# <u>Space</u>

## Literacy

- Create your own rhyme to help you remember the order of the planets!
- Create a fact file for your favourite planet which are your 3 favourite facts? Why?
- Write a list of what you would take into space with you if you were an astronaut. What would you take and why?
- Write an application to join NASA. Explain why you think you would be a great astronaut-

don't forget to mention all your skills and qualities that you think an astronaut would need!

- Write a space adventure story.
  How will you get into space?
  Where do you go? Describe what you see and how you feel.
  Do you meet anybody or anything? How does your story finish?
- Invent your own alien species.
  Write a description of what they look like, how they behave, what they eat, how they move and where they live.

Space word mat Mercury Venus astronaut Moon star Earth rocket comet gravity Mars Jupiter helmet Saturn flying saucer Uranus alien 🙎 Neptune space shuttle planets Pluto

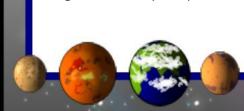
Explain how you would communicate with them. You could even draw a picture of the alien in their natural habitat!

- Watch: <a href="https://www.literacyshed.com/thewaybackhome.html">https://www.literacyshed.com/thewaybackhome.html</a> You could:
  - Write a diary/recount of the adventure from the boy's perspective.
  - Write a holiday brochure page for their destination.
  - Write dialogue between the boy and the alienwhat do they say to each other? Remember the rules of speech!
- Build your own rocket and write a set of instructions on how to build it. Then pretend you are a spaceman: act out your landing and investigate the new planet!
   If you have siblings, they can investigate with you!

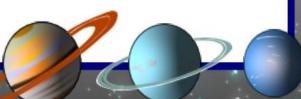
# Science

Calling all astronauts! Can you measure sound, magnetism, li and garden? Compare your data with a friend! https://spac









Record the moon every night. Draw a picture of what it looks like from your bedroom window. Do you notice a pattern? Why do think this is? If you like, and you happen to have any spare: you can create these phases of the moon on Oreos or Jaffa Cakes (just eat the parts of the moon that can't be seen!). Visit

http://www.primaryhomeworkhelp.co.uk/moon/phases.html for more information.



Recreate our solar system by using paper mache!



### How to make paper mache paste at home:

- 1. Mix one-part flour, with two parts water. Pour the water in gradually and keep stirring.
- 2. Try and remove as many lumps as possible.
- 3. Pop into the microwave at full blast for 30-40 seconds (remember microwaves do vary, so add it for less if need be). Remove, give it a good stir.
- 4. Pop back into the microwave for another 30-40 seconds etc.
- 5. Repeat this 2-4 times (depending on microwave) until you start seeing the mixture thickening up. It should look like thick soup but not TOO thick. If it is too thick, it will not apply or soak into the newspaper as well!
- 6. Remove the flour mixture and give it a good stir. Try and "squish out" any lumps against the side of the container. Your work will look neater and smoother if there are no lumps.
- 7. Let it cool a little and you are ready to use your mixture.

## To make your planets, you will need:

- Balloons
- Newspaper/ plain paper

## Method:

- 1) Blow up your balloons in 3 different sizes (big, little and medium-sized).
- 2) Tear newspaper/plain paper into strips and pieces. The smaller the better!
- 3) Dip your paper in the mache and apply to the balloon. Add 2-4 layers of paper!

- 4) Leave to dry. If you are drying these indoors, it is helpful NOT to put them near a radiator! The balloon could pop before the mache is dry, leaving you with a misshapen ball. Drying slowly is good!
- 5) Once dry, either leave the balloon inside (so you have something to hold whilst painting) or pop it your choice.
- 6) Paint/ colour in your planets! You may need to research each planet beforehand so you can paint them the right colours!
- 7) Leave to dry



Learn about gravity:

Did you know astronauts get taller while they are in space? Try measuring yourself at the start of every day and then end of every day for 5 days. What is the difference in height? Why do you think this is?

How does your body react to gravity? Lie on your back with your legs up against the wall for a minute or two. Then describe how you feel, discuss what happens to the blood in your body while you are doing this and can you explain why you think this happens? For explanations and some fun facts about gravity, visit:

https://www.theschoolrun.com/homework-help/gravity You could even create a poster to explain gravity!

Recording the Earth's rotation with shadows:



# You will need:

- a paper plate
- a pen (but any straight object will do)
- play dough

1) Create a mountain-like structure of play dough in the middle of the paper plate. Stick a pencil/ pen inside the play dough so it stands up straight.



2) Write an 'N' for 'North' on the edge of the paper plate. You may want to use your phone for a compass app to be sure the 'N' points North.



3) Make your first observation in the morning. Place your plates in a sunny area where the pen would cast a shadow on the plate.



4) Use a pencil to draw a line from the centre of the plate to the edge of the plate showing where the shadow fell. Label the line with the correct time.



- 5) Check plates every hour and record your observations.
- 6) You should start to notice a pattern: the distance between the first and second shadows was the same as the distance between the second and third shadows.
- 7) Ask your child to make a little mark on the plates showing where they think the next shadow would be in an hour.



8) Continue taking hourly measurements if you wish. You may need to move your plate a couple of times to ensure it remained in the sun. Those are the times it's handy to have marked an 'N' on the plate so you can always orientate the plate the same way each time its moved.



9) You should find that the shadows had covered nearly half of the plate. Your child may wonder why the shadows don't go around the entire plate. This is a good opportunity to remind them that for half of our 24-hour day we are in darkness because we are turned away from the sun.

At night, have a look at the stars. What constellations can you see? To find out what the constellations are, visit: <a href="https://www.twinkl.co.uk/resource/t-he-730-northern-hemisphere-constellation-spotting-checklist">https://www.twinkl.co.uk/resource/t-he-730-northern-hemisphere-constellation-spotting-checklist</a>

If you would like further research our solar system, visit <a href="https://www.bbc.co.uk/bitesize/topics/zdrrd2p/articles/ztsqj6f">https://www.bbc.co.uk/bitesize/topics/zdrrd2p/articles/ztsqj6f</a> or <a href="https://starchild.gsfc.nasa.gov/docs/StarChild/StarChild.html">https://starchild.gsfc.nasa.gov/docs/StarChild/StarChild.html</a>

## Cooking

Fun online ideas for spaced- themed cooking treats <a href="https://www.fun365.orientaltrading.com/article/space-themed-snacks">https://www.fun365.orientaltrading.com/article/space-themed-snacks</a>

### Art

Why not try and make a space mobile using an old coat hanger or some sticks from the garden? You could make stars, planets, rockets and even a few cheeky aliens to hang from it!







How about some alien inspired artwork? You could try using handprints or footprints to create a quirky character.





Try some rocket-inspired art! You could use an old cardboard tube to make a 3D rocket or just use some coloured paper to create a 2D version.

### Music:

Listen to Gustav Holst's, 'The Planets' <a href="https://www.youtube.com/watch?v=Isic2Z2e2xs">https://www.youtube.com/watch?v=Isic2Z2e2xs</a> (it's 50 minutes long so you only need to listen to extracts!). Your adult at home can play certain sections of the piece, as each planet is described in the music (each planet's time is listed below the clip). What planets are being described at which segments? Why do you think this?

### Maths

Every 4 years there is an inter planetary football competition, each planet sends one team to represent them at the competition. If each team plays one match against the other team, how many matches will be played in total if there are:

3 team?

6 teams?

9 teams?

25teams?

100 team?

Some Hexapods and some Octopods flew from the planet Zeno. There were at least two of each of them.

There were 100 legs all together.

Hexapod= 6 legs

How many Hexapods were there?

Octopod = 8 legs

Howe many Octopods were there?

1. An alien from Mars has 3 heads, how many heads would 5 aliens have?

- 2. The space station has 4 towers of rooms. Each tower has 3 bedrooms. How many bedrooms is that altogether?
- 3. Two thirds of the 27 passengers on a rocket are adults. How many passengers are children?
- 4. If there are 12 space meals in each box, how many meals will there be in 6 boxes?
- 5. Mark is 18. His father, astronaut Buzz Aldrin, is 38 years older, so how old is he?
- 6. There were 74 rivets in the heat shield. 19 fell out. How many rivets were left?
- 7. The Martian sports team scored 311 in the first game and their opponents scored 132 fewer. How many points did both teams score altogether?
- 8. The space crew have to fly 245 light years away. They have to refuel after 87 light years. How much further do they still have to fly?



