





INTRODUCTION

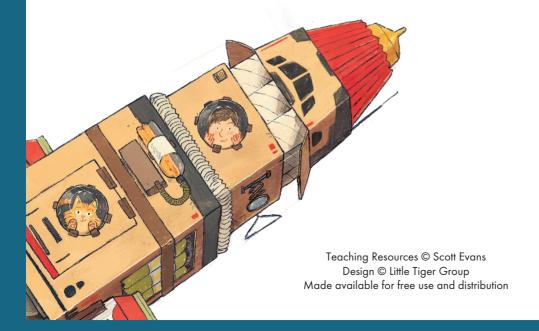
Suitable for: Children aged 5-8 years old in Years 1-3

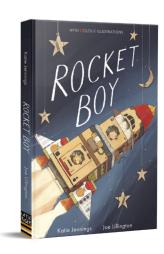
Based on: The intergalactic adventures of a boy and his cat and the power of imagination

Ideal for: Emerging readers, and especially reluctant readers

Includes: 4x lessons that build towards children writing their own newspaper article

Themes: Space; Imagination; Wonder; Curiosity; Recycling; Friendship; Family; Travel







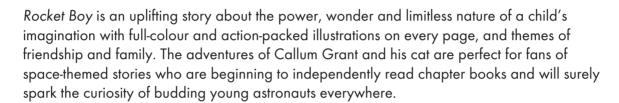




ABOUT ROCKET BOY

All day every day, Callum imagines himself being the youngest person in space and he loves to amaze his mum with facts about the solar system, but Mum is too busy building furniture to listen. However that doesn't stop Callum striving to achieve his dream of being the first person to walk on the Red Planet and there are plenty of objects around his house that are ideal to help him build his rocket to get him there on his inaugural mission to Mars...

With his reluctant cat, Oscar, for company, will Callum and his rocket made out of recycled materials be able to break out of the four-walled boundaries of his bedroom and blast into outer space?



ABOUT THE AUTHOR - KATIE JENNINGS

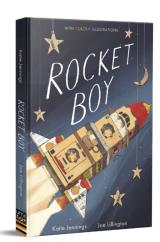
Katie Jennings is a senior commissioning editor in children's publishing where she has been responsible for publishing authors such as Michelle Harrison, Sinéad O'Hart and Holly Webb. She is also a published children's author, bringing out her first book, Rocket Boy, in August 2020.

X

ABOUT THE ILLUSTRATOR - JOE LILLINGTON

Joe Lillington is an illustrator who is currently based in Bristol. He was born in London and studied illustration at Falmouth University. He is inspired by stories, real or made up, that have a strong sense of place and interesting characters. He likes to use museums, history, folklore, old paintings and mosaics to influence his work. He is represented by Arena Illustration.









NATIONAL CURRICULUM OBJECTIVES

English: Reading: comprehension

Develop positive attitudes to reading, and an understanding of what they read, by:

i. discussing words and phrases that capture the reader's interest and imagination

Understand what they read, in books they can read independently, by:

- i. identifying how language, structure and presentation contribute to meaning
- ii. drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence





English: Writing: composition

Plan their writing by:

i. discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar

Evaluate and edit by:

i. assessing the effectiveness of their own and others' writing and suggesting improvements



Science: Uses of everyday materials

Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses

Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

Science: Forces and magnets

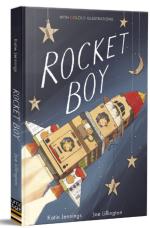
Compare how things move on different surfaces

Design and technology: Design

Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Design and technology: Make

Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics











Design and technology: Technical knowledge

Build structures, exploring how they can be made stronger, stiffer and more stable

Music

Listen with concentration and understanding to a range of high-quality live and recorded music

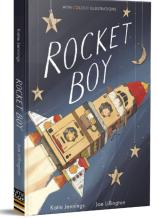


Experiment with, create, select and combine sounds using the inter-related dimensions of music













LESSON OBJECTIVES AND OUTCOMES

Lesson 1: Imagination Station

Objectives:

- To think about the gift of imagination and encourage children to embrace their imagination
- To explain what imagination is and to give examples





Outcomes:

- A class discussion about the power of imagination
- A piece of artwork about children's imaginations
- An observational experience of cloud watching

Lesson 2: Rocket Recycle

Objectives:



- To identify and describe common materials
- To learn what can be recycled to benefit the environment and how to reuse their own waste materials as resources for creative work

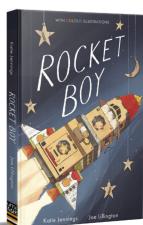
Outcomes:

- An introduction to recycling and a guessing game based on the properties of materials
- A completed storyboard about the journey of a recycled object and its impact on the environment linked to plastic pollution
- A plan and construction of a space rocket made out of recycled materials

Lesson 3: Mission to Musical Mars

Objectives:

- To listen to a new piece of music and explore its musical elements
- To perform simple musical patterns using tuned and untuned instruments









Outcomes:

- A class discussion about what elements children can hear when listening to a piece of music
- A poster created to recruit Mars Explorers or a diary entry about being selected for a mission to Mars
- A performance of simple musical patterns using a range of musical instruments



Lesson 4: Headline News

Objectives:

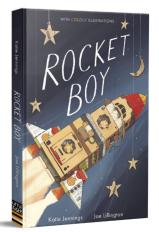
- To identify the features of a newspaper report and use drama to explore the stories behind newspaper headlines
- To write a newspaper report in the style of the illustrations at the beginning and end of the book

Outcomes:

- A group discussion about features used in newspaper reports including headlines
- Reading an example of a newspaper report about space
- Writing a headline or short newspaper report in the style of the illustrations at the beginning and end of the book











LESSON ONE: IMAGINATION STATION

Questions:

- What does the word 'imagination' mean?
- What do you think an imagination looks like and why?
- Is it possible to not have an imagination?



Task 1:

To get children thinking creatively, hold up a simple object, such as a skipping rope. Ask them to use their imagination to think beyond what the object is used for, discussing with a partner what it could become (e.g. a swing, a halo, a snake). Invite children to come to the front and mime using it in different ways. In pairs or small groups, challenge children to think of as many inventions as they can in one minute. Share some of their ideas. Ask whether everything they can see around them is an invention, from carpets to shoes to pencils to computers to buildings to the internet. Discuss how someone would have imagined an idea, researched it, developed it, tested it and brought it to life a bit like Callum does in the book with his rocket. Can they imagine an idea and create an invention that would be helpful either in school or at home?

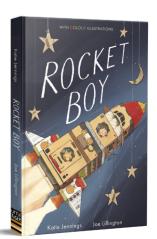


Task 2:

Ask the children to close their eyes and take a few moments to think of a time when they have used their imagination. It could be when they have had to be creative, when they have written a story or when they have imagined something in the future. Discuss when, why and how children have used their imaginations. Ask the children to close their eyes again and imagine what their imagination inside their head looks like. Is it colourful? Is it crazy? Is it full of real or fictional things? For this task, take a photograph of each child's head and print it in black and white. On a page in their books, stick the monochrome image of the children's heads towards the bottom of the page leaving a blank space above. Here, children can draw or paint their imaginations. Ask them to try to include as many details and as much colour as possible and once complete, ask children to share what their imagination looks like.

Task 3:

In the beginning of the book, we see Callum's imagination in full effect when he sees space-themed objects in the clouds. It is said that 'Clouds are the sky's imagination.' If possible, take children outside on a pleasant day to experience cloud watching. While outside, look up and begin to seek out images in the clouds. Encourage children to imagine a face or an animal shape within the clouds. Explain that looking at the "negative" space between the clouds is a challenge but can also be helpful, for there can be hidden features, outlines











and objects. After looking at clouds in different ways, children will come up with plenty of their own questions related to their own experiences and thoughts. Take photographs of the clouds to use in the classroom. Once back inside, print out or project the photographs on the whiteboard. Show children how the cloud shapes can be transformed into objects by adding details like faces, hands and legs to them. Invite children to draw on their chosen cloud shape to transform it using their imagination. Use the account @ADaily_Cloud on Twitter as inspiration.















LESSON TWO: ROCKET RECYCLE

Questions:

- What does the word 'recycle' mean?
- How do we recycle?
- Why is it important to recycle? What can we all do to help recycle?

T.

Task 1:

Show children some common household waste items, e.g. plastic bottle, cardboard carton, yoghurt pot, scrunched up newspaper, glass jar, aluminium can, kitchen foil, etc. You may want to use some of the materials that Callum uses to create his rocket. Discuss the uses and properties of each material and check that the children can name the items. Put all of the materials into a feely bag and invite one child at a time to place a hand inside, feel one of the objects and describe it to the rest of the class without saying what it is. Can the class guess which material and object they think is being described? Award three points after the first clue, two points after the second clue and one point after the third clue. Take care with glass, metallic or sharp items. After doing this, look at the materials and discuss what happens to them when they have been used. Can they be recycled? Explain what the word 'recycle' means. Share as a class how we can recycle these materials at home and in school, and what happens if we put them in the bin.

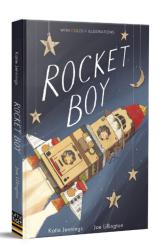


Task 2:

Talk about the impact of plastic pollution on the environment and the world at the moment. Share images of the plastic in our oceans and seas. To learn more about the process of recycling and why we need to do it, show children the journey of a plastic bottle. Discuss what happens when people do not recycle their plastics and how plastic does not biodegrade when it likely ends up in landfill where it creates a negative impact on our environment and wildlife and means that more plastic bottles will have to be made, using up Earth's natural resources. But recycling helps to enable the plastic bottle and the resources that were put into making it to be used again, sometimes into new plastic bottles or different products altogether. Using a storyboard template, sequence the journey of a plastic bottle to show how one small act can make a big difference to help to preserve our planet.

Task 3:

In Rocket Boy, space enthusiast Callum sets about making his very own rocket from recycled materials in order to embark on his mission to Mars. Share with children the parts of a space rocket, such as the body, nose and fins. Ask children to plan a design of a rocket made out of common household waste











items, as Callum does in the book, like those used in Task 1. Suggest using materials and objects like a cardboard box for the body of a bigger rocket or a plastic bottle for the body of a smaller rocket. Label these around the parts of the rocket. Think about all the parts of a rocket and which materials or objects would be most appropriate in terms of qualities like strength, transparency and weight. Once the plans have been designed, ask children to bring in some common household waste items and make their rocket designs come to life out of recycled materials. Display their rockets in a gallery of launch positions in the classroom and imagine how they would take off using the mission music in Lesson Three.















LESSON THREE: MISSION TO MUSICAL MARS

Questions:

- What is Mars? How is it different to Earth?
- What might it be like to live on Mars?
- Why do people want to visit Mars?

T.

Task 1:

Ask the children to share their knowledge about any planets they know facts about like Callum from the book. Do they know the order of the planets from the Sun? Do they know any facts about Mars? Learn more about the characteristics of the Red Planet, the exploration efforts and what the landscape looks like, showing them pictures taken from the Mars Curiosity Rover. List the similarities and differences of life on Mars compared to life on Earth using a Venn diagram. These could include the colour and size difference between the two planets and the lack of water on Mars to the almost 70% of Earth's surface that is covered by liquid water.

Task 2:



As a class, using the differences listed from the previous task, discuss whether there could be life on Mars and why people want to visit Mars. Ask who would like to visit Mars. Record this data in the form of a pictogram or bar chart. Investigate the reasons why children may want to go. Design a 'Mars Explorers Wanted' poster to recruit a crew of astronauts for your mission to Mars. On your poster, make sure to include an eye-catching title and illustrations, bold headings and bright colours along with a list of requirements for the role. Use the 'Mars Explorers Wanted' posters produced by NASA as inspiration.

Empathy Extension:

Link this to the real reasons behind why in the future there will most likely be a global search to find the best candidates for the first human mission to Mars. Using the Mars One website, find out more about the proposed mission to Mars and the multiple requirements to apply to become a Mars One astronaut. Write a short diary entry about being successfully chosen to be one of the astronauts on the mission to Mars, realising that you will be a permanent inhabitant because you will not be able to return.

Task 3:

Listen to 'Mars' from The Planets by Gustav Holst. Explain that Holst is a composer, somebody who writes and tells a story through music. On the second time of listening, encourage the children to tell you what they hear,











focusing on elements of the music like the volume (loud/quiet), pitch (high/low) or tempo (fast/slow). Talk more about how these elements change the mood of the music and can make us think about the size, feelings and what might be happening on Mars. Ask questions like: 'Is Mars big or small?' 'I wonder if Mars is happy or angry?' 'How can we tell?'

Gather a range of musical instruments such as drums and other percussion instruments. Watch and listen to 'Mars' being played by an orchestra. Explain that percussion instruments are things that are struck or shaken to make a sound. Can children see and name these in the orchestra?

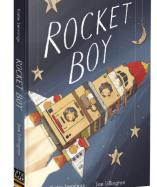




Play a simple rhythm on a drum and ask the children to repeat it back. As a class and in small groups, create more rhythms to soundtrack your launch and mission to Mars thinking about the volume, pitch and tempo to express emotions through your music.











LESSON FOUR: HEADLINE NEWS!

Questions:

- What is a newspaper?
- Do you like watching, reading or hearing about the news? Why?
- Why do we have headlines?

Task 1:

As a class, look at a range of newspapers. Discuss why people watch the news on the television, read the news in a newspaper or listen to the news on the radio. Share with children a range of child-friendly newspaper articles including the ones featured at the beginning and end of the book. Point out and identify some of the features like the headline and the photograph. Explain how the headline draws the reader's attention to the news article due to its size and font and tells the reader what it is going to be about in a short, concise way. Cut out some headlines and some photographs from some child-friendly newspaper articles and match them with each other. Encourage the children to always think: What is the picture telling us and why? Now show children a photograph from a newspaper article without a headline. The children must look very carefully and explain what they think is happening in the picture shown. As a class, write a headline for the photograph. Challenge them to do it in eight words or less because of the limited space available. Share each other's headlines: e.g. Launch of a Lifetime.

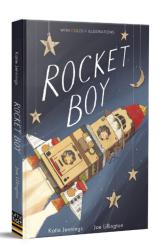


Task 2:

Using the headlines and photographs from in Task 1, recreate the photographs using drama to explore the stories behind newspaper headlines. Take one of the headlines and freeze frame the action happening within the headline. Is it a shocking event? A proud moment? Try to think about how this can be shown through body language and actions. Create a scene of your own momentous occasion or a mission to Mars, take a photograph of it and write an accompanying headline to go with it. You may want to use a range of props like your rocket made out of recycled materials from Lesson Two and dressing up equipment to set your scene. Use the newspaper headlines from the beginning and end of the book such as 'Callum Grant: Youngest Person in Space' as inspiration.

Task 3:

Looking back over all they have learned in your lessons, as a class or individually, write a short newspaper article about a real-life or fictional mission to Mars. Ask children to plan out their first paragraph using the 5Ws









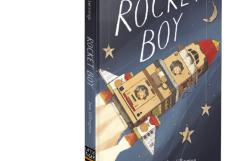
(Who? What? Where? When? Why?) to describe the events. Was the mission a success or a failure? Ensure children think carefully about the spelling, punctuation and grammar they use when writing, especially capital letters and full stops. Encourage children to include the features of a newspaper they have learned about within this lesson like headlines and photographs. When they are finished, encourage them to read it out to a friend or to the class. Publish the newspaper articles together in a class newspaper or online using a word processor and give feedback as a group or as a class on the newspaper articles.















FURTHER IDEAS AND ACTIVITIES

- Read more books about space such as The Darkest Dark by Chris Hadfield and The Fan Brothers, Man on the Moon: A Day in the Life of Bob by Simon Bartram and Professor Astro Cat's Frontiers of Space by Ben Newman and Dominic Walliman.
- Go back in time and find out about the history of space exploration from the first
 Moon Landings to significant people such as women like Katherine Johnson, Valentina
 Tereshkova and Helen Sharman and why they have played a major role in space history.
- Things and people in space aren't affected by gravity the same way they are on Earth. Gravity is still present in space, but the feeling of weightlessness is due to the fact that they are in orbit so effectively in freefall around the Earth. Astronauts on board the ISS can't walk around, so they move by pushing themselves off from different surfaces. Find out more about the effects of weightlessness and write a story about there being no gravity on Earth. What would it be like?
- Tim Peake is a famous astronaut who is the most recent Briton to go into space. Learn more about his life, how he became an astronaut and write a biography about him.
- Research five facts about each of the planets. Present your research in a table and compare them. Write non-fiction fact files about each of the planets in the solar system.
 Create a model of the solar system using papier-mâché. Can you remember the order?





