

Dear Parents/ Carers,

Please find below information about what your child is learning this term- we call it a 'Knowledge Organiser' for our new Connected Curriculum. The last section of the Knowledge Organiser offers ideas of how adults can support children at home and gives information about homework.



Please speak to your child's class teacher if you have any questions.

Knowledge Organiser for Y6 unit Out of This World

Baseline assessment and experience of learners (Learner conversation & KWL grid)

- Children knew the names of planets and that the moon orbited the earth.

Pre-requisite knowledge:

- Compare and group together different types of rocks
- Compare and group together everyday materials on the basis of their properties
- Names of the planets

Knowledge to be secured (What do learners need to know and understand?)

- Evaporation, condensation, water cleaning, insulation
- Earth and moon's orbit, day and night, shadows, relative sizes of planets and gravity
- Research about Copernicus, Kepler and Galileo and their theories
- How rockets work
- How to use control software
- How to interpret and move to music
- The rules of tag rugby
- How to make our space community a better place (PSHE)
- Number and place value up to 10,000,000 formal methods of addition, subtraction, multiplication and division, multiplying decimals by 10, 100 and 100 and using these skills to solve problems.
- How to write persuasively
- How to write an engaging adventure story

Terminology and vocabulary we will be using

Evaporation	Condensation	Insulation	Thermal
Gravity	Copernicus	Kepler	Galileo
Orbit	Planet	Universe	Theory
Variables	Transparent	Translucent	Opaque
Heliocentric	Geocentric	Aerodynamic	Trajectory
Axis			

Spelling patterns we will be looking at in Fast Spelling:

Words with cious and tious: conscious, vicious, precious, delicious, malicious, suspicious, ambitious, cautious, infectious, nutritious, fictitious, spacious,

Words with ant/ance/ancy: observant, expectant, hesitant, hesitancy, tolerant, tolerance, substance

Words with able/ably/ible/ibly: dependable, comfortable, understandable, reasonable, enjoyable, considerable, forcible,

	<p>legible, changeable, applicable, possible, horrible, horribly, sensible, sensibly, incredible. Incredibly</p> <p><u>Words with I before e except after c:</u> ceiling, receive, receipt, deceive, conceive, perceive, (exceptions – protein, caffeine, seize, either, neither)</p> <p><u>Words with ough:</u> ought, bought, enough, fought, tough, although, borough, plough, dough, cough, though, through, bough</p> <p><u>Possible misconceptions that may arise or things which these learners may find difficult</u></p> <ul style="list-style-type: none"> • The sun moves around the Earth • That digits move when we multiply and divide by 10, 100 or 1000. We do not add or remove a 0.
<p><u>Skills to be secured (What do learners need to be able to do?) Know how to...</u></p> <ul style="list-style-type: none"> • Be Independent • Compose • Listen and appreciate • Design and construct • Plan different types of scientific enquiries • Take measurements with accuracy and precision • Record data and results • Report and present findings • Select from and use a wide range of materials • Investigate and analyse a range of existing products • Use sequence, selection and repetition in programmes • Use search technologies effectively • Select, use and combine a variety of software • Play and perform in solo and ensemble contexts • Improvise and compose music for a range of purposes • Perform dances 	<p><u>Links to other learning to be made (previous learning in the same subject and cross-curricular / life applications)</u></p> <ul style="list-style-type: none"> • Writing Science-fiction stories • Working out how much water needs to be carried on to the spaceship – Maths • Learning the moon walk – P.E.

<ul style="list-style-type: none"> • Develop flexibility, strength, technique, control and balance • How to write persuasively and adventure stories 	
<p><u>The journey...</u> Start point - <i>The year is 2050 – the class have been commissioned to explore the possible problems and solutions that could be encountered in sending a group of 30 people into space for five years.</i></p> <p>End points – Group learning in our connected curriculum books containing reports, results of experiments, information collected and stories written.</p>	<p><u>Planned or possible experiences, investigations or enquiries (link to any entitlement lists drawn up by the school)</u></p> <p>We are hoping to arrange a star gazing experience for the children. More details to follow.</p>
<p><u>Probing or comparative questions / challenges</u></p> <p>How will you...? How does this affect...? What equipment will you use? How could you solve this? Why do you think that? How else could you?</p>	<p><u>Writing opportunities and related skills</u></p> <p>Space Poetry Adventure stories set in space Persuasive letters</p>
<p><u>Resource guidance</u></p> <p>Jugs/cylinders Cling film Bowls of water Filter paper Oxygenating plants Sieves Range of plastic bottles, corks, footpump, card, adhesives I-pads and laptops Globes Torches</p> <p>Useful websites: https://www.esa.int/kids/en/home</p>	<p><u>Agreed outcomes</u></p> <p>Group learning in our connected curriculum books containing reports, results of experiments, information collected and stories written.</p> <p>A competition and launch of air powered rockets</p> <p>A dance routine to War of the Worlds</p> <p>An understanding of how to make their space community a better</p> <p>A set of programmed and sequenced instructions to music</p>

<https://www.bbc.co.uk/bitesize/topics/zkbbkqt>

Star gazing app:

Sky View lite – good app for locating stars in the sky

Ways parents/ carers can support/ Homework

- Helping children to understand and use the key vocabulary listed above.
- Support children with their homework – x1 weekly maths activity and x1 English activity. This will be given out on a Friday and will need to be returned to school by the following Tuesday.
- We do not do weekly spelling or multiplication tests, we do something called Fast Spelling & Fast Maths, which involves regular targeted practice in class. Please support your child with learning the words and sounds listed on this knowledge organiser and ensuring your child knows their multiplication tables up to 12 x 12 with rapid recall.
- Your child will also be given My Maths weekly homework to complete online, which will support their learning in class. If they are unable to access the internet at home, they can go to homework club during their lunch break.
- Take children to the local library to take out books about space.
- Read with your children at least 5 times in a week.
- Ask them questions about what they have been learning.
- P.E. is on a Thursday and Friday – please ensure that correct kit is in school and all earrings will need to be removed.
- Every Friday, we will be sharing topical news items from the local area and around the world and would like your child to do some research of their own to share news with the rest of the class.

PE – PE days are Thursday and Friday. Please ensure that children's PE kits are in school for these days and make sure earrings are not worn on PE days too.

During this school year please help your child to achieve the following five challenges – they could be recorded in reading records or by photograph and sent into school:

- Study the stars at night
- Watch a sunrise or sunset
- Visit a new city
- Learn how to access the news from home
- Keep a diary for a week