







You do not need to print off any of the challenges. You can complete them on a piece of paper and take a picture of your work to upload it to Twitter or Facebook.

<p>Week 7</p> <p>Space</p>	<p><b>Reading</b></p> <p>Tim Peake</p>  <p><b>Task 1:</b> Read the text all about the British astronaut Tim Peake and answer the attached comprehension questions.</p> <p><b>Task 2:</b> Log into Active Learn and read one of the books assigned to you and answer the questions.</p> <p><b>Writing</b></p> <p>Write a persuasive letter to invite an astro scientist to visit school for a day. Use the attached resources to help you.</p>	<p><b>Spelling &amp; SPAG</b></p> <p>This week we have combined these 2 tasks together as one big challenge!</p> <p><b>'The Mystery of The Stolen Space Suit!!!!'</b></p>  <p>Are you ready to solve the mystery?</p> <p>Complete the attached activity and find out who was the culprit.</p>	<p><b>Maths</b></p> <p><b>Task 1:</b> Complete the activity about the sizes of the different planets.</p>  <p><b>Task 2:</b> complete the space trip task, remember to read the information in the table carefully.</p> <p><b>Task 3:</b> complete the space challenge cards.</p>  <p>Remember your TTRs!</p>	<p><b>Science.</b></p>  <p><b>Task 1:</b> Complete the space fact hunt attached to find out more about the planets in our solar system.</p> <p><b>Task 2 :</b> Using the template attached, design a rocket that could launch you into space.</p> <p><b>Task 3:</b> Pick a planet from our solar system and create a poster about it.</p> <p>You can include:</p> <ul style="list-style-type: none"> <li>- Size</li> <li>- Distance from the sun</li> <li>- Distance from the earth</li> <li>- A labelled diagram of the planet</li> </ul>	<p><b>Wellbeing</b></p> <p>Looking after our physical bodies is really important. Astronauts had to make sure they were in top shape before they could travel to space.</p> <p>Design a fitness routine that could help an astronaut get into shape.</p> <p>(There are some ideas attached to help you get started.)</p> 
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## Reading

# Tim Peake

### **Tim's Background**

Timothy Nigel 'Tim' Peake was born in Chichester, West Sussex, England, on 7<sup>th</sup> April 1972, and grew up in a nearby village. Tim and his older sister, Fiona, enjoyed a stable upbringing and a relatively ordinary family life. Their mother, Angela, worked as a midwife and their father, Nigel, was employed as a journalist. Tim's father had always had a keen interest in historic aircraft and Tim accompanied him to air shows from an early age: this is what fuelled Tim's fascination with flying and his passion began.

He studied at the Chichester High School for Boys in 1983, leaving in 1990 to enrol at the Royal Military Academy Sandhurst.

### **Military Career**

Despite having been intrigued by stars and the universe as a child, Tim pursued his passion for flying and trained to be a pilot resulting in an eighteen-year military career, flying a broad range of helicopters and aircraft. His skills were tested the most intensely in Bosnia when Tim was in active service during the war in the Balkans in the 1990s.

In 2005, Tim trained to be an instructor, joining the prestigious Empire Test Pilots' School and graduating with an award for the 'best rotary wing pilot'. He also completed a degree in Flight Dynamics and Evaluation from the University of Portsmouth, before flying Apache helicopters in Texas with the US Army. Luckily, on his return to the UK, the Apache was being introduced into the British Army so Tim made valuable contributions to the development of the training programme.

Tim left the army in 2009, after completing over 3000 flying hours to become a test pilot - a pilot who flies an aircraft to test its performance.

### **European Space Agency**

In 2008, when the European Space Agency (ESA) announced it was accepting applications for new astronauts, Tim saw the advert online and decided it was once in a lifetime opportunity that he couldn't afford to miss. He was ideally placed to apply, with his flying experience and academic qualifications. His application joined 8000 others in the competition to achieve a place!





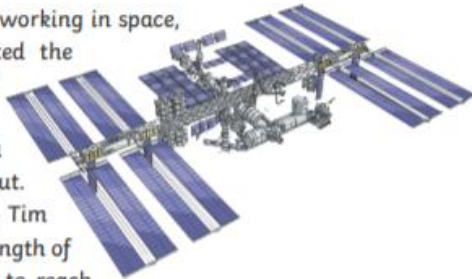
In 2009, Tim sat multiple exams and assessments, testing his intelligence and skills including memory, spatial awareness and concentration. More than 900 candidates were whittled down to ten – amazingly, Tim was one of them. Weeks went by before Tim finally received a phone call from the ESA offering him one of the six available places to train to be an astronaut with the European Astronaut Corps in Cologne, Germany.

Basic training involved acquiring all of the knowledge needed to become an astronaut including: space law, rocket propulsion and space flight engineering. Tim also had to learn to speak Russian (the language used by the ESA training programme). As training progressed, Tim learnt survival skills, CPR (short for cardiopulmonary resuscitation - a medical procedure of repeated cycles of compression of the chest and artificial respiration, performed to help a person who has suffered cardiac arrest) and how to move in zero gravity.

### Blast Off!

On 15<sup>th</sup> December 2015, at 11.03 a.m., the nation collectively held their breath as Tim Peake, Yuri Malenchenko and Tim Kopra launched. Tim reached his destination at 5:33 p.m. but the docking procedure did not happen smoothly, meaning the team had to dock manually (by hand, without computers). More than two hours later, the hatch opened and Tim was welcomed onboard, becoming the first British ESA astronaut to inhabit the International Space Station (ISS).

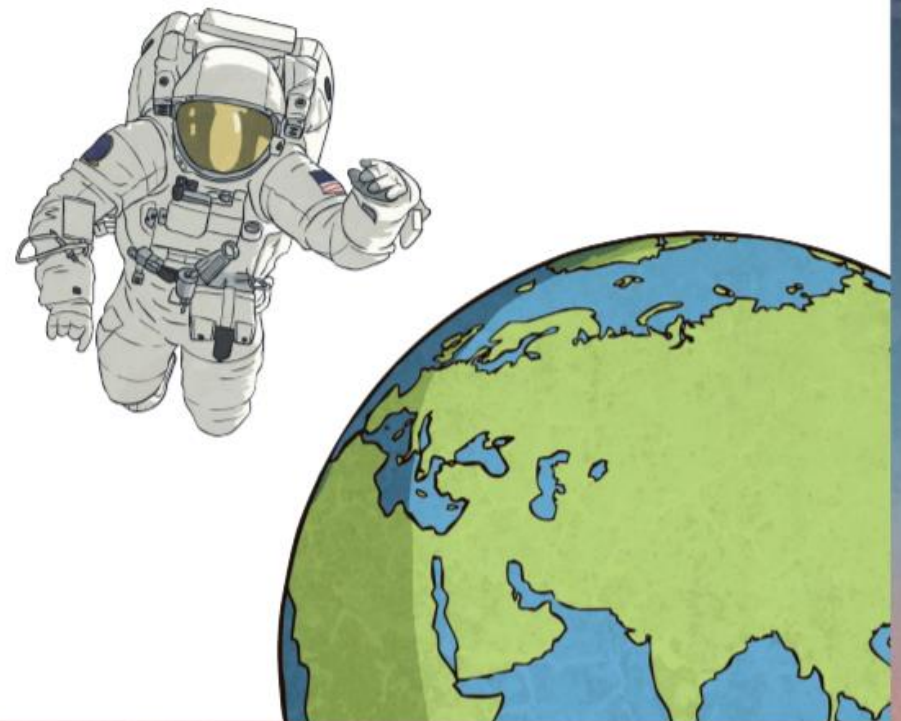
Tim spent six months living and working in space, during which time he completed the first spacewalk (a period of physical activity engaged in by an astronaut in space outside a spacecraft) by a British astronaut. With his crewmate, Tim Kopra, Tim travelled 50 metres (double the length of a normal-sized swimming pool) to reach their maintenance work. The mission was cut short when Tim Kopra reported water in his helmet but the main task had been completed successfully. In addition, Tim completed the London marathon on the ISS treadmill and appeared via video link at the Brit Awards ceremony.



### Coming Home

Tim returned to Earth on 18<sup>th</sup> June 2016, travelling in the Soyuz capsule (a spacecraft designed by the Soviet space programme) at 25 times the speed of sound, landing in Kazakhstan at 9:15 a.m. During his mission, Tim had made 3000 orbits of Earth, covering about 125m km. It took approximately two months for Tim's body to recover from the effects of zero gravity (the state or condition in which there is no apparent force of gravity acting on a body).

Tim commented that, as a child, like many other children, he dreamed of going into space but never seriously considered it a possibility. However, a lifelong fascination with flying, years of training as a pilot and then an astronaut, along with some luck, turned his dream into a reality. While in space and since returning home, Tim has worked a lot with children on various science projects to inspire future generations to strive to become astronauts too.



## Questions

1. In 2005, Tim trained to be an instructor, joining the prestigious Empire Test Pilots' School...' What does **prestigious** mean? Tick one.

- ☐ distinguished
- ☐ underprivileged
- ☐ affluent
- ☐ wealthy

2. When was Tim's competence most tested? Tick one.

- ☐ during astronaut training
- ☐ during the Balkan Wars
- ☐ when he applied to be an astronaut
- ☐ when he worked as a test pilot

3. 'Tim... enjoyed a stable upbringing...'

What do you think the word **stable** means?

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4. Find and copy the names of two astronauts who participated in the journey into space with Tim.

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5. Find and copy a phrase from the text which shows that the astronauts experienced difficulties when docking with the ISS.

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6. Explain why the author has organised this text with sub-headings.

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7. Summarise what you have read in paragraphs 6-8 in one sentence.

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## Questions

8. Why might Tim have left the army after 18 years?

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9. Explain why you think Tim spends time working with children.

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10. Do you think that Tim will change careers in the future? Give evidence to support your answer.

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## Writing

Here is an example persuasive letter.

Look at the features it has and make sure yours includes persuading the astro scientist to visit our school!

Palm Primary School,  
Soultown,  
Bettersham,  
BE5 5TE

12 Queen Street,  
Soultown,  
Bettersham,  
BE5 5TE

Monday 18<sup>th</sup> March

Dear Mrs Hassan,

As you know, this is year 6's final year at the wonderful Palm Primary School. We have all very much enjoyed our time here and would love to end the year in the best way possible. That's why I am writing to you, as a hard-working member of year 6, to ask that we are allowed to have a prom in July.

It is indisputable that the current year 6 class are the best class that Palm Primary School has ever had. Our humour, attitude, work ethic and brilliance alone are enough of a reason to celebrate. Last year's year six had a simple leaving assembly; this surely does not reflect the superior standard of our class. The only logical step is to hold a prom – the most fitting way to reflect the high standards and excellence of year 6.

Furthermore, the expected SATs results of year 6 will far exceed any gained before by Palm Primary School students. Without a doubt, this is as a result of unrivalled hard work and dedication during our studies at this school. Shouldn't our unwavering effort be justly rewarded? If future classes are to succeed as we have, it is clear that a worthy reward, such as a prom, would motivate and enthuse them. It is the least that hard working students deserve after exam pressures.

Ultimately, it cannot be forgotten that a year 6 prom will provide the final opportunity for year 6 to spend enjoyable time together before progressing onto different high schools. Surely, you would not deny us a last celebration together before we head in different directions? A prom would be crucial to our happy memories of Palm Primary School which would last a lifetime.

In brief, with your support and a small budget, we could make year 6's dreams a reality and truly reward the hard-work and effort that year 6 have shown during their time at Palm Primary School. In conclusion, I'm very hopeful that you will support this exciting opportunity.

Yours sincerely,

Anita Begum  
Class 12

The sender's address is on the right.

The recipient's address is on the left.

The letter shows the date on which it was written.

There is a greeting to the recipient.

The opening sentence hooks the reader and explains why you are writing.

There is an introduction.

The text is organised into paragraphs, which each have their own point.

Each point has arguments to support it.

There is a conclusion which summarises the main point of the letter and reiterates the opinion.

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**Remember to include why you want them to visit and explain how you would benefit as a young child learning all about space!**

# Persuasive Writing

## Introductions

I think...  
For this reason...  
I feel that...  
I am sure that...  
It is certain...  
I am writing to...  
Of course...  
In the same way...  
On the other hand...  
In this situation...

## Making your point

Firstly, secondly,  
thirdly...  
Furthermore...  
In addition...  
Also...  
Finally...  
Likewise...  
Besides...  
Again...  
Moreover...  
Similarly...  
Surely...  
Certainly...  
Specifically...  
If...then...  
because...

## Details

For example...  
In fact...  
For instance...  
As evidence...  
In support of this...

## Endings

For these reasons...  
As you can see...  
In other words...  
On the whole...  
In short...  
Without a doubt...  
In brief...  
Undoubtedly...

## Other Words

reasons  
arguments  
for  
against  
unfair  
pros  
cons





# Persuasive Letter Writing Word Bank

Greetings	Opening Sentences	Introductions	Details
Dear Mrs May, Dear Mr Brown, Dear Sir or Madam,	I agree that... It is my belief that... Some people believe that... Recent figures reveal...	For this reason... I am sure that... It is certain... In the same way...	For example... In fact... In support of this... Statistically...
Causal Conjunctions and Adverbials	Conclusions and Summaries	Closing Farewell	Vocabulary
accordingly consequently hence thus otherwise	As you can see... Without a doubt... In brief... On the whole... Undoubtedly...	Yours sincerely, Yours faithfully,	arguments unfair support persuade imperative pros/cons



## SPAG

# The Mystery of the Stolen Space Suit

A serious crime has been committed before the launch of the space shuttle to Mars. It is the night before the rocket is due to launch and everything has been prepared and packed. When the astronauts went in to do their final checks, one of them found that their space suit was missing and saw a remarkably similar one appear on a well-known auction site!

As the Detective Chief Inspector, it is your job to find out who has stolen the suit. Your officers have taken down the names and descriptions of the thirty astronauts who were training during the day.

There are also five clues that have been left. To crack the case, you will need to solve each clue and check the information against the list of names.

Good luck!



## The Astronaut Descriptions

Name	Gender	Nationality	Colour of Uniform	Wear Glasses?	Age
Astrid Asteroid	female	Russian	orange	Y	31
Aurora Astro	female	American	navy blue	Y	32
Apollo Atom	male	British	silver	N	24
Belinda Bright	female	American	navy blue	N	26
Comet Crater	male	Chinese	navy blue	N	35
Carina Cosmo	female	Chinese	silver	N	46
Cassiopeia Celeste	female	British	orange	N	29
Draco Day	male	British	silver	Y	36
Eos Eclipse	male	Russian	silver	Y	36
Esther Earthshine	female	American	navy blue	N	33
Halo Hypernova	male	British	silver	N	45
Helene Hubble	female	American	orange	Y	41
Juno Jupiter	female	British	orange	N	39
Leo Lightyear	male	Russian	navy blue	Y	38
Luna Lunar	female	British	navy blue	N	28
Lyra Light	female	British	navy blue	Y	26
Mars Molecule	male	Russian	orange	N	25
Mercury Meteor	male	Chinese	silver	Y	29
Miranda Moon	female	Chinese	orange	Y	39
Norma Nebula	female	American	silver	N	31
Nysa Neutrino	male	American	silver	N	41
Orion Orbit	male	Chinese	navy blue	N	45
Phoenix Pulsar	male	British	silver	Y	34
Portia Pluto	female	Russian	silver	N	35
Rhea Radiant	female	American	orange	N	33
Rocket Red	male	Russian	orange	N	38
Themis Totality	male	British	silver	N	37
Triton Twinkle	male	Chinese	navy blue	Y	29
Venus Van Allen	female	American	orange	N	45
Wolf White	male	British	silver	Y	29

## Clue 1

### Space Sentences



These space sentences have been written with parenthesis. Check which ones have the correct punctuation (it could be commas, brackets or dashes).

If there are more ticks, then the culprit is male. If there are more crosses, then the culprit is female.

Space Sentence	✓ or X
The astronauts, who come from all over the world have prepared for this mission for months.	
"I have waited for this chance for years," said one of the astronauts – she was actually one of the older astronauts.	
Unfortunately, the space food (most of the astronauts dislike it) has disappeared from the storage cupboard.	
Mission control, which is located in Paris, has delayed the take-off.	
Tom Peek – one of the British astronauts has eaten all of the space food.	
Luckily, the Space Agency stored extra food in a safe place they kept this a secret.	
Finally, the spare food (mainly baked beans) has been packed into the rocket.	
The rocket, with its extra food stores, has taken off safely.	

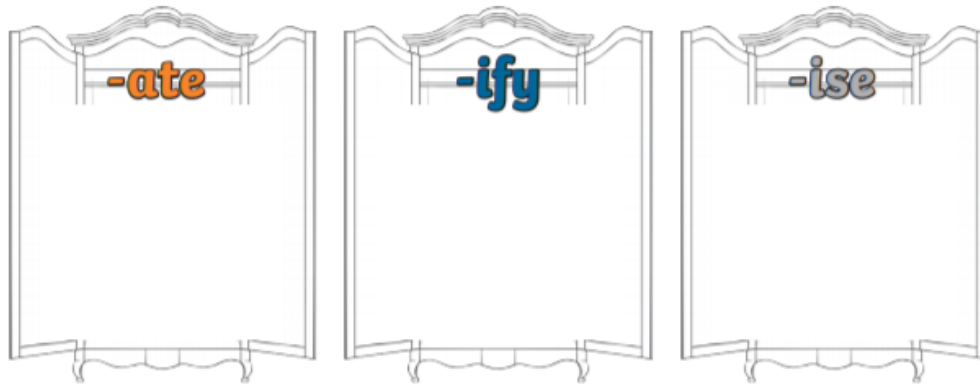
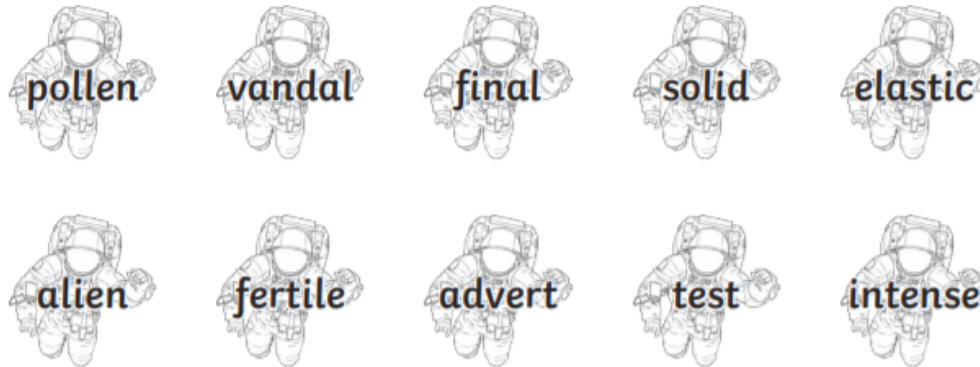
There were \_\_\_\_\_ crosses and \_\_\_\_\_ ticks. There were more \_\_\_\_\_ so the culprit is male/female.

## Clue 2

### Space Suit Suffix Sort-Out!

With all the chaos this police investigation has caused, the uniforms have been muddled up! In order to help prepare for takeoff, you need to match the nouns and adjectives to the correct suffix to form a verb. Whichever suffix has the most matching words will reveal the colour of the culprit's uniform.

Remember: sometimes the root word will need to be altered before the suffix is added.



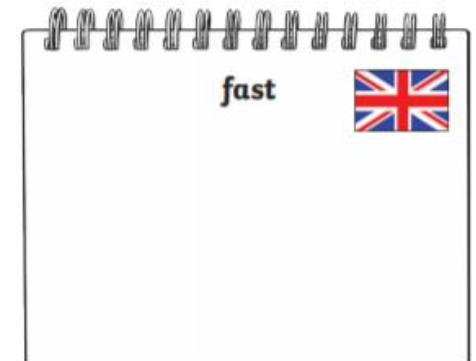
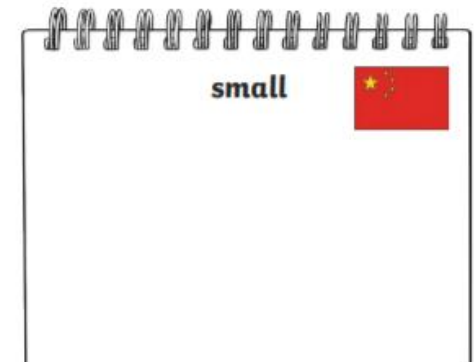
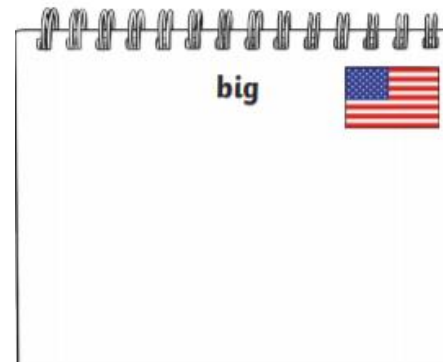
The suffix with the most root words is \_\_\_\_\_, so the culprit's uniform is \_\_\_\_\_.

## Clue 3

### Super Space Synonyms

While they wait for the mystery to be solved, the astronauts have been thinking of exciting synonyms for different words. Whichever nationality of astronauts have thought of the most synonyms for their word will reveal the nationality of the culprit.

diminutive	turbo	steady	zippy
unhurried	minuscule	speedy	nanoscopic
colossal	mountainous	swift	gargantuan



The nationality of the astronauts who found the most synonyms was \_\_\_\_\_.



## Clue 4

### Avoid the Active Asteroids!



Find your way through this vortex of sentences by following the pathway of passive sentences (up, down, left and right) and avoiding the active asteroids.

At the end of your journey you will discover whether the culprit wears glasses or not.

#### Start

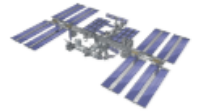
The space suit was taken by one of the astronauts.	The mission was delayed by the incident.	Rocket Red ate the space food.	The delayed mission devastated Orion Orbit.
The incident delayed the mission.	The culprit will be discovered by the Detective Chief Inspector.	One of the astronauts took the space suit.	Esther Earthshine lost the navy blue uniforms.
The Detective Chief Inspector will discover the culprit.	The space food was eaten by Rocket Red.	Carina Cosmo is the oldest astronaut on the mission.	Lyra Light spotted the space suit on a well-known auction site.
Apollo Atom is the youngest person to ever join astronaut training.	Orion Orbit was devastated by the delayed mission.	The navy blue uniforms were lost by Esther Earthshine.	Juno Jupiter has been on five missions in the past.
Norma Nebular packed the silver uniforms.	During the mission, the astronauts will receive regular messages from home.	The space suit was spotted on a well-known auction site by Lyra Light.	The rocket will orbit the planet for 40 days and nights.



The culprit wears/does not wear glasses.

## Clue 5

### Hyphens Go into Hyperdrive



The astronauts have been writing about their time in space. They have tried to use hyphenated words but some have got confused. Check these sentences to find which ones are correct. If they are, give them a tick. If they are incorrect, give them a cross.

If you have more ticks, then the culprit is more than 30 years old. If you have more crosses, then the culprit is less than 30 years old.

Space Sentence	✓ or X
During my first mission, we saw thirty-one large asteroids one day.	
Take off is the most dangerous part of any space mission.	
It can be difficult not to be bad-tempered when spending a lot of time in space with the same people.	
On my last mission, I worked with the all knowing Belinda Bright.	
As we headed back home, I was hopeful that our reentry into the Earth's atmosphere would go smoothly.	
I was sent on a spacewalk to re-cover some exposed electrical wires.	
Before any mission, it is important to re-search the planet you will be visiting.	
On the space station, we re-cycle all of our water through a complicated system.	

There were \_\_\_\_\_ crosses and \_\_\_\_\_ ticks. There were more \_\_\_\_\_ so the culprit is less than/more than 30 years old.

**Return to the list of suspects and work out who the culprit is!**

## Maths

### Task 1:

Name	Size	Distance from sun	Length of Year	Length of Day
Mercury	4879.4km	58 million km	88 days	176 earth days
Venus	12 104 km	10827 million km	225 days	243 earth days
Earth	12 742km	151.75 million km	365 days	24 hours
Mars	6791km	2227.9 million	687 days	1 day 0 hours and 37 minutes (earth time)
Jupiter	139 822km	778.89 million km	12 earth years	9 hours and 56 minutes
Saturn	116 464 km	1.5 billion km	29 earth year	10 hours and 42 minutes
Uranus	50 724 km	2.94 billion km	84 earth years	17 hours and 14 minutes
Neptune	49 244 km	4.48 billion km	165 earth years	16 hours and 6 minutes

<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
Which planet has the shortest day?	Order the planets in ascending order (smallest to largest)	Place the planets in day length order.
Which planet has the longest day?	What is the size difference between Mercury and Jupiter?	How much longer is a year on Neptune than Earth? (Answer in days)
How much longer is a day on Uranus than Neptune?	How much further is Neptune from the sun, than Mars?	How much long is a day on Mars than a day on Neptune?
Which is the smallest planet?	How much further from the sun is Earth than Mercury	How much further is Jupiter from the sun than Earth?

**Task 2: Use the information to answer the questions about the planets.**

FROM	TO	AU	KM	MILES
Mercury	Venus	0.34	50,290,000	31,248,757
Mercury	Earth	0.61	91,691,000	56,974,146
Mercury	Mars	1.14	170,030,000	105,651,744
Mercury	Jupiter	4.82	720,420,000	447,648,234
Mercury	Saturn	9.14	1,366,690,000	849,221,795
Mercury	Uranus	18.82	2,815,640,000	1,749,638,696
Mercury	Neptune	29.70	4,443,090,000	2,760,936,126
Venus	Earth	0.28	41,400,000	25,724,767
Venus	Mars	0.8	119,740,000	74,402,987
Venus	Jupiter	4.48	670,130,000	416,399,477
Venus	Saturn	8.80	1,316,400,000	817,973,037
Venus	Uranus	18.49	2,765,350,000	1,718,388,490
Venus	Neptune	29.37	4,392,800,000	2,729,685,920
Earth	Mars	0.52	78,340,000	48,678,219
Earth	Jupiter	4.2	628,730,000	390,674,710
Earth	Saturn	8.52	1,275,000,000	792,248,270
Earth	Uranus	18.21	2,723,950,000	1,692,662,530
Earth	Neptune	29.09	4,351,400,000	2,703,959,960
Mars	Jupiter	3.68	550,390,000	342,012,346
Mars	Saturn	7.99	1,196,660,000	743,604,524
Mars	Uranus	17.69	2,645,610,000	1,643,982,054



1. Dan is planning a trip, he travels from Earth to Mars and then from Mars to Saturn, what is his total distance travelled in km?
2. Alex travels from Venus to Earth to see his friends, he then travels to Jupiter, what is the total distance he travels?
3. Harry is planning a trip from Earth to Neptune, it costs £3 per km to get there, how much will his trip cost him?
4. Daniel is planning a trip from Mercury to Mars and then to Earth, it costs him £4 per km, how much will his trip cost him?
5. Sam wants to start at earth and travel to Venus, Neptune and Saturn, plan out his route and calculate the total distance travelled in km.

## Task 3

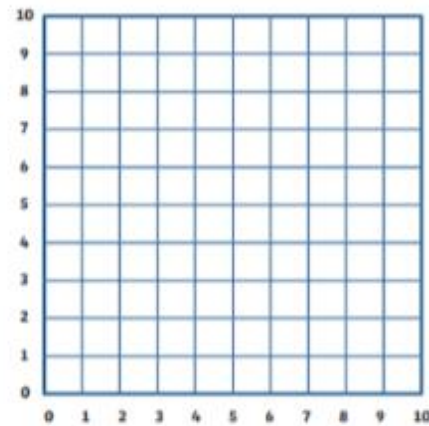
### Constellation

Make a grid with the numbers 1 - 10 across the bottom and up the side (see right). Plot out the coordinates to reveal the constellation.

Can you give the constellation a name?

(1,7) (1,3) (3,2) (5,2)  
(7,2) (9,3) (9,7) (8,5)  
(7,6) (6,5) (5,8) (4,5)  
(3,6) (2,5)

### Space Challenge Card #1

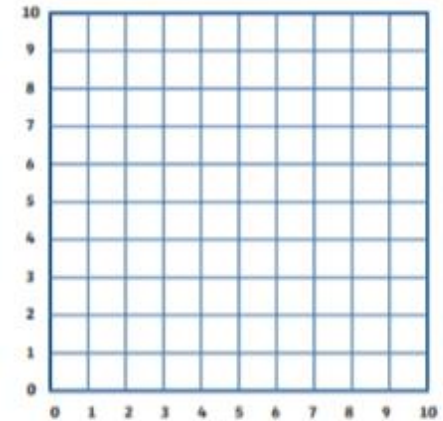


### New Constellation

Make a grid with the numbers 1 - 10 across the bottom and up the side (see below).

Draw the new constellation on your grid and then write out the coordinates.

### Space Challenge Card #2

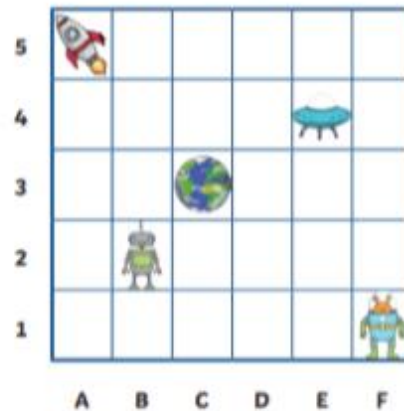


### In the Zone

This is a map of zone 2B.  
Can you write the location of the following:

- rocket
- planet
- robot
- alien
- spaceship

### Space Challenge Card #3



### In the Zone

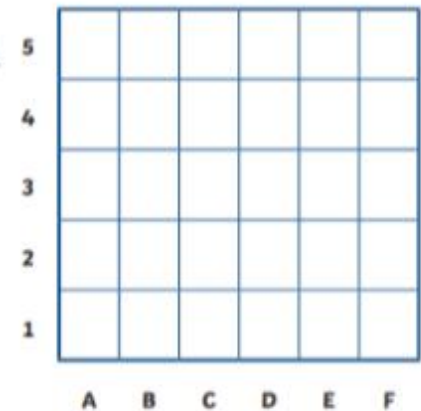
You have been exploring zone 3A. Make a grid with the letters:

A - F across the bottom.

1 - 5 up the side (see example).

Draw the things you find and write down their location.

### Space Challenge Card #4



## Science Task 1

### Solar System Fact Hunt

Use books, the Internet or the Solar System Fact Cards to find the answers to the following questions.



<p>Which planet orbits closest to the Sun?</p> <p>_____</p> <p>_____</p>	<p>Which planet has the highest maximum temperature?</p> <p>_____</p> <p>_____</p>
<p>Which planet's atmosphere contains the highest percentage of carbon dioxide?</p> <p>_____</p> <p>_____</p>	<p>How much bigger is Earth than Mars?</p> <p>_____</p> <p>_____</p>
<p>Which planet has the shortest day?</p> <p>_____</p> <p>_____</p>	<p>Which planets are made of gas?</p> <p>_____</p> <p>_____</p>
<p>Which planet has the most moons?</p> <p>_____</p> <p>_____</p>	<p>What is the Earth's atmosphere made mostly of?</p> <p>_____</p> <p>_____</p>

## Mercury



Size (diameter):	4879.4km
Moons:	0
Distance from Sun:	53.29 million km
Length of year:	88 days
Length of day:	58 days 15 hours 30 minutes
Temperature:	-173°C to 427°C
Atmosphere:	
hydrogen, helium, oxygen, sodium and potassium	

## Venus



Size (diameter):	12 104km
Moons:	0
Distance from Sun:	107.48 million km
Length of year:	225 days
Length of day:	116 days 18 hours 0 minutes
Temperature:	around 470°C
Atmosphere:	
carbon dioxide (96.5%), nitrogen and sulphur dioxide	

## Earth



Size (diameter):	12 742km
Moons:	1
Distance from Sun:	151.75 million km
Length of year:	365 days
Length of day:	24 hours
Temperature:	between -88°C and 58°C
Atmosphere:	
Nitrogen	78.08%
Oxygen	20.95%
Argon	0.93%
Carbon dioxide	0.04%

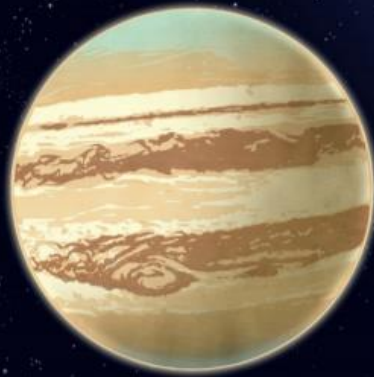
## Mars



Size (diameter):	6791km
Moons:	2 (Phobos and Deimos)
Distance from Sun:	227.9 million km
Length of year:	687 days
Length of day:	1 day 0 hours 37 minutes
Temperature:	between -140°C and 20°C
Atmosphere:	
Oxygen: 0.13%, CO <sub>2</sub> : 95.32%	
CO: 0.08%, N: 2.7%, Ar: 1.6%	

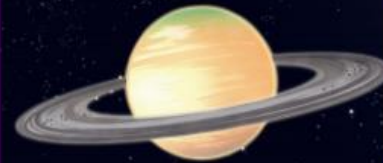


## Jupiter



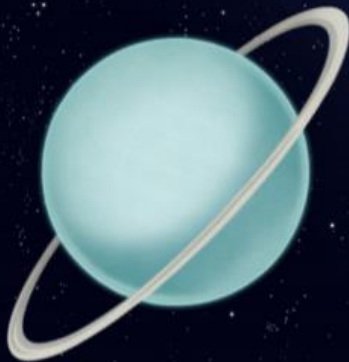
Size (diameter):	139 822km
Moons:	79
Distance from Sun:	778.89 million km
Length of year:	12 years
Length of day:	9 hours 56 minutes
Temperature:	about -145°C
Atmosphere:	
This planet is made up mostly of gas. Almost the entire planet is made up of hydrogen and helium, with traces of ammonia, sulphur and water vapour.	

## Saturn



Size (diameter):	116 464km
Moons:	82
Distance from Sun:	1.5 billion km
Length of year:	29 years
Length of day:	10 hours 42 minutes
Temperature:	between -185°C and -122°C
Atmosphere:	
This planet is made up mostly of gas. Almost the entire planet is made up of hydrogen (~75%), helium (~25%) and traces of methane and water.	

## Uranus



Size (diameter):	50 724km
Moons:	27 (Titania, Oberon, Miranda, Ariel, Umbriel, etc.)
Distance from Sun:	2.94 billion km
Length of year:	84 years
Length of day:	17 hours 14 minutes
Temperature:	around -224°C
Atmosphere:	
This planet is made up mostly of gas. Almost the entire planet is made up of hydrogen and helium, with traces of ammonia, water and methane.	

## Neptune



Size (diameter):	49 244 km
Moons:	13 confirmed, 1 provisional
Distance from Sun:	4.48 billion km
Length of year:	165 years
Length of day:	16 hours 6 minutes
Temperature:	around -210°C
Atmosphere:	
This planet is made up mostly of gas. Almost the entire planet is made up of hydrogen, helium and methane.	

## Task 2

### **Rocket design sheet.**

Design a rocket to take you to another planet, remember to label your design with the materials you are using.



## Wellbeing

## Astronaut fitness

Create an astronaut fitness routine, try and include as many from the grid as possible.

