## Goodnight Starry

Teacher \& Kid Resources Recommended ages: 3 to 6 years


## WHAT IS GOODNIGHT STARRY ABOUT?

Goodnight Starry is a beautiful picture book for little stargazers aged 3 to 6 years. Saying goodnight to each member of the Earth's family in the solar system, they will discover how very different and special each one is and learn things that they will recall, long after bedtime is over.

Humorously written and beautifully illustrated, Goodnight Starry is the perfect goodnight story to ignite a little one's love of the planets, moons, stars and space. They can sleep safe and sound, secure in the knowledge that the Earth's celestial family also watches over them each and every night.

Each page of Goodnight Starry introduces four key learnings about the planets in our solar system:


1
Key Fact about each Planet
2
Distance from Earth based on previous space missions
3 Appearance, size and colour of the Planet
4
Planet's Official Astronomical Symbol

## WHAT'S ON GOODNIGHT STARRY'S WEBSITE?

The Goodnight Starry website provides teachers and parents access to resources to help children learn more about the Solar System. It also has a range of children's games and activities based on Goodnight Starry. Click https://goodnightstarry.com/ to visit the website.

## TEACHER RESOURCES

These resources have been specifically developed to support teachers. All activities are presented electronically (in the form of Powerpoint and PDF presentation packs) for use in class, or in printable format for homework. Click https://goodnightstarry.com/pages/for-teachers for teacher's resources.

Based on the UK National Curriculum Stages, the activities on the website (and some within this pack) will contribute to the Early Years Foundation Stage (3 to 5 years) developments in:

1. Language \& Literacy (e.g. Comprehension Checks, Reading and Research skills)
2. Understanding the World Around Us
3. Communication Skills
4. Numeracy Skills
5. Sciences

## KIDS ACTIVITIES

A range of games and activities are also available for children to explore at home.
Click https://goodnightstarry.com/pages/for-kids for kid's resources.

## PLANETARY EXPLANATORY

The website also has a 'Planetary Explanatory' where teachers and parents can quickly get the answers to all those tricky space questions children may ask. Amaze little stargazers with your space knowledge because grown-ups know everything, right?

For example:

1. Why is the Moon holding a rabbit?
2. Why is the Sun called 'the Sun'?
3. And is Pluto still a Planet?

Click https://goodnightstarry.com/pages/planetary-explanatory-2 for Planetary Explanatory resources.

## SUMMARY OF FULL RESOUCES

For a summary of the free resources available, click https://goodnightstarry.com/pages/kids-activities

Outline of this Pack

Activities 1 \& 2: Comprehension and understanding checks

Ackivily 3: Guess the Planekary Symbol
Ackivily 4: Distance to Earth
Ackivily s: Crossword Puzzles
Ackivily 6: Build a Fruiky Solar System
Ackivily 7: Fill in the missing words
Activity 8: Colour-Me-In Templates

And lots more on the website hleps://goodnightstarry.com/

## Activity 1 - Comprehension Check (1)

## After reading Goodnight Starry, can you answer the following questions?

1. Which is your favourite Planet? Why?
2. Which Planet:
a. Has a windy bottom?
b. Was last to be found?
c. Spins on its side?
d. Has the most beautiful rings?
e. Has the biggest dust storms?
f. Is closest to the Sun?
g. Is deep blue like the ocean?
h. Is brightest in the night sky?
3. Emotions: Many of the Planets look like they are feeling different things in the story. Which planet:
a. Looked embarrassed?
b. Looked angry?
c. Was hot and bothered?
d. Was really, really excited?
e. Had the biggest smile?
f. Looked most glamourous?
g. Looked naughty or cheeky?
h. Was very relaxed?
i. Looked like a Queen?

## Answers in Appendix 1

## Activity 2 - Comprehension Check (2)

After reading Goodnight Starry, you should be able to identify what my name is?

I'm Earth's glamourous sister, all sparkles and glitter.

I have a necklace of pearls around my majestic world.

I'm always running around, and I was last to be found.

I have dust storms blowing high into rusty red skies.

I'm the one that lives closest to the Sun.

I'm tipped over and spin on my side.

I'm the one sparkling all green and blue.

I'm the big daddy of all this bunch.

I'm the one that shimmers like the deep blue sea.

Answers in Appendix 2

My name is $\qquad$

My name is $\qquad$

My name is $\qquad$

My name is $\qquad$

My name is $\qquad$

My name is $\qquad$

My name is $\qquad$

My name is $\qquad$

My name is $\qquad$

Activity 3 - Guess the Planetary Symbol
Learn the official symbols for each of the Objects in our solar system.


## Guess the Planetary symbol from memory?



## Answers in Appendix 3

## Activity 4 - Distance to Earth?

Study the distance of each Planet to Earth (based on previous space missions) and then test your learning.


Details of each of the different space missions can be found in the Planetary Explanatory section of our website.

See https://goodnightstarry.com/pages/planetary-explanatory-2

Guess the Planet based on distance to Earth?


Answers in Appendix 4

Guess the Planet based on distance to Earth?


## Answers in Appendix 4

## Activity s - Crossword Puzzles

Find answers to the clues below at the Planetary Explanatory see https://goodnightstarry.com/pages/planetary-explanatory-2

## Puzzle 1



## Down

1 Which Planet is the hottest in the Solar System?
2 Which Planet has a great red spot?
4 Which Planet has the most rings around it?
$6 \quad$ What do you call an Alien that is supposed to live on Mars?
7 Which 'Planet' was the last to be found?

## Across

3 Which Planet looks like the deep blue sea?
5 Which Planet was named after the Roman God of War?
8 Which Planet is named after the Roman God of Messengers?
9 Which Planet orbits the Sun on its back?
10 This collection of gas is called the Heart N $\qquad$ ?

## Answers in Appendix 5

## Activity s - Crossword Puzzles

Find answers to the clues below at the Planetary Explanatory see https://goodnightstarry.com/pages/planetary-explanatory-2

## Puzzle 2



## Down

1 What Star must you never look at?
2 Who was the first man to go into space?
4 Which object has the outline of a rabbit on its face?
5 Which Planet is the biggest?
7 The Sun is a huge $\qquad$

## Across

3 What is another name for an Astronaut?
6 Which Planet spins backwards and tipped on its side?
8 Which is the only place in the Solar System where any life is found?
9 Which Planet has a moon called Titan?
10 Which is the coldest Planet (on average)?

## Answers in Appendix 5

## Activity 6 - Build a Fruity Solar System

Use fruit to understand the relative size of the Planets to each other and also learn the order of the Solar System.


## How:

1. Use the following pieces of fruit to set up this activity
2. Ask the following questions using the fruit as props to build the Solar System

## GAS GIANTS

| JUPITER | -1 Watermelon |
| :--- | :--- |
| SATURN | -1 Orange |
| URANUS | -1 Large apple |
| NEPTUNE | -1 Lime |

## ROCKY PLANETS

| EARTH | -1 Cherry tomato |
| :--- | :--- |
| VENUS | -1 Blueberry |
| MARS | -1 Pea |
| MERCURY | -1 Peppercorn |

## Build the Fruity Solar System. Questions:

1. Out of all the objects in our Solar System, which object is the biggest?
2. How many Planets are there in the Solar System?
3. What are the names of all the Planets?
4. Ask the children to guess which fruit resembles each Planet
5. Ask the children to arrange the fruit in the order of the Solar System
6. Which Planets are known as the Rocky Planets?
7. What Planets are known as the Gas Giants?

## Answers in Appendix 6

# Activity 7 - Fill in the missing words 

## Find the missing words by researching Planetary Explanatory at

 https://goodnightstarry.com/pages/planetary-explanatory-2
## Lesson 1: The Sun, Moon and Mercury

How long would it take you to travel to the Sun?
If you flew to the Sun as fast as a jet airplane normally travels, it would take you $\qquad$ years to get there.

## Why is it called the Sun?

English is part of a family of languages that came from Germany. And an old German word
$\qquad$ was first used to describe that big, orangey thing in the sky.
In Old English, this gradually changed to $\qquad$ before it was shortened to 'Sun' in modern English.

## Where did the Moon come from?

It is thought that the Moon was created from the remains of a Planet (about the size of
$\qquad$ ) that collided with the Earth around $\qquad$ billion years ago.

Why is the Moon holding a rabbit?
Many Asian and indigenous American people see the shape of a rabbit in the dark and light markings on the Moon, which they call the ' $\qquad$ $\therefore$.

## Who is Mercury named after?

Mercury was named after the $\qquad$ God of $\qquad$

## Has anyone ever been to Mercury?

No human is likely to set foot on Mercury, as it's just too unpleasant.
So instead, we have sent over $\qquad$ unmanned spacecraft (or robotic probes) to Mercury over the years.

## Answers in Appendix 7

# Lesson 2: Venus, Mars and Liklle Asteroids 

## Find the missing words by researching Planetary Explanatory at https://goodnightstarry.com/pages/planetary-explanatory-2

## Who is Venus named after?

Venus was named after the Roman Goddess of $\qquad$ and $\qquad$ .

Why is the Planetary symbol for Venus used to represent women here on Earth?
Venus has long been associated with $\qquad$ . It is sometimes called Earth's sister Planet as it has a similar structure and size to our home.

Why does Mars have a red brush on his head and look so angry?
The ancient Romans named this Planet after their mighty $\qquad$ of $\qquad$ Mars, because of the way it twinkles blood-red in the night sky.

Are there really volcanoes on Mars?
Mars is home to the biggest Volcano found so far in the Solar system, called 'Olympus
$\qquad$ '. At around 22 km ( $\qquad$ miles) high, it is roughly 3 times higher than the highest mountain on Earth, Mount $\qquad$ .

## What are Asteroids?

Asteroids are little bits of $\qquad$ , stone and $\qquad$ that orbit around the Sun in a region known as the Asteroid Belt.

What's the difference between an Asteroid and a meteorite?
When asteroids collide, little pieces can break off and fly away. If they fly off in a direction that takes them outside the orbit of the Asteroid Belt, they are then called a $\qquad$ .

## Answers in Appendix 7

# Lesson 3: Jupiter, Sakurn and Uranus 

## Find the missing words by researching Planetary Explanatory at https://goodnightstarry.com/pages/planetary-explanatory-2

## Why is it called Jupiter?

The Romans had many gods, but the most important of these was Jupiter, who was the $\qquad$ of all of the Gods. So, they called the largest Planet they could see in the night sky after their greatest God of all, mighty Jupiter.

Why does Jupiter have a windy bottom?
A mighty storm, known as the Great $\qquad$ has been raging for hundreds of years in Jupiter's southern hemisphere.

## What are Saturn's rings made of?

Saturn's beautiful rings are made up of millions and millions of tiny particles of $\qquad$ , rocks and $\qquad$ .

How many moons does Saturn have?
Saturn has $\qquad$ official moons and maybe up to another $\qquad$ more

Why does Uranus spin backwards?
We're not sure why, but Uranus spins in the $\qquad$ direction to the Earth and almost all of the other Planets (except Venus).

Why is it called Uranus?
All of the other Planets (besides Earth) are named after Roman Gods.
Uranus is different and is named after the $\qquad$ God of the $\qquad$ .

## Answers in Appendix 7

# Lesson 4: Neptune, Pluto and The Galaxies 

## Find the missing words by researching Planetary Explanatory at https://goodnightstarry.com/pages/planetary-explanatory-2

## Does Neptune really have rings?

Yes, Neptune is surrounded by a set of $\qquad$ known rings. They were first discovered by the probe Voyager 2, who flew past Neptune in $\qquad$ .

## Why is it called Neptune?

Only discovered in $\qquad$ , Neptune was named after the Roman God of the $\qquad$ .

## Is it true that Pluto is not a Planet anymore?

From its discovery in $\qquad$ until 2006, Pluto was classed as the ninth and last Planet in our solar system. However, when $\qquad$ began finding other objects in our solar system that were similar in size to (or even bigger than) Pluto, they had to decide what it is they mean when they say 'Planet'. Under the new definition, Pluto is now considered to be a small, $\qquad$ Planet.

## Why is it called Pluto?

Pluto was named after the Roman God of the $\qquad$ , who was thought to live at the very end of the world and past the furthest boundaries of the ocean. The name Pluto was suggested by an 11-year-old $\qquad$ , Venetia Burney, after more than 1,000 names had been proposed to the observatory that discovered it.

## And what's a galaxy?

A galaxy is a large group of stars (like our Sun), gas and dust (like the Planets in our solar system and in the billions of other solar systems in our galaxy) that are all bound together by the mighty force of $\qquad$ .

## What galaxy are we in again?

We're part of the ' $\qquad$ Way' galaxy but there are at least 100 billion other galaxies (and different types of galaxies) out there in the $\qquad$ .

Answers in Appendix 7

# Lesson 6: Earth, Heart Nebula, Astronaut \& Our Solar System 

## Find the missing words by researching Planetary Explanatory at https://goodnightstarry.com/pages/planetary-explanatory-2

## Why is our Planet called Earth?

Unlike every other Planet in the solar system, the Earth was not named after a Greek or Roman God. Rather, the word 'Earth' comes from an eighth-century $\qquad$ (or English-German) word 'Erda', which just meant 'the $\qquad$ ' or 'soil'.

## What is that on the top of the Earth?

At the very top and very bottom of the Earth, and at different times of the year, you can often see a $\qquad$ light show up high in the night sky. Near the North Pole, these are called the $\qquad$ lights’ (or the Aurora Borealis). While near the South Pole, they are called the 'Southern lights' (or $\qquad$ Australis).

## What is an Astronaut?

An Astronaut is anyone who has trained to go into space aboard a $\qquad$ , either as a pilot or crew member.

## How do I become an Astronaut?

You have to $\qquad$ at school and be very physically fit. Engineering, Science (e.g. physics, biology, astronomy, chemistry) and mathematics are all very important subjects if you want to be an $\qquad$

## What is a Nebula?

A Nebula is a cloud of dust, hydrogen, helium and other $\qquad$ that live in the regions in between $\qquad$ or solar systems (called the interstellar medium).

## Is there only one solar system?

No, there are many, many more solar systems out there. Almost every one of the tens of
$\qquad$ of stars you see in the sky at night-time is a star like our Sun. And most of these $\qquad$ also have Planets and other objects in orbit around them, which also makes them solar systems.

Answers in Appendix 7

## Activity 8 - Colour-Me-In



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Activity 8 - Colour-Me-In


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## Activity 8 - Colour-Me-In



## Activity 8 - Colour-Me-In



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## Activity 8 - Colour-Me-In



Activity 8 - Colour-Me-In


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## Activity 8 - Colour-Me-In



## Activity 8 - Colour-Me-In



## About Us

Meet the Author

Born on the anniversary of the first moon landing, D'Arcy Lewis has always been fascinated with the stars. Growing up under the clear desert night skies of Western Australia, his first little telescope helped him to discover a lifelong love of astronomy. As a nipper, he even wrote to the President of the USA to let him know that Mars had all the resources to sustain life and was worth a visit. NASA politely responded that it wasn't a priority at the time, but also enclosed a beautiful book of planets to further help his 'research'.


## The origins of Goodnight Starry

Goodnight Starry was inspired on a cold, clear winters night in our backyard in Bondi, Australia. Some UK friends, visiting with their 9 year old son, saw our telescopes and wanted to view the night skies 'Down Under'. We spent a stellar evening spotting Jupiter, Saturn and the Southern Cross in our chilly winter skies. The idea of developing an educational picture book to introduce the planets and other objects in our solar system to a new generation of little stargazers was born.

## Meet the Illustrator

Andrew McIntosh is a digital illustrator from Melbourne, Australia. He started his artistic career in the video games industry focusing on Pixel art, 3D modelling and UI design.


## Appendices

## Appendix 1 - Comprehension Check (1) Answers

1. Which is your favourite Planet? Why?
2. Which Planet:
a. Has a windy bottom?
b. Was last to be found?
c. Spins on its side?
d. Has the most beautiful rings?
e. Has the biggest dust storms?
f. Is closest to the Sun?
3. Is deep blue like the ocean?
h. Is brightest in the night sky?

Jupiter
Pluto (dwarf Planel)
Uranus
Salurn
Mars
Mercury
Neptune
Venus
3. Emotions: Many of the Planets look like they are feeling different things in the story. Which Planet:
a. Looked embarrassed?
b. Looked angry?
c. Was hot and bothered?
d. Was really, really excited?
e. Had the biggest smile?
f. Looked most glamourous?
9. Looked naughty or cheeky?
h. Was very relaxed?
i. Looked like a Queen?

## Jupiter

Mars
Mercury
Pluto
Earch
Venus
Neplune
Uranus
Saturn

# Appendix 2: Comprehension (2) Answers 

I'm Earth's glamourous sister, all sparkles and glitter.

I have a necklace of pearls around my majestic world.

I'm always running around, and I was last to be found.

I have dust storms blowing high into rusty red skies.

I'm the one that lives closest to the Sun.

I'm tipped over and spin on my side.

I'm the one sparkling all green and blue

I'm the big daddy of all this bunch.

I'm the one that shimmers like the deep blue sea.

My name is Venus

My name is Saturn

My name is Pluto

My name is Mars

My name is Mercury

My name is Uranus

My name is Earth

My name is Jupiter

My name is Neptune

Appendix 3 - Guess the Planetary Symbol and Learn the Order of the Planets

Answers and Order of the Planets


## Appendix 4 - Guess the Planet based on distance to Earth

Answers


MERCURY


MARS


VENUS


JUPITER


SATURN


NEPTUNE


URANUS


PLUTO

Appendix 5 - Crossword Puzzle
Answers


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## Appendix 6 - Build the Fruity Solar System Answers



## Questions:

1. Out of all the objects in our Solar System, which object is the biggest? Answer: The largest of all the Planets is Jupiter. But the biggest object in our solar system is our star, the Sun. The Sun is around 10 times larger than Jupiter.
2. How many Planets are there in the Solar System?

Answer: 8 (Pluto isn't counted, as it's classified as a dwarf planet now)
3. What are the names of all the Planets?

Answer: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus \& Neptune
4. Ask the children to guess which fruit resembles each Planet

Answer: As above
5. Ask the children to arrange the fruit in the order of the solar system Order: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune
6. Which Planets are known as the Rocky Planets?

Answer: Mercury, Venus, Earth and Mars
7. What Planets are known as the Gas Giants?

Jupiter, Saturn, Uranus and Neptune

## Order of the Planets



Rocky Planets


Gas Giants


## Activity 7 - Fill in the missing words

## Lesson 1: The Sun, Moon and Mercury

How long would it take you to travel to the Sun?
If you flew to the Sun as fast as a jet airplane normally travels, it would take you
$\qquad$ years to get there.

Why is it called the Sun?
English is part of a family of languages that came from Germany. And an old German word Sonne was first used to describe that big, orangey thing in the sky. In Old English, this gradually changed to SUA』E before it was shortened to 'Sun' in modern English.

## Where did the Moon come from?

It is thought that the Moon was created from the remains of a planet (about the size of Mas ) that collided with the Earth around 4.5 billion years ago.

## Why is the Moon holding a rabbit?

Many Asian and indigenous American people see the shape of a rabbit in the dark and light markings on the Moon, which they call the 'Moon Rabbit

## Who is Mercury named after?

Mercury was named after the Roman God of Messengers

## Has anyone ever been to Mercury?

No human is likely to set foot on Mercury, as it's just too unpleasant.
So instead, we have sent over 40 unmanned spacecraft (or robotic probes) to Mercury over the years.

## Lesson 2: Venus, Mars and Little Asteroids

## Who is Venus named after?

Venus was named after the Roman Goddess of Love and Beauty

Why is the planetary symbol for Venus used to represent women here on Earth?
Venus has long been associated with Women. It is sometimes called Earth's sister planet as it has a similar structure and size to our home.

Why does Mars have a red brush on his head and look so angry?
The ancient Romans named this planet after their mighty God of War, Mars, because of the way it twinkles blood-red in the night sky.

## Are there really volcanoes on Mars?

Mars is home to the biggest Volcano found so far in the Solar system, called 'Olympus MonS '. At around 22 km ( 14 miles) high, it is roughly 3 times higher than the highest mountain on Earth, Mount Everest.

## What are Asteroids?

Asteroids are little bits of loCKS, stone and ICe that orbit around the Sun in a region known as the Asteroid Belt.

## What's the difference between an Asteroid and a meteorite?

When asteroids collide, little pieces can break off and fly away. If they fly off in a direction that takes them outside the orbit of the Asteroid Belt, they are then called a meteorite

## Lesson 3: Jupiter, Saturn and Uranus

## Why is it called Jupiter?

The Romans had many gods, but the most important of these was Jupiter, who was the $\mathbf{k}_{1} \mathrm{~g}_{\text {of }}$ all of the Gods.
So, they called the largest planet they could see in the night sky after their greatest God of all, mighty Jupiter.

Why does Jupiter have a windy bottom?
A mighty storm, known as the Great Red Spot has been raging for hundreds of years in Jupiter's southern hemisphere.

## What are Saturn's rings made of?

Saturn's beautiful rings are made up of millions and millions of tiny particles of dust rocks and $\qquad$ .

How many moons does Saturn have?
Saturn has 53 official moons and maybe up to another 9 more

## Why does Uranus spin backwards?

We're not sure why, but Uranus spins in the opposite direction to the Earth and almost all of the other planets (except Venus).

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All of the other Planets (besides Earth) are named after Roman Gods.
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## Lesson 4: Neptune, Pluto and The Galaxies

## Does Neptune really have rings?

Yes, Neptune is surrounded by a set of $\qquad$ known rings. They were first discovered by the probe Voyager 2, who flew past Neptune in $\qquad$ 1989

## Why is it called Neptune?

Only discovered in 1846 , Neptune was named after the Roman God of the Sea.

## Is it true that Pluto is not a planet anymore?

From its discovery in 1930 until 2006, Pluto was classed as the ninth and last planet in our solar system. However, when Scientists began finding other objects in our solar system that were similar in size to (or even bigger than) Pluto, they had to decide what it is they mean when they say 'Planet'. Under the new definition, Pluto is now considered to be a small, DWar $f$ planet.

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## And what's a galaxy?

A galaxy is a large group of stars (like our Sun), gas and dust (like the planets in our solar system and in the billions of other solar systems in our galaxy) that are all bound together by the mighty force of gravily

## What galaxy are we in again?

We're part of the 'M.IKy_Way' galaxy but there are at least 100 billion other galaxies (and different types of galaxies) out there in the UniveNSe .

## Lesson 5: Earth, Heart Nebula, Astronaut $\$$ Our Solar

 System
## Why is our planet called Earth?

Unlike every other planet in the solar system, the Earth was not named after a Greek or Roman God. Rather, the word 'Earth' comes from an eighth-century
$\qquad$ (or English-German) word 'Erda', which just meant 'the ground or 'soil'.

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How do I become an Astronaut?
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## What is a Nebula?

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Is there only one solar system?
No, there are many, many more solar systems out there. Almost every one of the tens of Mllions of stars you see in the sky at night-time is a star like our Sun.

And most of these $\qquad$ also have planets and other objects in orbit around them, which also make them solar systems.

We would love to hear your feedback on the website and on these resources.

You can email us at darcy@goodnightstarry.com<br>Or share your comments on:<br>Facebook: @goodnightstarry<br>Instagram: ©goodnightstarry<br>Twitter: ©goodnightstarr1<br>Website: www.goodnightstarry.com

