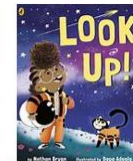
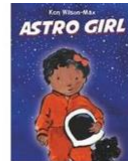
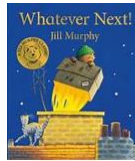


Reception Knowledge Organiser 'Out of This World'
Big Question- I wonder what will happen?

Key Texts



Key Vocabulary

Space	The area beyond Earth.
Planet	A large round object that orbits a star
Earth	Our home planet.
Moon	A rock that orbits Earth.
Sun	The star at the centre of our solar system.
Astronaut	A person who travels into space
Rocket	A vehicle used to travel into space
Stars	Huge balls of burning gas seen in the sky at night.
Constellation	A group of stars.
Solar system	The sun and everything that orbits around it
Meteor shower	Rock or dust than burn creating bright streaks
Magnetism	An invisible force that attracts or repels objects.
Gravity	A force which pulls things towards the centre of the Earth
Forces	A push or pull that can change how an object moves
Reaction	How something responds
Scientist	Examines the world to get an understanding of how it works.
Astronomer	A scientist who studies the universe beyond Earth, including the stars.

This builds on our learning from Preschool when we:	
Explored light and dark during our 'celebrations' unit	Explored how heating and cooling changed materials when we cooked during our 'time for tea unit'
This will help us in Year 1 when we will learn about:	
Significant people from the past	Properties of everyday materials

Career Aspirations



Scientist



Astronaut



Space Engineer

Home Learning Ideas

<p>Make a Junk-Model Rocket - Use boxes, tubes, foil, stickers, and paper. Talk about shapes and count the parts as you build.</p>
<p>Moon Craters with Flour - Fill a tray with flour. Drop small stones or balls to make "craters."</p>

Planet Playdough - Make playdough and colour it like planets (blue Earth, red Mars, yellow Sun).

Astronaut Exercise Challenge Jump like you're on the Moon (slow and floaty). Crawl through a "space tunnel" (blanket). Balance on "asteroid rocks" (cushions).

Foundational Knowledge

Key knowledge – The Natural World

What children should understand (in very simple terms): **Gravity**

- **Gravity is a pull.** Gravity pulls things downwards toward the ground.
- **Everything falls down unless** something holds it up. If you drop something, it falls because of gravity. If you throw something up, it comes back down again.
- **Gravity affects all objects.** Heavy and light things are both pulled down. Some things fall faster or slower depending on their shape (e.g., feathers float).
- **We stay on the ground because of gravity.** Gravity keeps people, animals, and objects on Earth. Without gravity, things would float.
- **Gravity works everywhere on Earth.** Whether you're in the forest, at home, or at school, gravity is always pulling.
- We live on a planet called **Earth**.
- Earth orbits the **Sun**.
- The **Moon** orbits the Earth.
- The **Sun** gives us **light and warmth**
- The **Moon** looks different at different times.
- **Day and night** happen because Earth spins.
- **You float in space** because there is no gravity like on Earth.
- **Space** is very cold and has no air to breathe
- **Astronauts** travel to space in rockets.

What children should understand (in very simple terms): **Magnets**

- Magnets can **pull (attract)** some objects.
- Magnets can **push (repel)** each other.
- Magnets work **through some materials**, like paper or thin fabric.
- Magnets have **two ends** called **poles**.
- Magnets stick to **some types of metal**,
- Many materials are **not magnetic**.

What children should understand (in very simple terms): **Exploring forces, materials, changes, reactions**

- Even though air is invisible, it's still *there* and it can **push**.
- Some **changes** make bubbles, fizz, or gas
- **Fizzing** means something is happening
- Gas **pushes** and can make things move

Key Knowledge - Past and Present

Key Knowledge - People Culture and Communities

<ul style="list-style-type: none"> ● There are significant people who did different things in the past ● Neil Armstrong – first person to walk on the Moon (1969). ● Mae Jemison – first Black woman to travel into space (1992) and a doctor, engineer, and dancer. ● Planes long ago looked different from planes today ● People haven't always been able to fly ● Rockets go into space, not planes 	<ul style="list-style-type: none"> ● People have different roles and achieve special things ● People have different aspirations, hopes and goals
<p>Key knowledge – creating with materials</p>	<p>Key knowledge – being imaginative and expressive</p>
<ul style="list-style-type: none"> ● Mixing two primary colours makes a new colour ● Mixing too many colours can make brown or muddy colours ● Materials such as cardboard, paper, wood, blocks, tubes, fabric, plastic, and natural materials can be used to build with ● Materials can be joined using glue, tape, string, blu-tack, split pins, clips, and folds. ● Materials have different textures (smooth, bumpy, rough) 	<ul style="list-style-type: none"> ● Stories can be re-counted using props and imagination <p>Key knowledge – fine motor skills (cooking)</p> <ul style="list-style-type: none"> ● Cooking tools can be used safely (spoons, bowls, jugs, cutters, whisks) ● Knife can be used safely under supervision (butter knife, plastic knife).