April 1961, he was on board the spaceship **Vostok 1**, which took him into space. This made him the first human to ever go into space! It took him 108 minutes (that's less than 2 hours) to orbit the Earth.



I said 'Poyekhali' when my spacecraft launched. That means 'Let's go!' How do you think I felt?

Valentina Tereshkova

Valentina Tereshkova is famous for being the first woman to travel into outer space and orbit the earth.

Valentina Tereshkova was born in Russia in 1937. In 1963, she travelled on her own on board the spacecraft **Vostok 6**.

Valentina was the first woman to travel into space. She orbited the Earth 48 times, which was a new world record! Valentina took many pictures of the Earth while she was in space.

On the journey back to Earth, there was a problem with the spacecraft and it nearly crashed! Valentina put all of her training into practice and was able to fix the problem.

Why do you think I took photographs while I was in space?

Neil Armstrong

Neil Armstrong is famous for being the first man to walk on the moon.

Neil Armstrong was born in 1930 in the United States of America.

On the 20th July 1969, Neil Armstrong landed on the Moon. He had travelled there on a spacecraft called **Apollo 11** with two other astronauts - Michael Collins and Buzz Aldrin. Neil Armstrong was the first astronaut to leave the spacecraft and became the first man to walk on the Moon.

Buzz Aldrin also left the spacecraft on that trip. They did important jobs, such as collect samples of moon rocks and complete experiments. They also planted an American flag. They landed back on Earth on the 24th July 1969.

When I first stepped onto the Moon, I said 'That's one small step for man, one giant leap for mankind.' What do you think it means?

Mae Jemison

Mae Jemison is famous for being the first Black woman to travel into space.

Mae Jemison was born in 1956 in the United States of America.

In 1992, she became the first Black woman to travel to space. She was on board a spacecraft called **Endeavour** as a mission specialist.

She was in space for a total of 8 days and orbited the Earth 127 times. While she was on her mission, Mae carried out different scientific experiments.

What science experiment would you carry out if you went into space?

Major Tim Peake

Major Tim Peake is a British astronaut, famous for spending 186 days in space.

Major Tim Peake was a born England in 1972. From December 2015, he went on a mission to the **International Space Station** and became the first official British astronaut to walk in space.

Major Tim Peake lived on the International Space Station for around six months. In this time, he performed many interesting scientific experiments.

He was often seen on videos and live calls, showing children and adults what he was doing!

I was in space for 186 days and lived on the International Space Station. Name one thing that you would take with you if you went to space for a long time.

Which Astronaut Has Inspired You the Most?

Talk to a partner and tell them which astronaut you thought was the most interesting. Can you explain why?

Yuri Gagarin

Valentina Tereshkova

Neil Armstrong

Tim Peake

Mae Jemison

Choose your favourite astronaut.

Draw a picture, able and explain why they are your favourite.

Wednesday- calculation

Place Value Challenge

Arrange the given digits to make a number that meets the given criteria.

1. Between 161 and 169:
   6, 1, 7

H	T	O

2. Between 295 and 311:
   9, 2, 9

H	T	O

3. Between 392 and 397:
   5, 3, 9

H	T	O

4. Between 134 and 189:
   5, 4, 1

H	T	O

5. Between 576 and 601:
   9, 5, 7

H	T	O

6. Between 784 and 812:
   8, 5, 7

H	T	O

7. Between 986 and 1000:
   8, 8, 9

H	T	O

8. Between 784 and 876:
   8, 4, 7

H	T	O

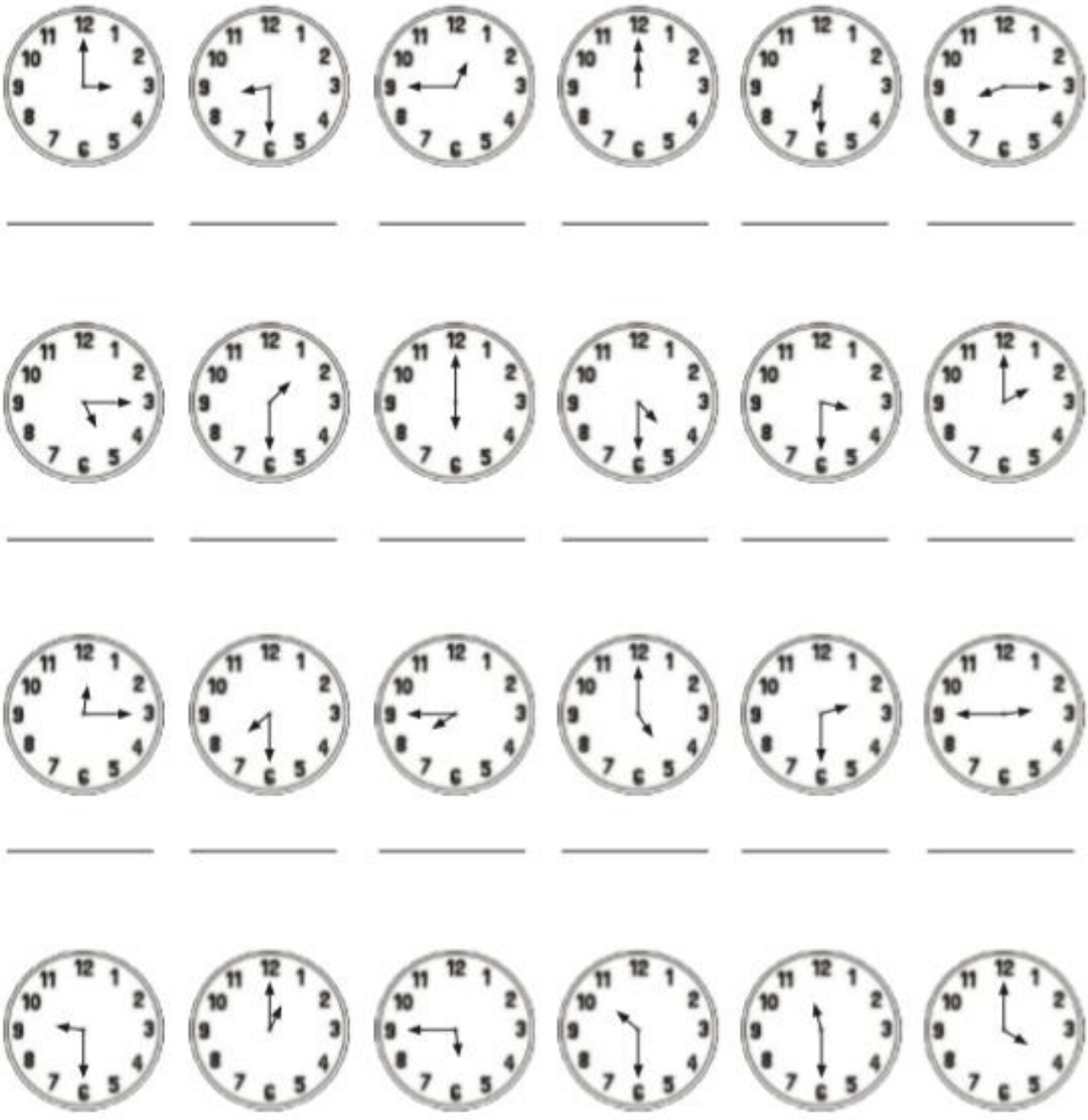
9. Between 578 and 811:
   8, 6, 7

H	T	O

Wednesday- maths

Time to the nearest 15 minutes

Write the time shown on each clock.



Draw the time on each clock.

9 o'clock

half past 3

6 o'clock

half past 4

quarter past 2

half past 1

quarter to 11

11 o'clock

half past 2

5 o'clock

quarter past 1

half past 5

quarter to 8

3 o'clock

half past 6

quarter to 1

half past 7

quarter past 8

10 o'clock

half past 12

quarter past 11

quarter to 4

half past 6

2 o'clock

Wednesday- spelling

Prefixes re-, sub-, inter-

A **prefix** is added to the beginning of a word to make a new word. Most prefixes are added to the beginning of **root words** without any changes in spelling.

re-

The children were **rebuilding** the sandcastle.

Jack was **rereading** his favourite story.

The sun was **reappearing** from behind the cloud.

-sub

A yellow **submarine** was in the sea.

The girl was sunbathing in the **subtropical** heat.

The net would soon be **submerged** in the rock pool.

-inter

The lifeguard was an **international** swimmer.

The seagulls were **interacting** with each

Land, sea and air are all **interconnected**.

Prefixes re-, sub-, inter-

I can add the prefixes re-, sub-, inter- to words to create new words.

1. Fill in the correct prefix to match the root word.

a) The bottle from the suntan cream is plastic and can be _____cycled.

b) The sandcastle has _____national flags on it.

c) Jack and James will _____turn to the big wheel later.

d) The children drink cold drinks to _____hydrate themselves.

e) It was a very hot _____tropical day.

f) The Whale's head is _____merged beneath the water.

g) The children want to _____visit the ice-cream van.

h) The seagulls keep _____appearing from behind the rocks.

Wednesday- English

Use your plan from yesterday to write your story about the Journey to space.

Use this checklist to help you.

Space Story Writing Checklist

Did I include...

- a futuristic setting of a place in space? ☐
- a main character like an astronaut or alien who has a problem? ☐
- adjectives to describe characters and places, e.g. the slimy, green alien; a mysterious, blue planet? ☐
- a mysterious ending? ☐

Remember to also include

- Correct punctuation
- Description (of the setting and main character)
- A problem
- A solution

Wednesday- topic

On the morning of July 16th 1969, the United States of America got ready to launch its **Saturn V rocket** from launch pad 39A at Cape Kennedy, Florida, USA.

Saturn 5 was the largest rocket ever built. It was **111** metres high, that's taller than the Statue of Liberty and taller than many tower blocks. It weighed **2.9 million kilograms (2 900 000 kg)** when it was full of fuel.

Saturn V had 5 gigantic F1 engines to launch it into space.

Even more engines were used later on in its journey.

Here is just one of the five F1 engines. They really were massive!

Three astronauts were on board Saturn V: **Neil Armstrong, Michael Collins and Edwin "Buzz" Aldrin.** The astronauts had to go through lots of training to move around in their bulky spacesuits, and test all the spacecraft's equipment.

Astronaut Michael Collins during a practice for the Apollo 11 mission.

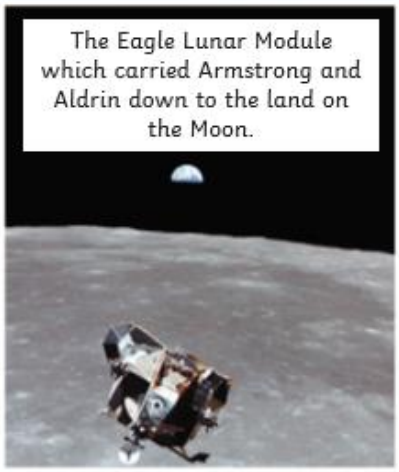
Astronaut Buzz Aldrin inspecting the Saturn V rocket.

On launch day, Collins, Armstrong and Aldrin sat at the very top of Saturn V in the command module. At 9:32am Saturn V's engines fired and the rocket launched off from its tower. Twelve minutes later, the astronauts were orbiting Earth.

The moment when Saturn V's F1 engines fired, launching it from its tower.

The Saturn V rocket blasts into space.

The Apollo 11 crew took 4 days to reach the Moon.
Once they were orbiting the Moon, Armstrong and Aldrin climbed into the Eagle Lunar Module and landed on the Moon.
Collins stayed in the Columbia Command Module.



The Eagle Lunar Module which carried Armstrong and Aldrin down to the land on the Moon.

The Columbia Command Module at the National Air and Space Museum in the USA.

On July 20, 1969, Neil Armstrong became the first human to step on the moon. He and Aldrin walked around for three hours. They did experiments. They picked up bits of moon dirt and rocks. They put a U.S. flag on the moon. They also left a sign on the moon.

Armstrong and Aldrin placed an American flag on the surface of the Moon.

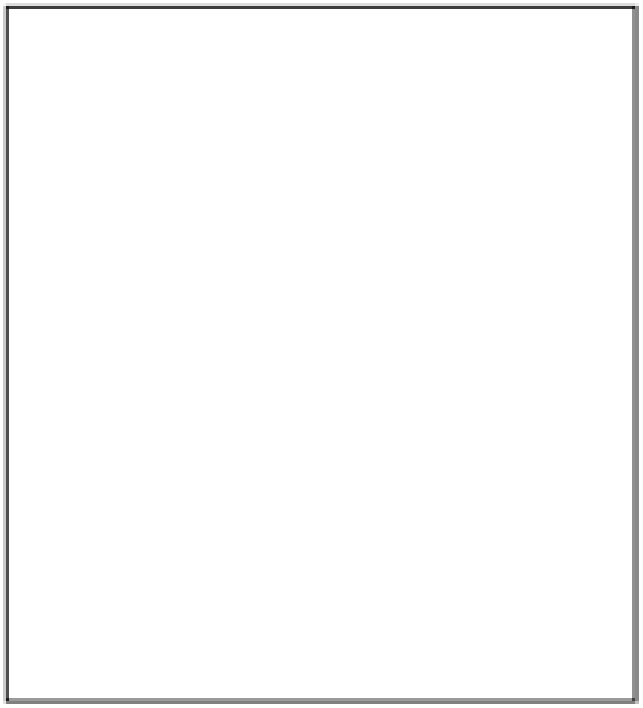
After 22 hours on the Moon, Armstrong and Aldrin returned to the command module using Eagle. The Apollo 11 crew returned to Earth and landed in the Pacific Ocean on 24th July. The module had a special heat shield which stopped it from burning up as it travelled through the Earth's atmosphere.

The Columbia Command Module has a custom made flotation collar to help it float when it landed in the Pacific Ocean.

The Apollo 11 Moon landing was the most watched event in the history of television, nearly **600 million people** watched. Across the USA people held Moon parties, recorded their thoughts in letters and took family photos. Nobody was going to forget the day that man first walked on the Moon.

Now complete this activity about a significant individual.

Neil Armstrong



Date of birth: _____

Birthplace: _____

Date of death: _____

He is known for: _____

_____

_____

_____

_____

_____

_____

His life:

_____

_____

_____

_____

_____

Interesting Facts:

_____

_____

_____

_____

Wednesday- reading comprehension

Tim Peake

Who Is Tim Peake?

Timothy Nigel 'Tim' Peake is a British astronaut who was born in Chichester, West Sussex, England, on 7th April 1972.

Tim's Childhood

Tim grew up in a village with his older sister, mother and father. At an early age, Tim was fascinated with flying because his father took him to air shows.

He went to school at the Chichester High School for Boys.

After Tim Left School

- In 1990, Tim went to the Royal Military Academy Sandhurst.
- He trained to be a pilot and worked for 18 years for the army.
- In 2008, Tim applied to become an astronaut.
- In 2009, Tim began his astronaut training at the European Astronaut Corps.

Blast Off!

In December 2015, Tim Peake launched alongside two other astronauts. Tim reached his destination on the same day.

He spent six months living in space. During that time, he completed a spacewalk, which means he left the space station to complete jobs outside in space. This was watched by millions of people on Earth with excitement.

Home Again

Tim returned to Earth in June 2016, landing in Kazakhstan. During his mission, Tim made 3000 orbits of the Earth.

It took two months for Tim's body to recover from the effects of zero gravity.

Did You Know?

- Tim's first meal on board the ISS was a bacon sandwich and cup of tea.
- While in space, Tim travelled about 125 million km.
- Tim was the first British astronaut to complete a spacewalk.
- During Tim's return to Earth, he travelled at 25 times the speed of sound.

Questions

1. On which date was Tim Peake born? Tick one.

   - ○ 15th December 2015
   - ○ 7th April 1972
   - ○ 18th June 2016
   - ○ 7th April 1990

2. Which school did Tim attend? Tick one.

   - ○ Sussex Boys School
   - ○ Royal Military Academy Sandhurst
   - ○ European Astronaut Corps
   - ○ Chichester High School for Boys

3. How many years did Tim work for the army? Tick one.

   - ○ 16
   - ○ 17
   - ○ 18
   - ○ 19

4. Where did Tim land when he returned from space? Tick one.

   - ○ Russia
   - ○ England
   - ○ Kazakhstan
   - ○ Britain

5. Fill in the missing words in this sentence:

   At an early age, Tim was _____ because his father took him to air shows.

6. How long did Tim spend in space?

   _____

7. Why do you think that people watched Tim's spacewalk with excitement?

   _____

   _____

   _____

Thursday- calculation

Write the numbers in order to reveal the answer to the joke.

1) What do you call a boomerang that doesn't work? _____

Number						
Letter						

smallest largest

183 S	528 C	293 T	382 I	574 K	148 A

2) What do you call a fake noodle? _____

Number							
Letter							

smallest largest

473 A	238 I	584 S	394 M	401 P	587 T	823 A

3) What has lots of keys but cannot open doors? _____

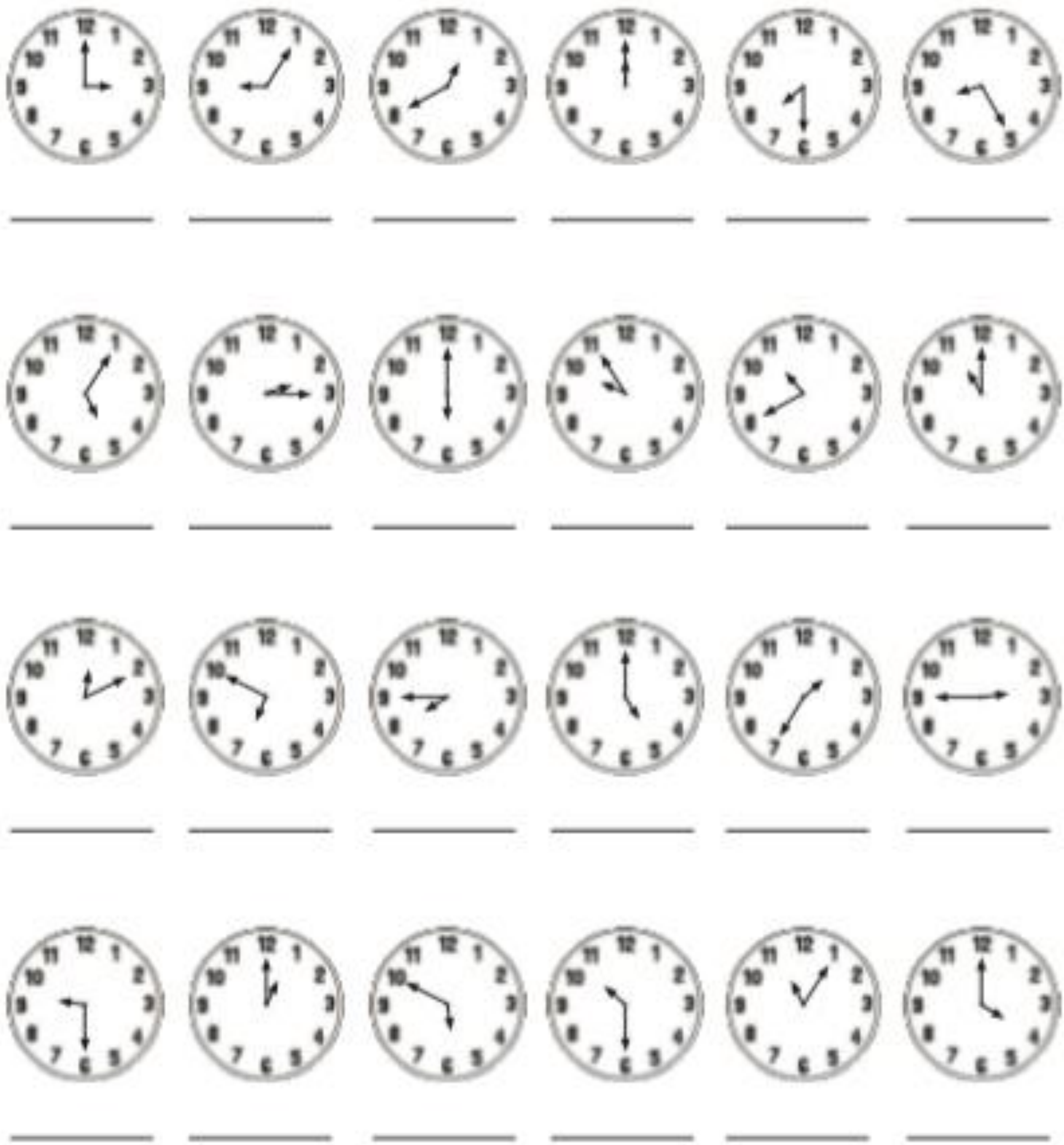
Number						
Letter						

largest smallest

874 A	832 I	746 A	723 N	843 P	713 O

Thursday- maths

Write the time shown on each clock.



Draw the time on each clock.

9 o'clock

half past 3

10 to 5

25 past 4

quarter past 2

half past 12

20 to 11

3 o'clock

half past 9

25 to 5

quarter to 1

10 to 7

quarter to 8

10 o'clock

half past 6

25 to 1

half past 7

quarter past 8

20 to 10

20 past 12

25 past 11

10 to 4

half past 6

2 o'clock

Thursday- spelling

Prefixes

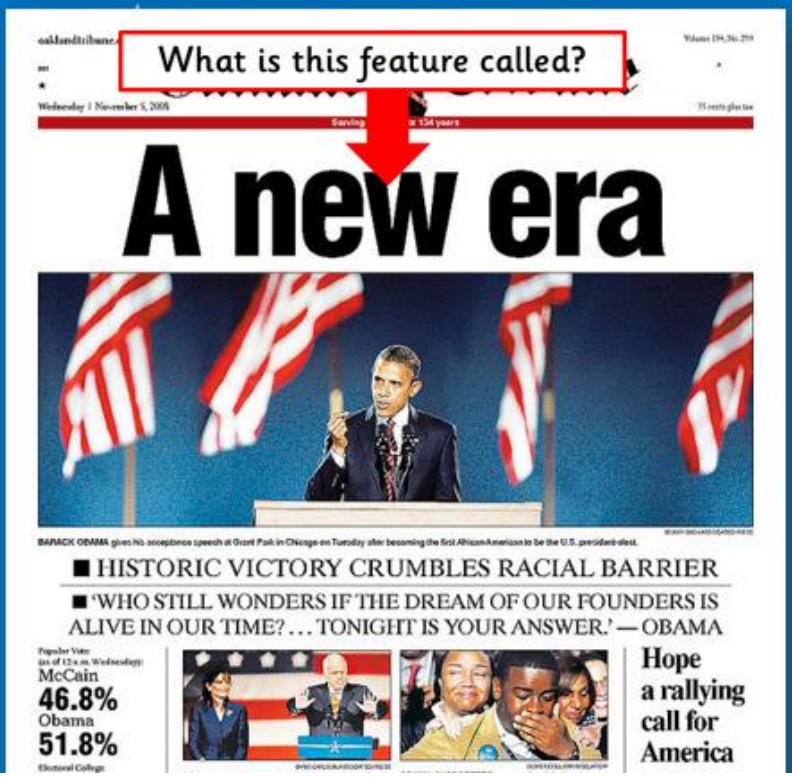
Prefixes go at the beginning of words. This changes the meaning of the word.

prefix	meaning	example	Write down 3 more examples of words with this prefix
re	to do again	<u>re</u>turn	
bi	two	<u>bi</u>cycle	
dis	not	<u>dis</u>like	
mis	wrong	<u>mis</u>behave	
pre	before	<u>pre</u>historic	
over	too much	<u>over</u>cook	
un	not	<u>un</u>happy	

Thursday- English

QUESTION 1

What is this feature called?



A new era

BARACK OBAMA gives his acceptance speech at Grant Park in Chicago on Tuesday after becoming the first African-American to be the U.S. president-elect.

■ HISTORIC VICTORY CRUMBLES RACIAL BARRIER

■ 'WHO STILL WONDERS IF THE DREAM OF OUR FOUNDERS IS ALIVE IN OUR TIME? . . . TONIGHT IS YOUR ANSWER.' — OBAMA

Popular Vote
as of 12 a.m. Wednesday:
McCain
46.8%
Obama
51.8%
Electoral College

Hope a rallying call for America

QUESTION 2

Choose the article with the correct tense for a newspaper report.

A

The spacecraft is travelling through space for 3 days until it reaches the moon.

B

The spacecraft travelled through space for 3 days until it reached the moon.

QUESTION 3

What should the opening sentences of a newspaper report include?

A
Lots of opinions.

B
The reporter's name.

C
The important facts (who, what, where, when and why).

QUESTION 4

Fill in the missing word.

The first word of the main report should be in _____ .

Art class: Winner Josh Tabti and runner-up Davida Brenda with Annie Hearne, arts co-ordinator at Sir William Ramsay School 05-161P3

Prickly pieces win prizes for art students

BUDDING artists at Hazlemere C of E School took to their easels with ease during a recent competition.

Cacti were the theme during a series of art workshops organised by Sir William Ramsay School in Rose Avenue and youngsters battled it out last week for a place in the final.

Annie Hearne, advanced skills teacher at visual arts college Sir William Ramsay, said: "The pupils were set the task of producing experimental sketch pads with all the techniques they had learned in the sessions."

The victors will go on to face the winners from Widmer End Combined, Manor Farm Community, and Tylers Green First schools in a grand final.

QUESTION 5

Fill in the missing word.

This feature is called a _____.

"It was amazing. I am very lucky to have been part of such a fantastic and historical event."

QUIZ ANSWERS

QUESTION 1: headline

QUESTION 2: B. Past tense

QUESTION 3: C. The important facts

QUESTION 4: capital letters

QUESTION 5: quote

ACTIVITY

We are going to write our own newspaper reports to tell people in Great Britain about the Apollo 11 moon landing.

You need to pretend you are a reporter from 1969.

You need to use all the features of a newspaper report in your writing.

You need to tell the people of Great Britain the important facts.

ACTIVITY

- First, plan your report using the **newspaper report planner**.
- Next, use your **newspaper writing checklist** to make sure you have planned to put all of the newspaper features into your writing.
- Next, write up your newspaper report using your plan.
- Finally, check your work and tick the checklist where you have included a newspaper report feature.

You will complete the first 2 point today.

Apollo 11 Moon Landing Newspaper Report Planner

My headline: _____

Who?	What?
When?	Where?

Quote:

Details that I will include:

Newspaper Report Texts Checklist

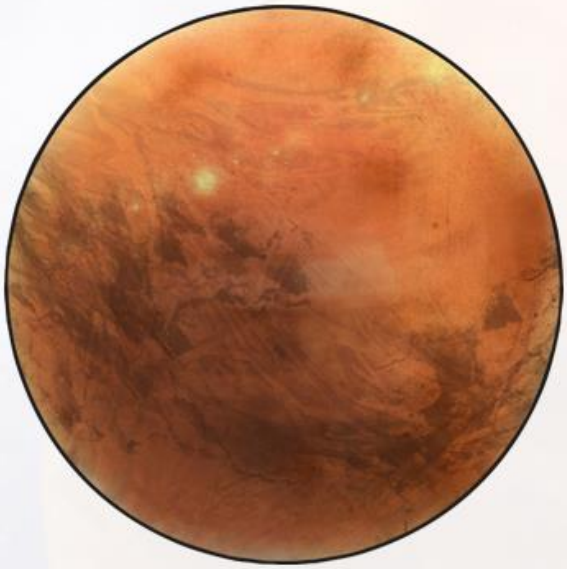
Headline	
Past tense	
First word in capital letters	
Introduction (what, who, when and where?)	
Contains facts	
Contains quotes	
Capital letters and full stops	

Thursday- topic

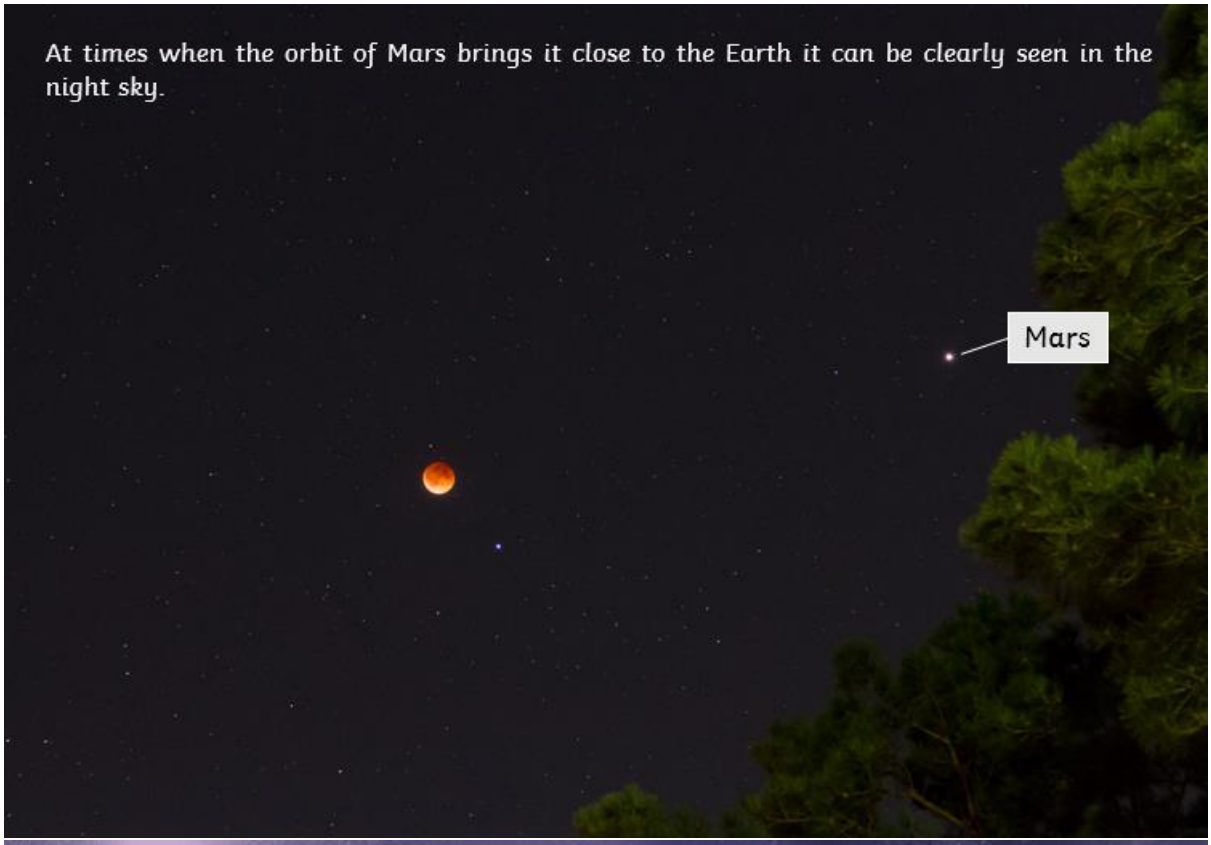
Earth is only one of the planets in our solar system. There are seven other planets that also orbit our Sun.

Neighbours

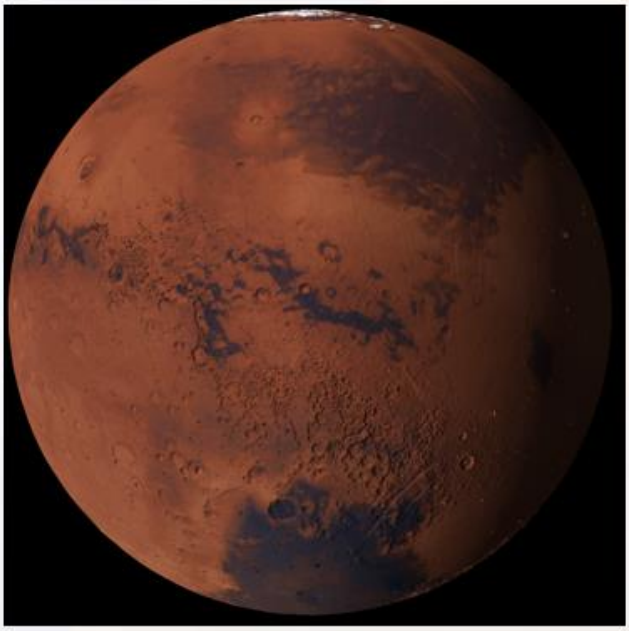
The planet Mars is our neighbour. At some points in our orbit, Mars is only 55 million km away.



At times when the orbit of Mars brings it close to the Earth it can be clearly seen in the night sky.



Mars is sometimes called the Red Planet. This is because most of the surface of Mars is covered in a thick layer of iron oxide dust. This is the same metal as a rusty car! It gives the planet a reddish appearance.



The Planets

In our Solar System, there are 8 planets.

Can you remember the order of the planets?

Mercury, **V**enus, **E**arth, **M**ars, **J**upiter, **S**aturn, **U**ranus, **N**eptune

A mnemonic is a way of remembering something. We can make a sentence out of the first letter of each word in a sequence to help us remember it.

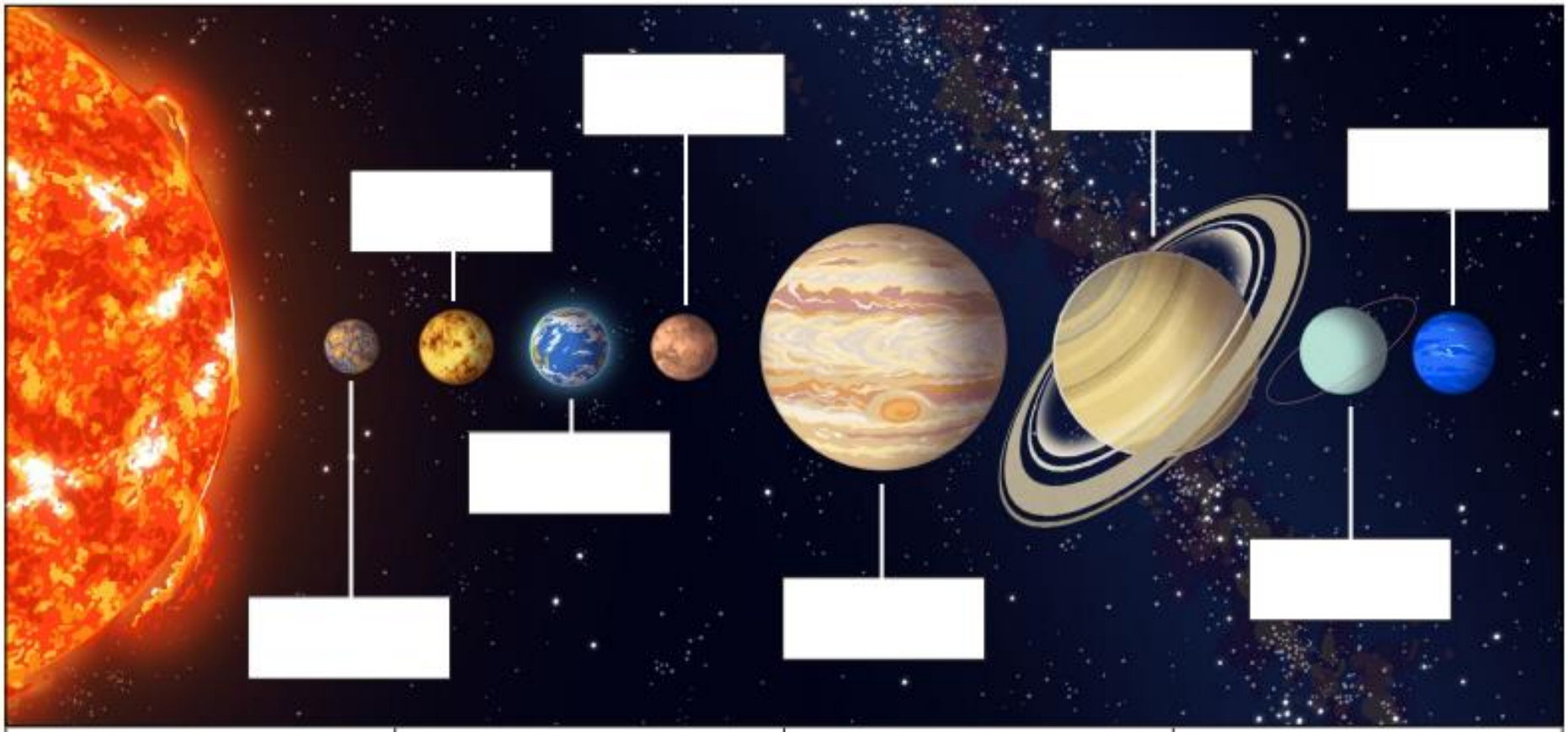
For example, we can remember how to spell 'because' by remembering the mnemonic: **B**ig **E**lephants **C**an **A**lways **U**nderstand **S**mall **E**lephants.

With your partner, create your own **mnemonic** to help you remember the order of the planets.

Label the planets in order below.

The Solar System

Use the word bank provided to label the parts of the solar system.



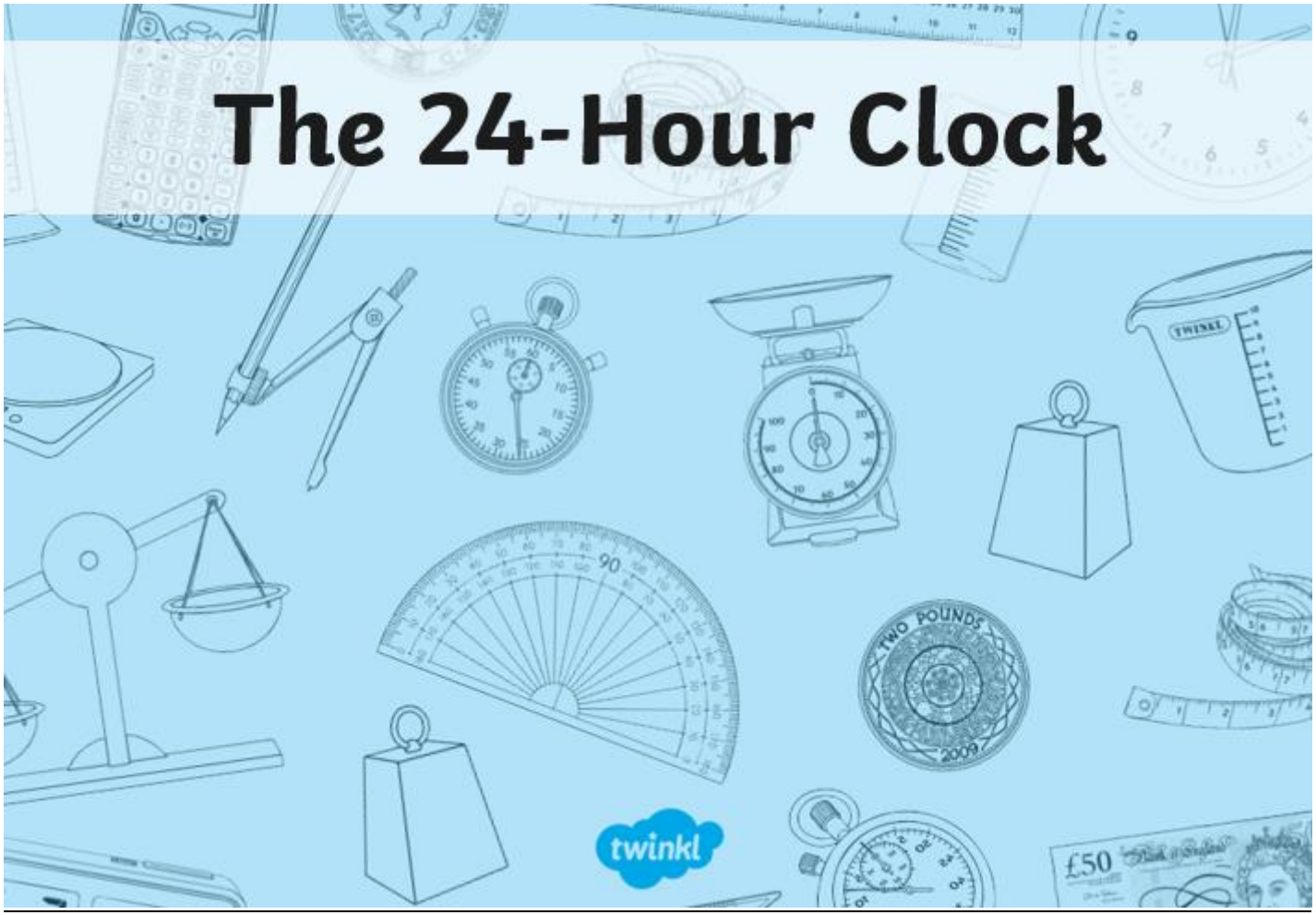
Mars	**Earth**	**Neptune**	**Saturn**
Jupiter	**Uranus**	**Mercury**	**Venus**

Friday- calculation

Calculate the answer to the following:

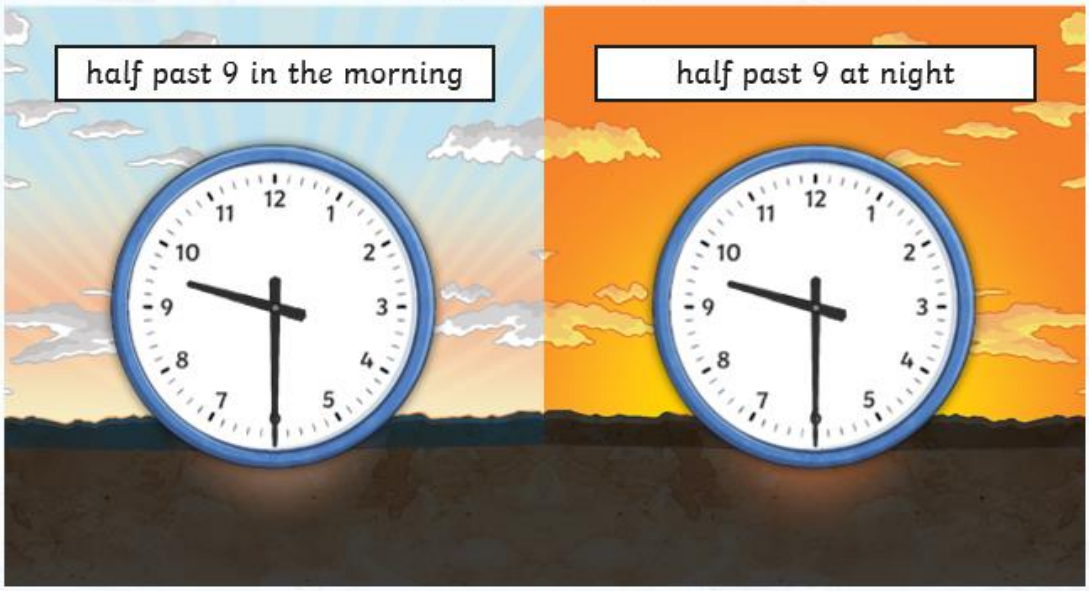
273 +514 ____	451 +225 ____	304 +463 ____	615 +172 ____
153 +716 ____	805 +102 ____	572 +213 ____	531 +267 ____
202 +236 ____	370 +116 ____	622 +375 ____	312 +251 ____
476 +403 ____	155 +234 ____	371 +628 ____	

Friday- maths



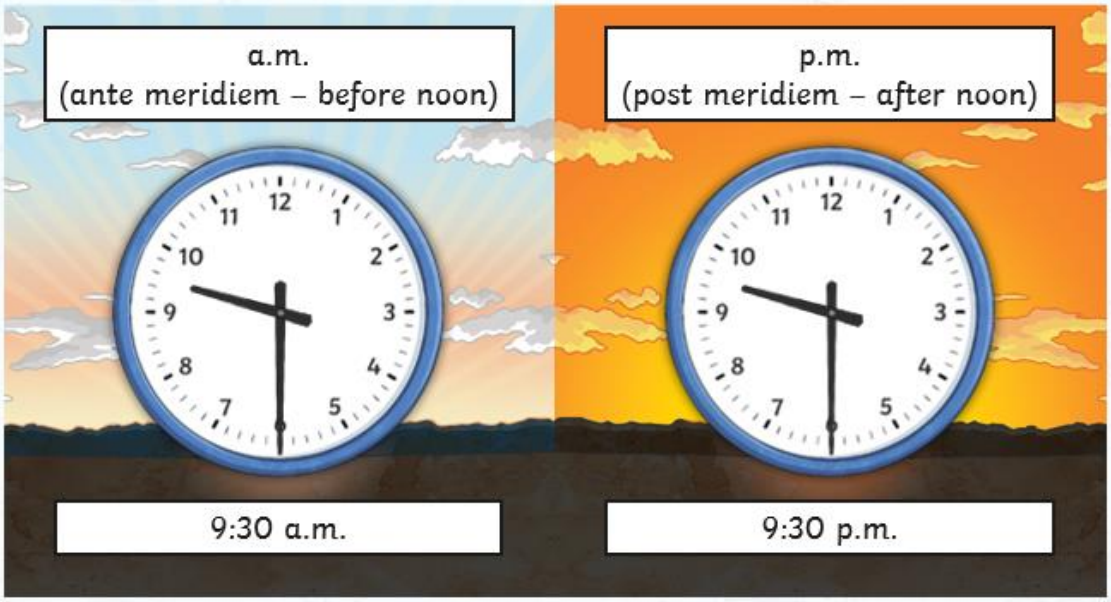
The 24-Hour Day

A day has 24 hours. A clock has 12 hours.
This means that every time will happen twice each day.



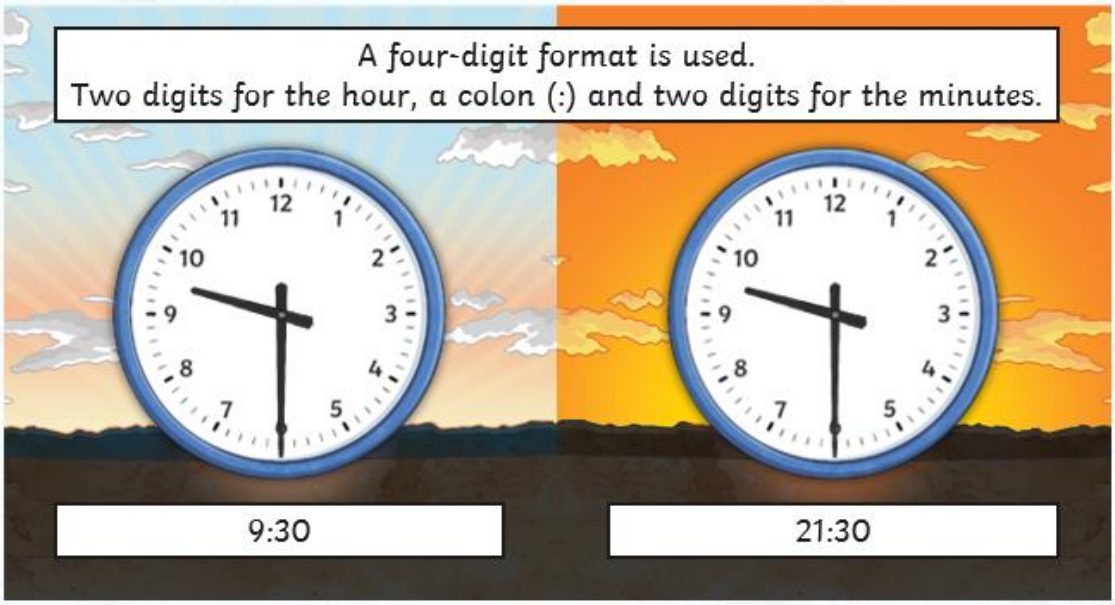
The 24-Hour Day

We have a few ways to tell the difference between these two times.
One way is to use a.m. and p.m.



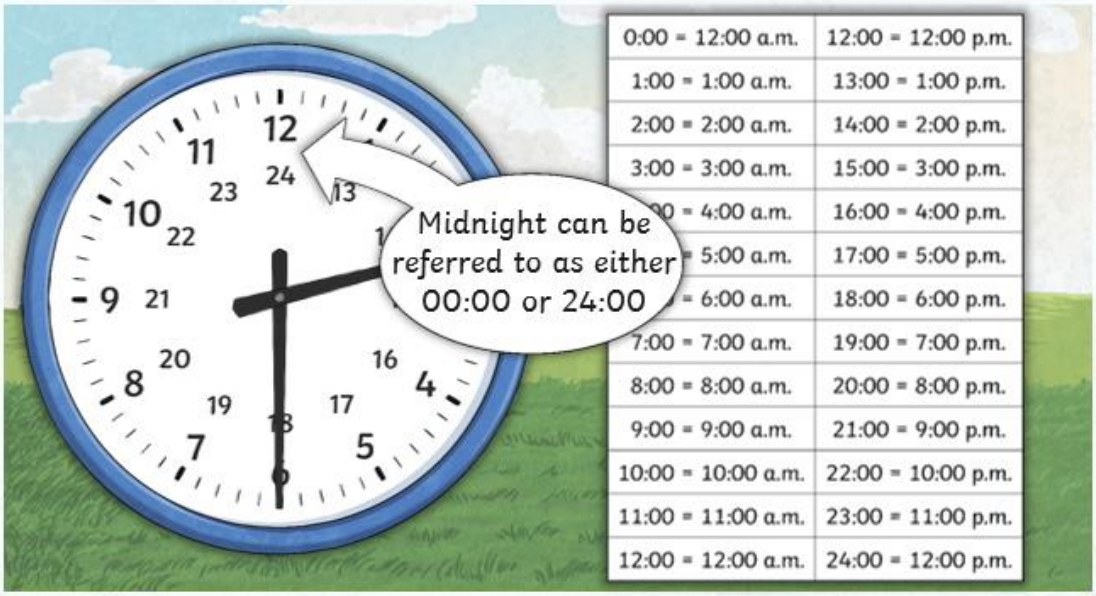
The 24-Hour Day

Another way is to use a 24-hour clock.



The 24-Hour Day

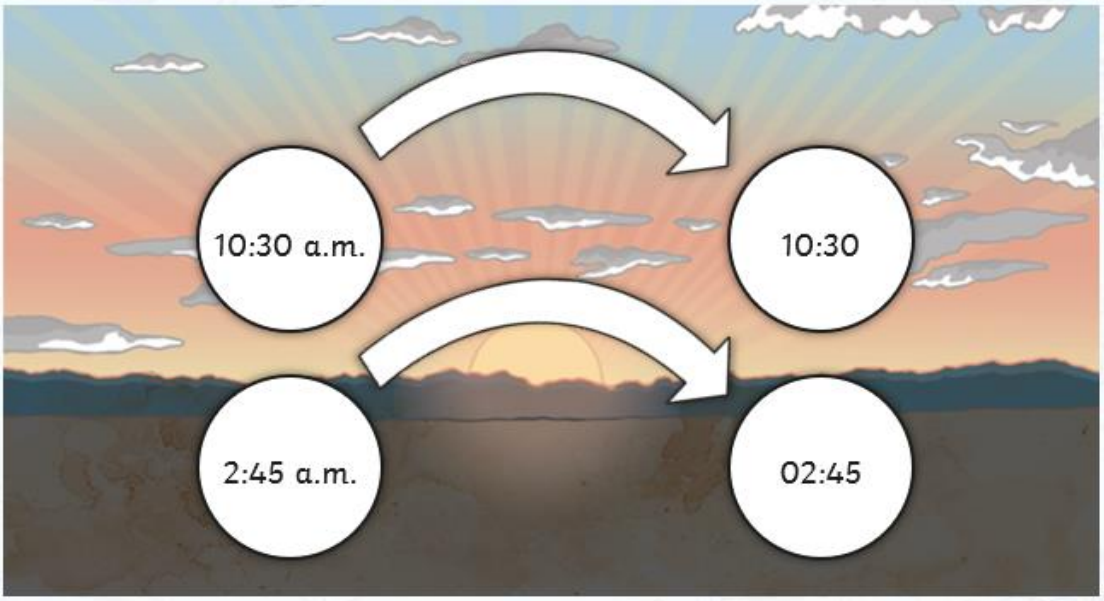
This clock and table show the corresponding hours on a 24-hour clock.



0:00 = 12:00 a.m.	12:00 = 12:00 p.m.
1:00 = 1:00 a.m.	13:00 = 1:00 p.m.
2:00 = 2:00 a.m.	14:00 = 2:00 p.m.
3:00 = 3:00 a.m.	15:00 = 3:00 p.m.
= 4:00 a.m.	16:00 = 4:00 p.m.
= 5:00 a.m.	17:00 = 5:00 p.m.
= 6:00 a.m.	18:00 = 6:00 p.m.
7:00 = 7:00 a.m.	19:00 = 7:00 p.m.
8:00 = 8:00 a.m.	20:00 = 8:00 p.m.
9:00 = 9:00 a.m.	21:00 = 9:00 p.m.
10:00 = 10:00 a.m.	22:00 = 10:00 p.m.
11:00 = 11:00 a.m.	23:00 = 11:00 p.m.
12:00 = 12:00 a.m.	24:00 = 12:00 p.m.

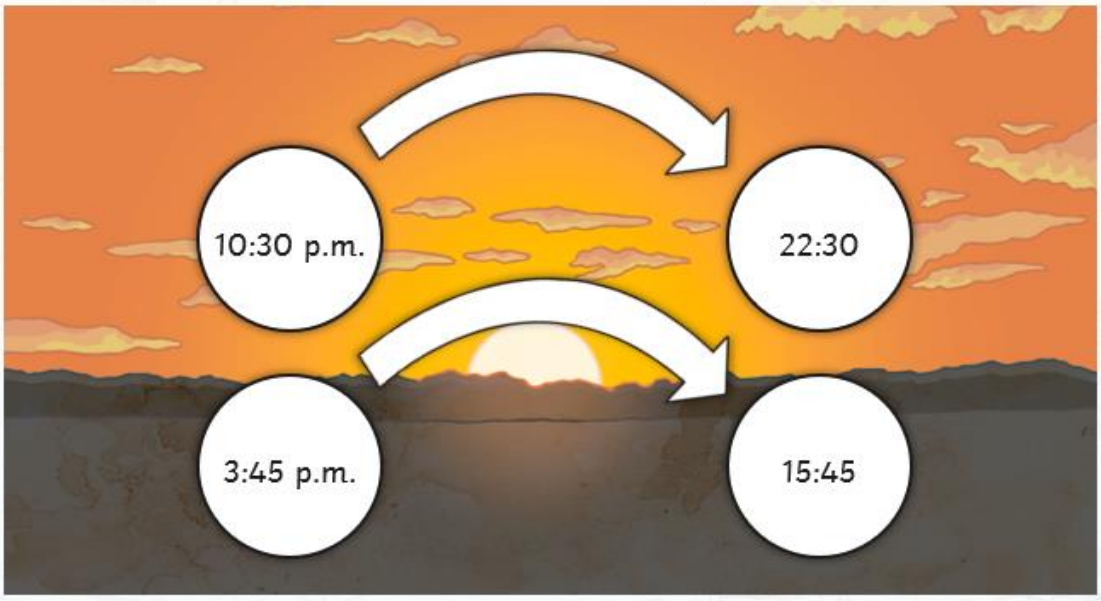
Changing 12-Hour Times to 24-Hour Times

To change 12-hour a.m. times to 24-hour times, make sure the time is in a four-digit format. You do not need to write 'a.m.'



Changing 12-Hour Times to 24-Hour Times

To change 12-hour p.m. times to 24-hour times, add 12 to the hour time. You do not need to write 'p.m.'



Now have a go...

1) Complete the chart, changing 12-hour a.m. digital times into 24-hour times.

12-Hour Time	24-Hour Time
1:00 a.m.	
2:00 a.m.	
3:00 a.m.	
4:00 a.m.	
5:00 a.m.	
6:00 a.m.	
7:00 a.m.	
8:00 a.m.	
9:00 a.m.	
10:00 a.m.	
11:00 a.m.	

2) Complete the chart, changing 12-hour p.m. digital times into 24-hour times.

12-Hour Time	24-Hour Time
12:00 p.m.	
1:00 p.m.	
2:00 p.m.	
3:00 p.m.	
4:00 p.m.	
5:00 p.m.	
6:00 p.m.	
7:00 p.m.	
8:00 p.m.	
9:00 p.m.	
10:00 p.m.	
11:00 p.m.	

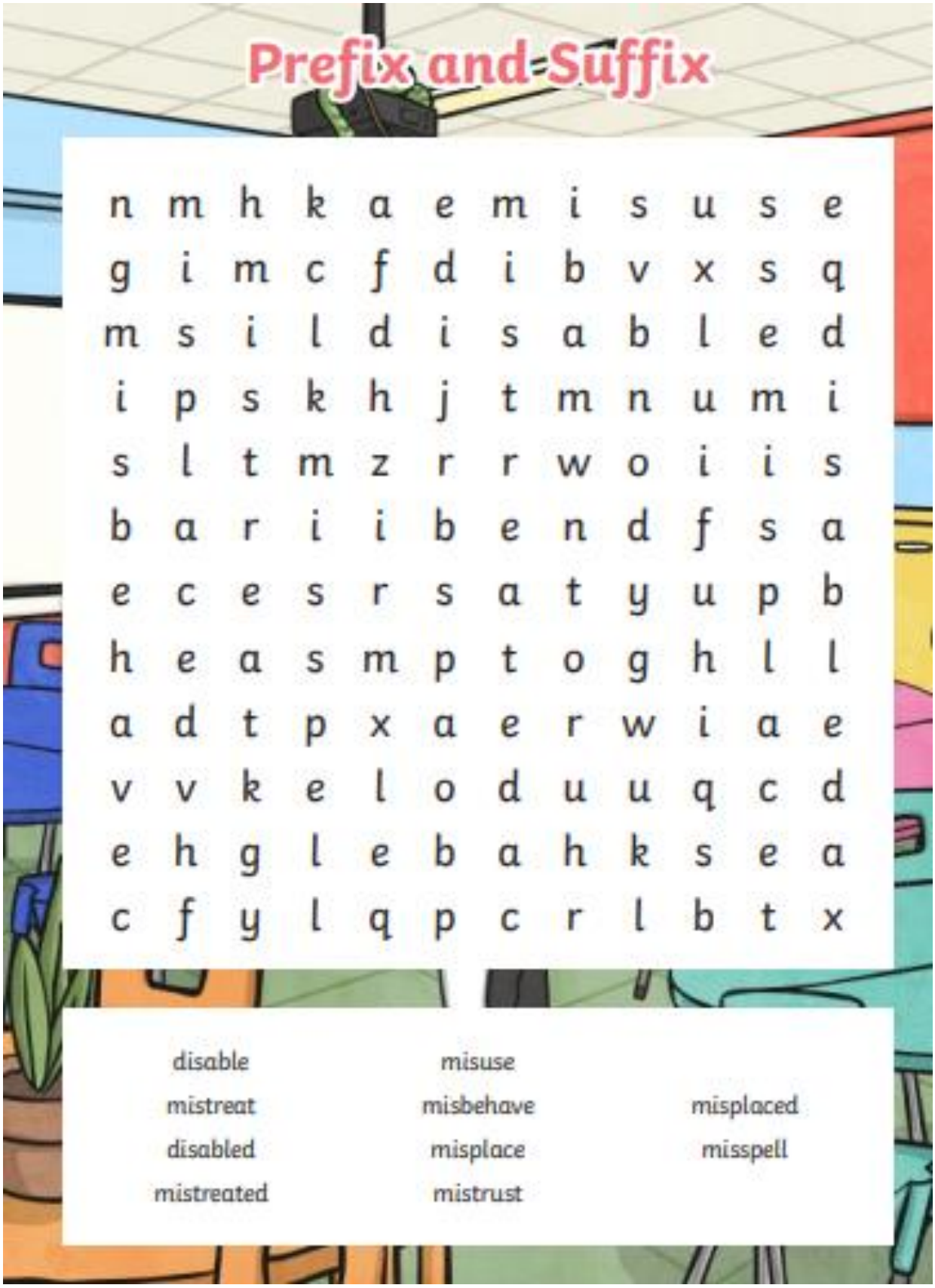
3) Complete this table, filling in the missing times.

24-Hour Time	12-Hour Time
03:15	
	4:00 p.m.
	7:30 a.m.
18:45	
14:30	
	5:30 a.m.
	10:45 p.m.
17:30	
09:15	
	6:30 a.m.
22:30	

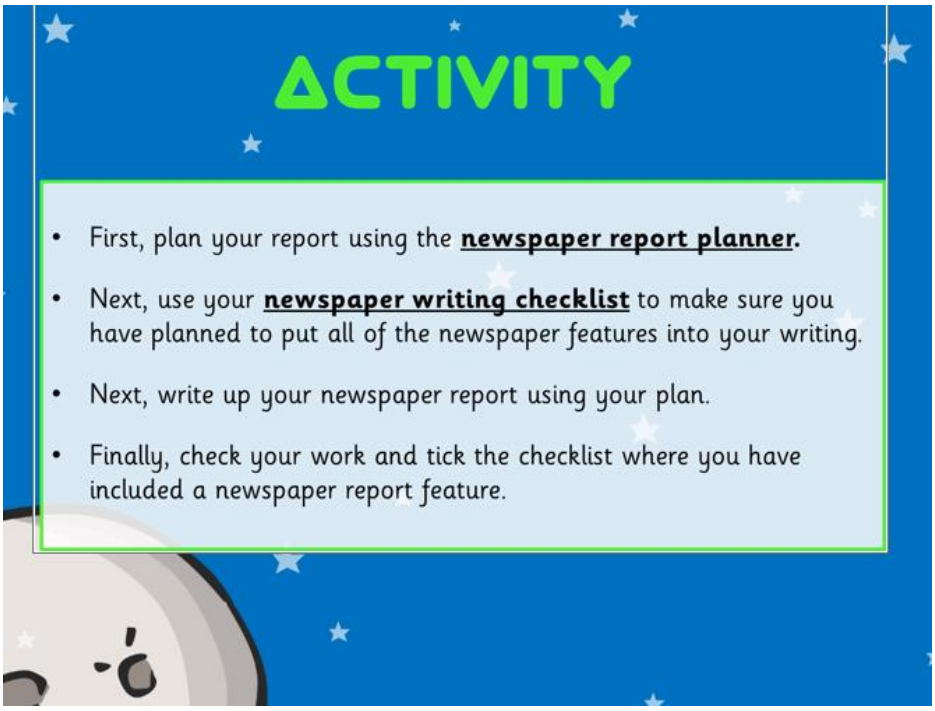
In each pair, tick the time which comes earliest in the day. The first one is done for you.

3:15 p.m.	○	11:30	☑
04:15	○	4:30 a.m.	○
13:15	○	1:00 p.m.	○
8:30 p.m.	○	09:15	○
11:30 a.m.	○	23:30	○
14:30	○	2:15 p.m.	○

Friday- spelling

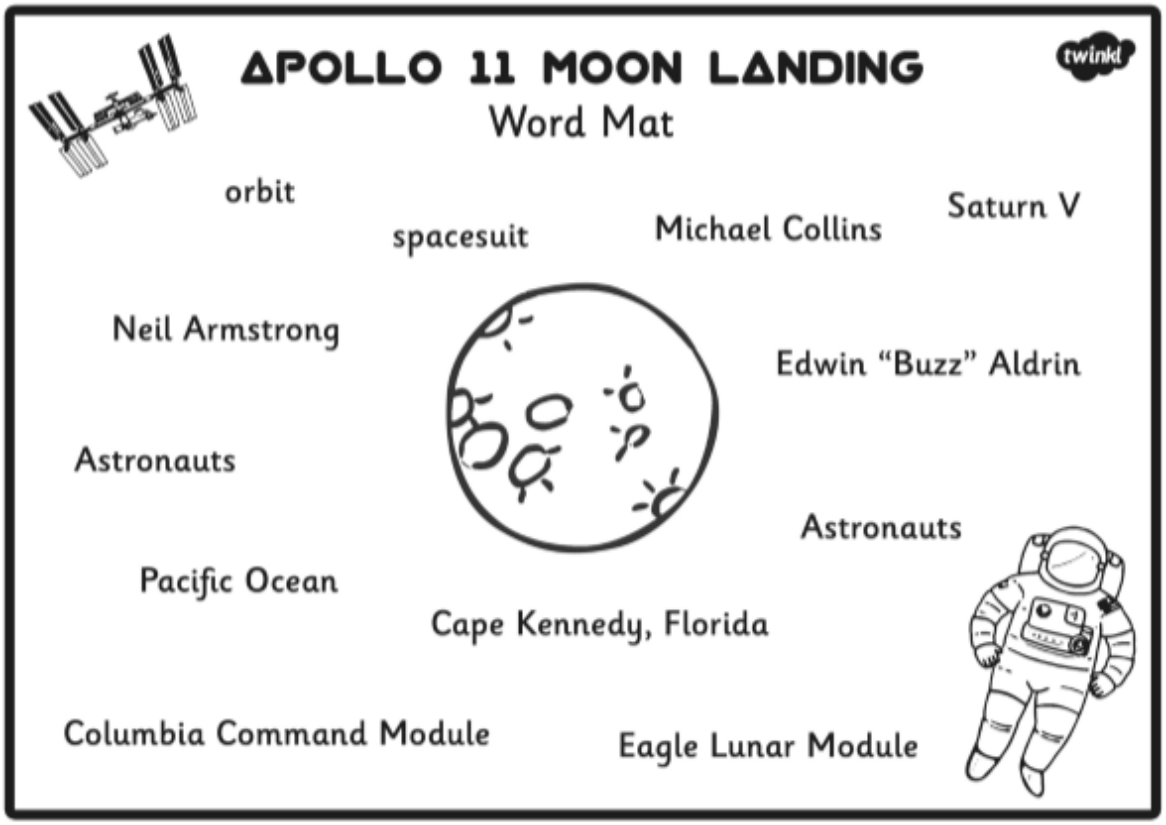


Friday- English



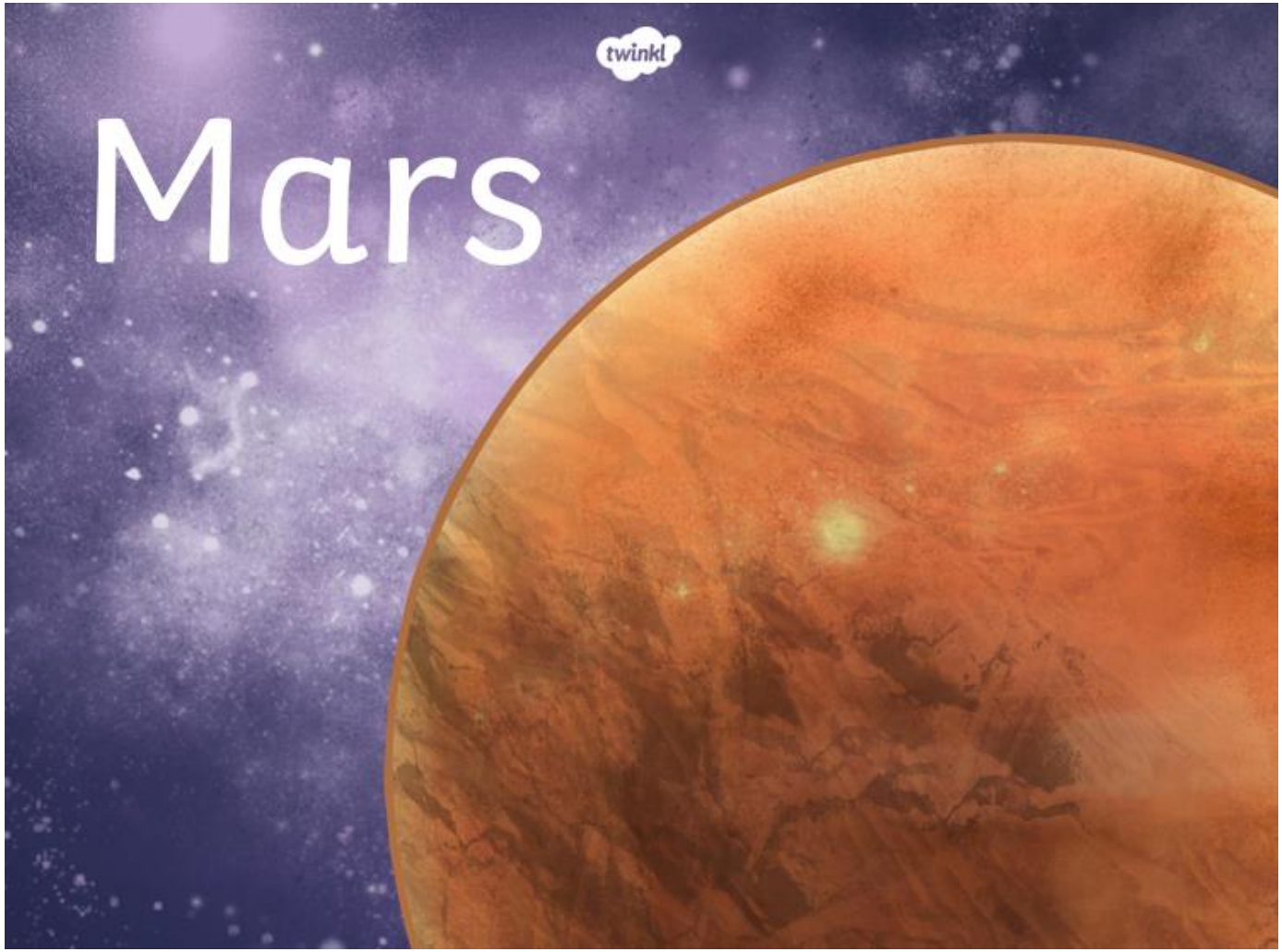
Today you will complete the last two points.

Use your plan from yesterday, the word bank and template to help you.



Headline

Friday- topic

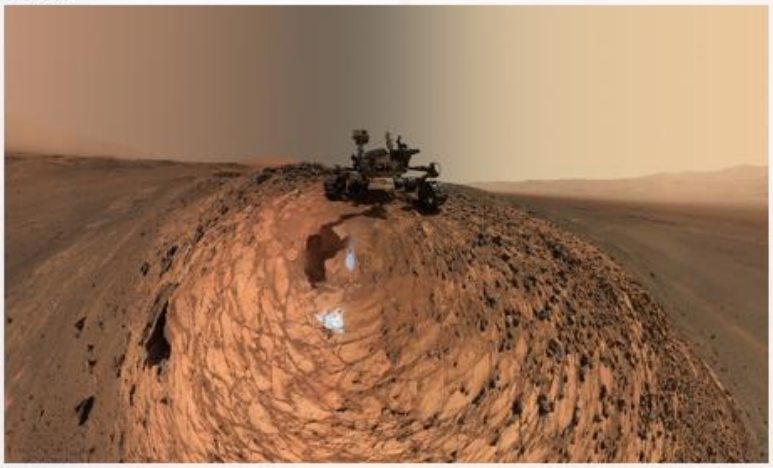


Exploring

Since 1960, the United States Space Agency NASA and Space Agencies in the USSR, China and India have attempted to send 43 spacecraft to gather data about Mars.

23 of these have either failed to reach Mars or failed to return any information.

20 spacecraft have been successful at sending photographs and other data back to Earth.



One of NASA's Mars rovers collecting a drilled rock sample.

Currently there are seven spacecraft in operation collecting data from Mars.

There are five orbiters circling the planet, and two space rovers on the surface.

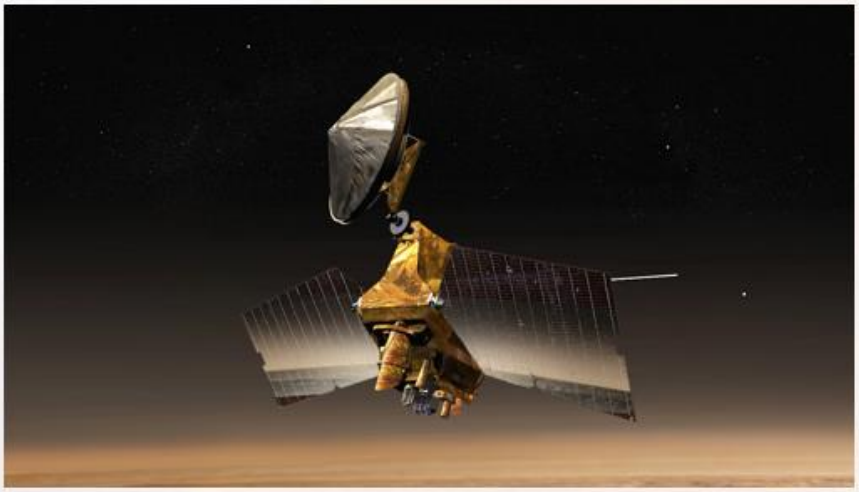
Photographs taken by the Mars Reconnaissance Orbiter:

A crater on Mars.

On 28th September 2015, scientists from NASA released a statement saying that the Mars Reconnaissance Orbiter (pictured below) has found proof that there is flowing water on the surface of Mars.

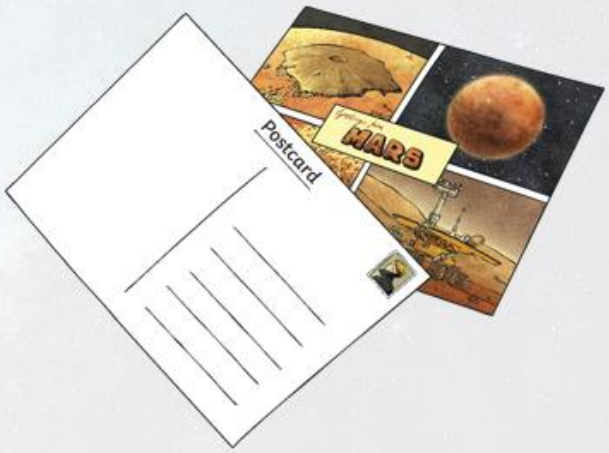
This is very important news because, as far as we know, all forms of life need water to survive.

This makes the possibility of finding life on Mars much more likely.

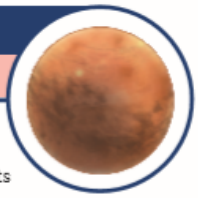


Planet Postcard

Imagine that you have taken a much-needed holiday to another planet. Using the **Planet Fact Cards**, write a postcard back to your family or friends on Earth describing the planet and the activities that you took part in. Try to use as many facts as you can about your chosen planet.



Facts about Mars



1. Mars is the fourth planet from the Sun.
2. Mars is known as the 'Red Planet' because of its distinctive red colour.
3. One year on Mars is longer than an Earth year. It lasts 687 Earth days.
4. Like Earth, Mars has ice caps at its north and south poles.
5. The average temperature on Mars is -63°C.
6. Diameter: 6800km
7. Distance from the Sun: 230 million km

Using the information, calculate Mars' scaled diameter and distance from the Sun in the boxes below. Round your answers to one decimal place.

Diameter

Scale 1cm:2000km

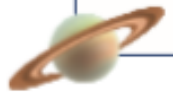
Distance

Scale 1m:200 million km

Your planet is Mars.

Planet Postcard

Write a postcard to your family or friends on Earth, describing a day on another planet. Try to use as many facts as you can about your chosen planet.



Friday- reading comprehension

Valentina Tereshkova

Who Is Valentina?

Valentina is a famous Russian cosmonaut. Cosmonaut is the Russian word for astronaut. She is best known for being the first woman to fly in space.

Valentina's Early Life

Valentina was born on 6th March 1937 in the country that is now called Russia but was then called the USSR. Her family were so poor they couldn't even afford bread! Valentina left school at just 16 and worked in a factory but she dreamed of doing something more exciting.

Valentina joined a skydiving club as a hobby and soon learnt that she had a knack for it!

The Space Race

The USSR wanted to be the first country to send a woman into space. They were in a race against the United States. Valentina applied to be in a space programme and was chosen because she was good at skydiving.

Five women were picked to train to be cosmonauts but only one of them would be sent into space. Valentina worked hard to win a place and training was tough. They had to do many tests in zero-gravity and spend lots of time on their own. The women had to keep their training a secret – even from their families! Of the five women, Valentina was chosen as the best and was the only one to go into space.

Valentina's Flight

On 16th June 1963, Valentina flew alone in space on a shuttle called Vostok VI. She went around the Earth 48 times setting a new world record. She took important photographs in space that helped scientists back on Earth. She had a tough journey back to Earth that nearly ended in disaster! The ship's programming went wrong and the ship nearly crashed. Luckily, clever Valentina was able to fix the problem and survived with just bruises on her face.

After her flight, Valentina became an engineer and then a doctor. She now works for world peace.

Did You Know...?

- Valentina has a crater on the moon named after her!
- Valentina's first husband was a cosmonaut too, making them the first married couple to have both been to space.

Questions

1. What is Valentina's nationality? Tick one

   ○ British ○ Russian

   ○ American ○ German

2. When was the date of Valentina's first flight into space? Tick one

   ○ 16th June 1936 ○ 16th June 1963

   ○ 13th July 1693 ○ 19th July 1996

3. Draw lines to complete the sentences about Valentina

Valentina was chosen for the space programme	in a factory before becoming a cosmonaut.
Valentina worked	her training a secret.
Valentina had to keep	because she was good at skydiving.

4. Number the events below to show the order in which they happened in Valentina's life. The first one has been done for you.

   ☐ Valentina trained in the space programme.

   ☐ 1 Valentina was born on 6th March 1937.

   ☐ Valentina joined a skydiving club.

   ☐ Valentina became a doctor.

   ☐ Valentina became the first woman to go to space.

5. Fill in the missing word in this sentence.

   On her first flight, Valentina took _____ that helped science.

6. Find and copy one word that describes the kind of life Valentina dreamed of.

   _____

7. What happened to Valentina on her way back to Earth? Why do you think she reacted the way that she did?

   _____

   _____

   _____