

#### **PURPOSE OF THIS PACK**

To provide additional resources to teachers and/or parents to help children learn about the planets and our solar system, using Goodnight Starry.

This pack includes:

- Educational applicability
- Summary of learnings from Goodnight Starry and the website
- Suggested activities, which can be completed in the classroom or as homework.

#### **EDUCATIONAL APPLICABILTY**

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

- Communication and language
- Literacy
- Understanding the world

**Age range:** The activities are suitable for 4–6 year olds.

#### **SUMMARY OF LEARNINGS**

#### Synopsis:

Children say Goodnight to the Earth and the amazing members of her celestial family with this beautiful picture storybook. Budding stargazers will discover how each of the planets and other objects in the solar system watch over them each and every night. And they will learn a little about what makes each member of the Earth's family so very special.

#### What's on each page:

Each page of the book provides:

- A beautiful illustration of each planet
- A key fact about the planet
- Rough distance of the planet to Earth
- Astronomical symbol of each planet

#### How does website support further learning?

The website has a number of resources:

- 'Planetary Explanatory' to answer children's common questions about the planets (for teachers and parents)
- Colouring in activities
- Spot the Difference games
- Links to children's space websites

#### **ACTIVITIES FOR USE IN CLASSROOM (AGE 4–6 YEARS)**

- Activity 1: My name is ...
- Activity 2: Order the Planets
- Activity 3: A Fruity Solar System
- Activity 4: Space Jokes
- Activity 5: Colour in your favourite planet

#### **ACTION FOR TEACHERS**

Photocopy relevant sheets from within this Master pack for use in classroom or homework activities.



Activity 1: My name is ...

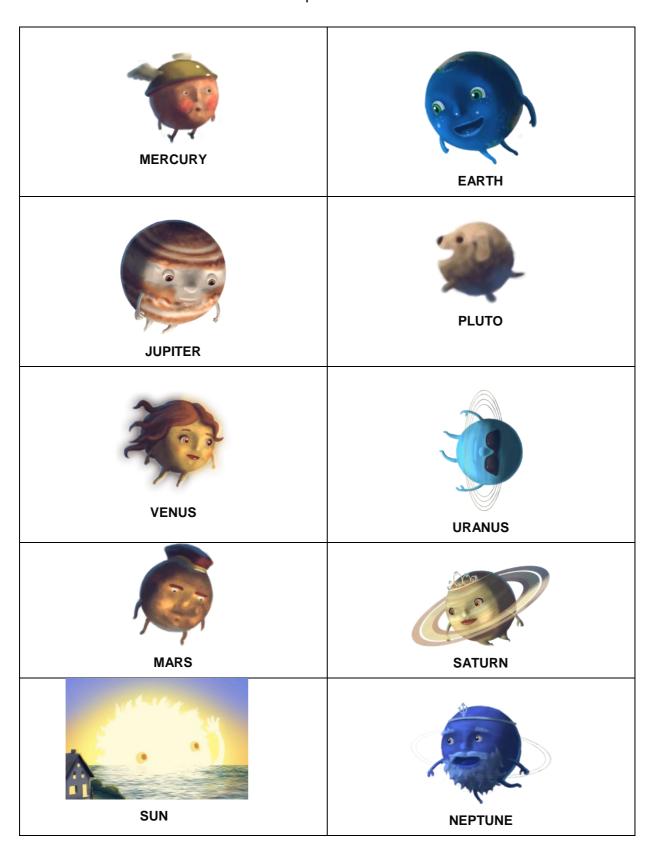
Read Goodnight Starry then name each planet from the clues below

I'm Earth's glamourous sister, all sparkles and glitter.	My name is
I have a necklace of pearls around my majestic world.	My name is
I'm always running around, and I was last to be found.	My name is
I have dust storms blowing high into rusty red skies.	My name is
I'm the one that lives closest to the Sun.	My name is
I'm tipped over and spin on my side.	My name is
I'm the one sparkling all green and blue.	My name is
I'm the big daddy of all this bunch.	My name is
I'm the one that shimmers like the deep blue sea.	My name is



## **Activity 2: Order the Planets**

Cut the Planets out and ask the class to place them in order from the Sun.





## **Activity 3: A Fruity Solar System**

Use common fruits to highlight the different sizes of the planets, relative to each other

This activity, from the Royal Observatory Greenwich, helps children grasp the various sizes of planets in our Solar System using common fruits. The class discussion before the activity encourages children to take an educated guess as to which planet each item represents.

#### Equipment per team (multiply as necessary for teams):

Use the picture below as a reference for the size of fruit to look for.

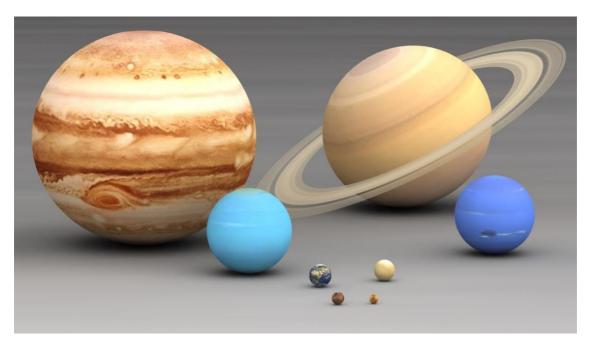
#### **GAS GIANTS**

JUPITER - 1 watermelon
SATURN - 1 large grapefruit
URANUS - 1 large apple

NEPTUNE - 1 orange (slightly smaller than apple)

#### **ROCKY PLANETS**

EARTH - 1 cherry tomato
VENUS - 1 cherry tomato
MARS - 1 blueberry
MERCURY - 1 peppercorn



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### **Activity 3: A Fruity Solar System (continued)**

#### Questions to ask before the activity:

- Out of all the things in our Solar System what do you think is the biggest?
   Answer: The Sun as it is a star and dwarfs all the planets. The Sun is 10 times larger than the largest of the planets, Jupiter.
- 2. How many planets are there in the Solar System?
  - Answer: Eight. Follow up by asking if they can name one and ask around the class. Remember, Pluto is now a 'dwarf planet'.
- 3. There are two different categories of planets in our Solar System: the four rocky or terrestrial planets and the four gas giants. All the items we will be using today will be solid is this accurate for all the planets in our Solar System?

Answer: No. The gas giants are mostly made of gases

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# Solly

## **Activity 4: Space Jokes**

Share some space jokes with children.

Q: Why did the cow go in the spaceship?

A: It wanted to see the mooooooon!

Q: Why don't martians eat clowns?

A: Because they taste funny!

Q: What do you call a crazy person in space?

A: An astro-nut!

Q: What did Venus say to Saturn?

A: Give me a ring!

Q: What do planets sing?

A: Nep-tunes!

Q: How do astronauts serve dinner?

A: On flying saucers.

Q: What do planets like to read?

A: Comet books!

Q: How many paperclips would it take to reach the moon?

A: One, but it would have to be very large.

Q: How does the solar system hold up its pants?

A: With the asteroid belt!

Q: When do astronauts eat their lunch?

A: At launch time.

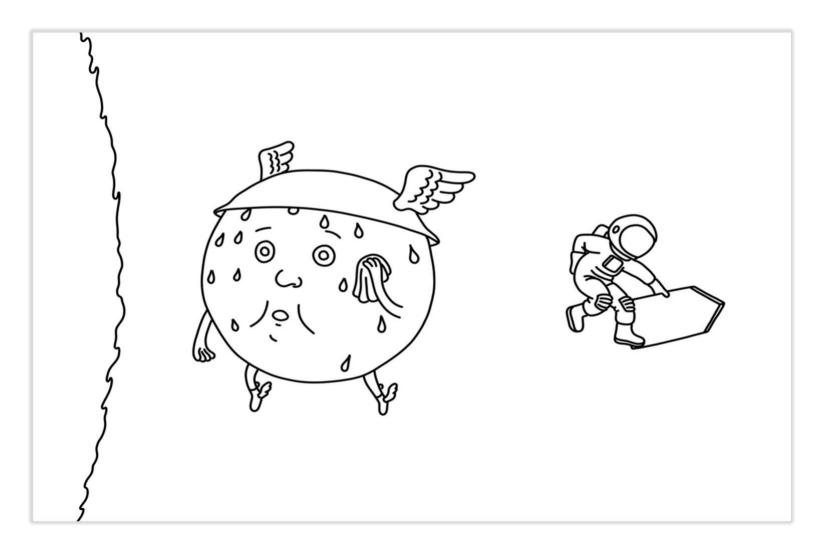
Q: How do you know when the moon has enough to eat?

A: Because it's full.

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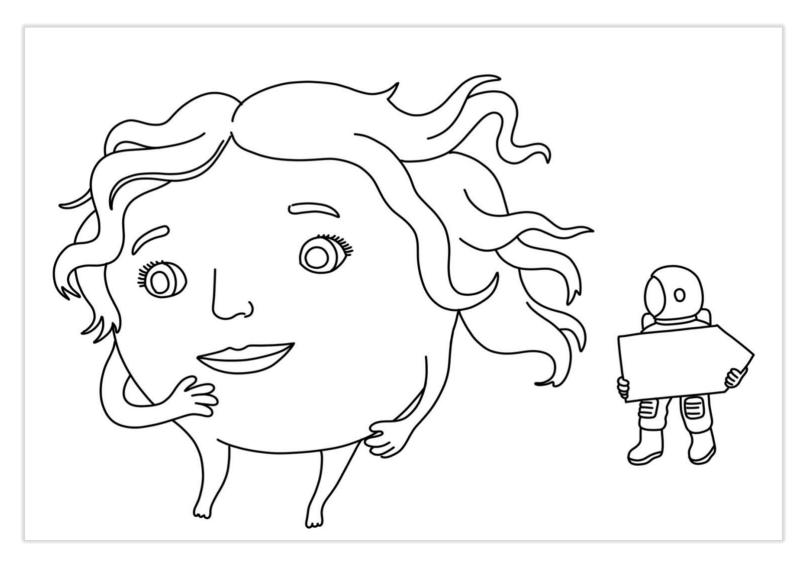
## Activity Pack – 4 to 6 years

## Activity 5 – Colour in your favourite Planet



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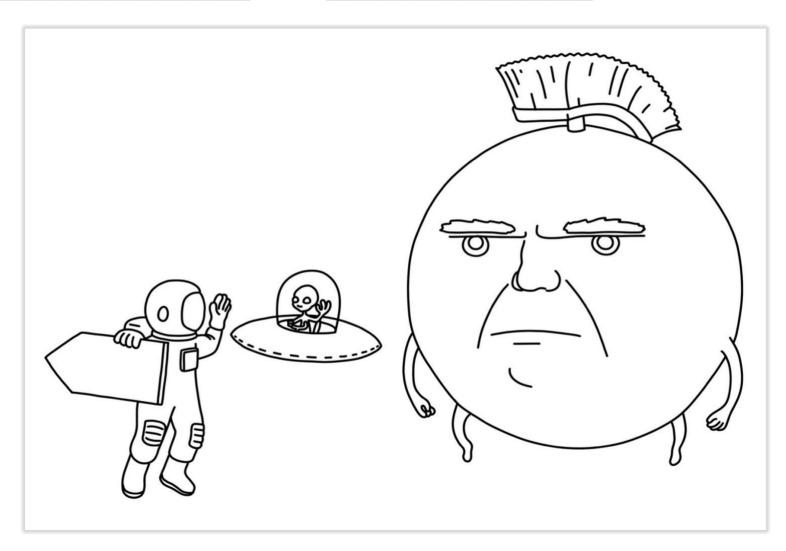
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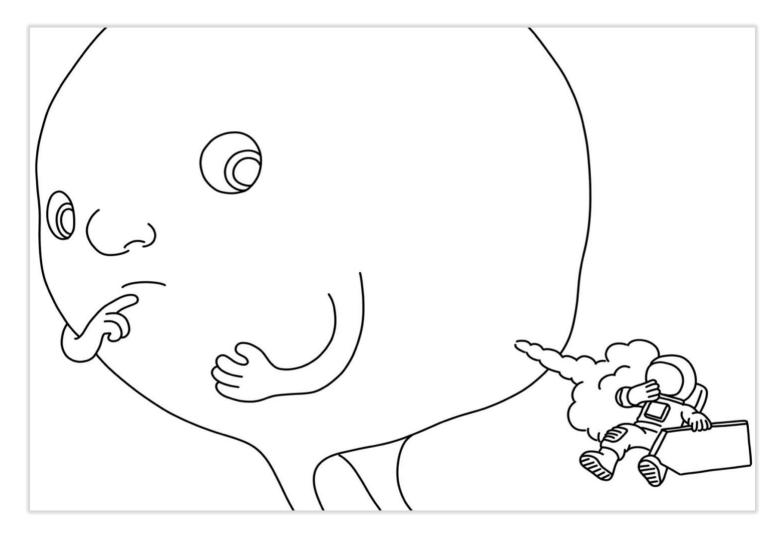
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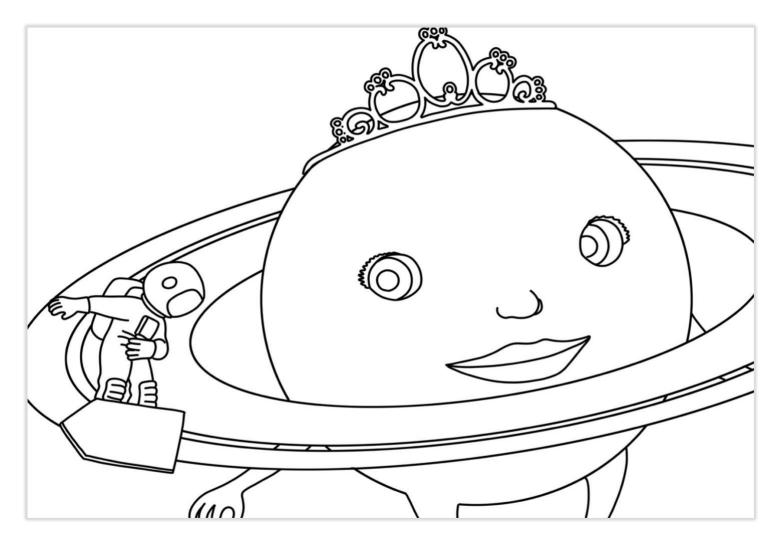
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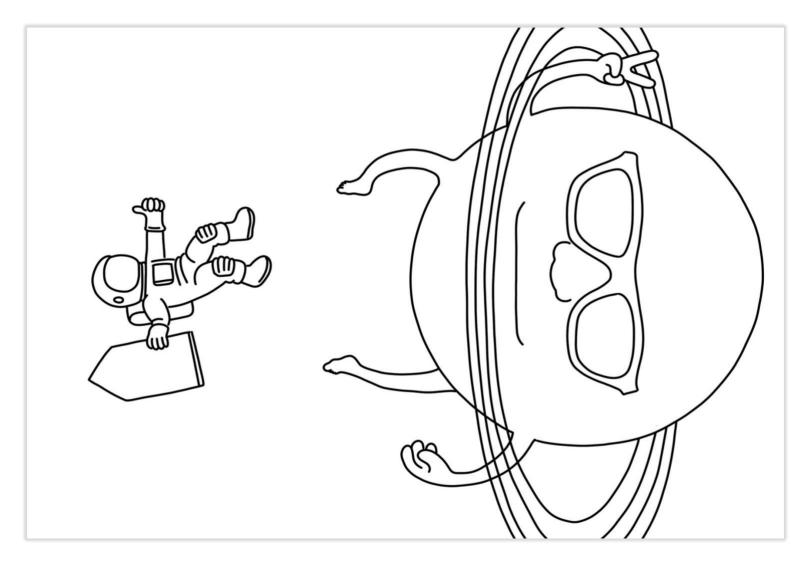
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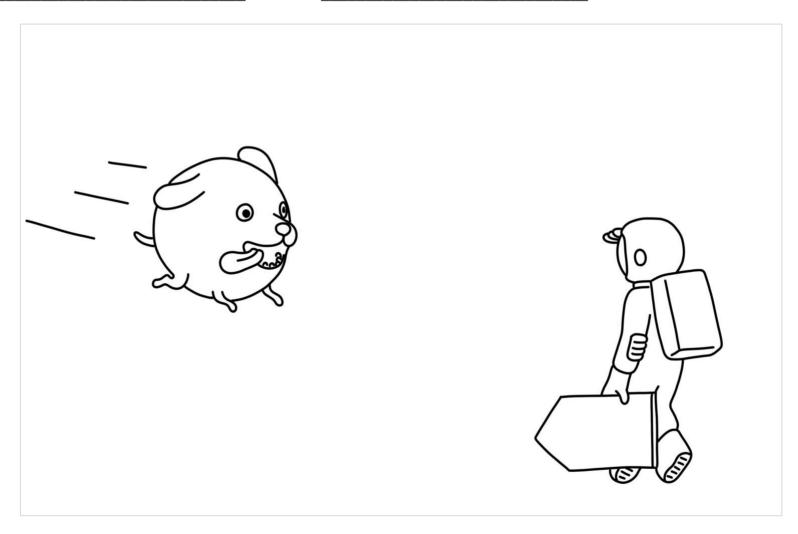
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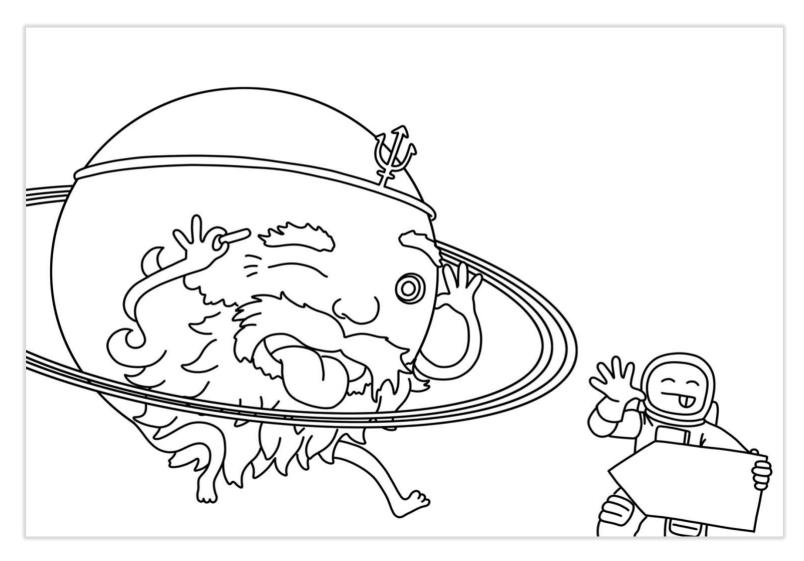
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This pack includes:

- Educational applicability
- Summary of learnings from Goodnight Starry and the website
- Suggested activities, which can be completed in the classroom or as homework.

#### **EDUCATIONAL APPLICABILTY**

Based on the **UK National Curriculum Stages**, the activities proposed within this pack will contribute to Key Stage 1 (5-7 years) developments in:

- English (Reading, Literacy, Comprehension)
- Understanding the world
- Mathematics and numeracy

Age range: The activities are suitable for 6–7 year olds.

#### **SUMMARY OF LEARNINGS**

#### Synopsis:

Children say Goodnight to the Earth and the amazing members of her celestial family with this beautiful picture storybook. Budding stargazers will discover how each of the planets and other objects in the solar system watch over them each and every night. And they will learn a little about what makes each member of the Earth's family so very special.

#### What's on each page:

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#### **ACTIVITIES FOR USE IN CLASSROOM (AGE 6-7 YEARS)**

- Activity 1: Knowledge Check
- Activity 2: Who am I?
- Activity 3: Fill in the missing words
- Activity 4: Colour in your favourite Planet

#### **ACTION FOR TEACHERS**

Photocopy relevant sheets from within this Master pack for use in classroom or homework activities.

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## **Activity 1: Knowledge Check**

#### **BEFORE READING THE BOOK**

- 1. Show the children the front cover and ask them what they think the story is about?
- 2. Ask the children to tell you something they know about space?
- 3. Ask the children to name some of the things that are in space, for example: Planets, asteroids, meteorites, astronauts, satellites

#### AFTER READING THE BOOK

- 1. Which was your favourite planet? Why?
- 2. Which was the funniest planet? Why?
- 3. Which planet:

a. had a windy bottom? Jupiter b. was last to be found? Pluto (dwarf planet) c. spins on its side? **Uranus** d. has the most beautiful rings? Saturn e. has the biggest dust storms? Mars f. is closest to the Sun? Mercury g. is deep blue like the ocean? Neptune h. is brightest in the night sky? Venus

- 4. Where do Asteroids live? Which two planets are on each side of the Asteroid Belt?
- 5. Emotions: Many of the planets look like they are feeling different things in the story. Which planet:

a.	looked embarrassed?	Jupiter
b.	looked angry?	Mars
C.	was hot and bothered?	Mercury
d.	was really, really excited?	Pluto
e.	had the biggest smile?	Earth
f.	looked most glamourous?	Venus
g.	looked naughty or cheeky?	Neptune
h.	was very relaxed?	Uranus
i.	looked like a Queen?	Saturn

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### Activity 2: Who am I?

Draw a line from the relevant clue to the planet

I am called Earth's sister planet, as we are so alike in many ways. I shine brightest of all the planets, and am yellow, cloudy and super-hot.

#### Who am I?

I'm full of gas, and smell like rotten eggs. But I'm also supercool and very laid back. Like Venus, I spin the opposite way to all the other planets, so the Sun rises in my west and sets in my east.

#### Who am I?

I am often called the 'red' planet, though my colour is really like rust. I have the solar system's biggest volcano, and also the biggest dust storms in the solar system.

#### Who am I?

While three other planets also have rings, mine are the most beautiful. I have at least 53 moons, am made up of gas and spin around very fast.

#### Who am I?

I live closest to the Sun, and my name starts with the letter 'M'. I get very, very hot in the day, but very, very cold at night.

#### Who am I?

I was only discovered in 1930 and am now called a 'dwarf planet'. My orbit around the Sun is more oval than circular, and I am very, very far away.

#### Who am I?



**MERCURY** 



**SATURN** 



**VENUS** 



**PLUTO** 



**URANUS** 



**MARS** 



## **Activity 3: Fill in the missing words**

Complete the sentences below. All answers can be found in the 'Planetary Explanatory' at: <a href="https://goodnightstarry.com/pages/guide-to-the-planets">https://goodnightstarry.com/pages/guide-to-the-planets</a>

Name:
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
years to get there.
Where did the Moon come from?
It is thought that the Moon was created from the remains of a planet (about the size
of) that collided with the Earth around billion years ago.
Who is Mercury named after?
Mercury was named after the God of
Who is Venus named after?
Venus was named after the Roman Goddess of and
Are there really volcanoes on Mars?
Mars is home to the biggest Volcano found so far in the Solar system, called
'Olympus'. At around 22km ( miles) high, it is roughly 3
times higher than the highest mountain on Earth, Mount
Why does Jupiter have a windy bottom?
A mighty storm, known as the Great 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
, rocks and

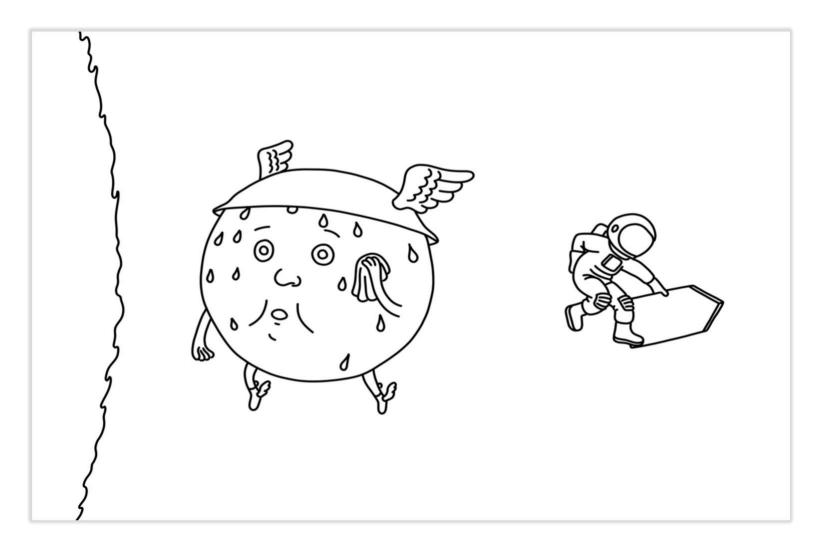


## **Activity 3 (continued)**

Which way does Uranus sp	oin?			
We're not sure why, but Urar	nus spins in the		_ direction to	the Earth and
almost all of the other planets	s (except Venus	).		
Does Neptune really have r	rings?			
Yes, Neptune is surrounded	by a set of	_ known ring	s. They were	first
discovered by the probe Voy	ager 2, who flew	past Neptur	ne in	<b>-</b> •
Is it true that Pluto is not a	planet anymore	e?		
From its discovery in	until 2006, Pluto	was classed	as the ninth	and last
planet in our solar system. F	lowever, when _		began find	ding other
objects in our solar system th	nat were similar i	n size to (or	even bigger tl	han) Pluto,
they had to decide what it is	they mean when	they say 'Pla	anet'. Under	the new
definition, Pluto is now consid	dered to be a sm	nall,	plane	∍t.
What galaxy are we in agai	n?			
We're part of the '	Way' galaxy but	there are at	least 100 billio	on other
galaxies (and different types	of galaxies) out	there in the _		·
What is that on the top of t	he Earth?			
At the very top and very botto	om of the Earth,	and at differe	ent times of th	ie year, you
can often see a	light show up hi	gh in the nigl	nt sky. Near	the North
Pole, these are called the '		_lights' (or th	e aurora bore	ealis). While
near the South Pole, they are	e called the 'Sou	thern lights' (	or	australis).

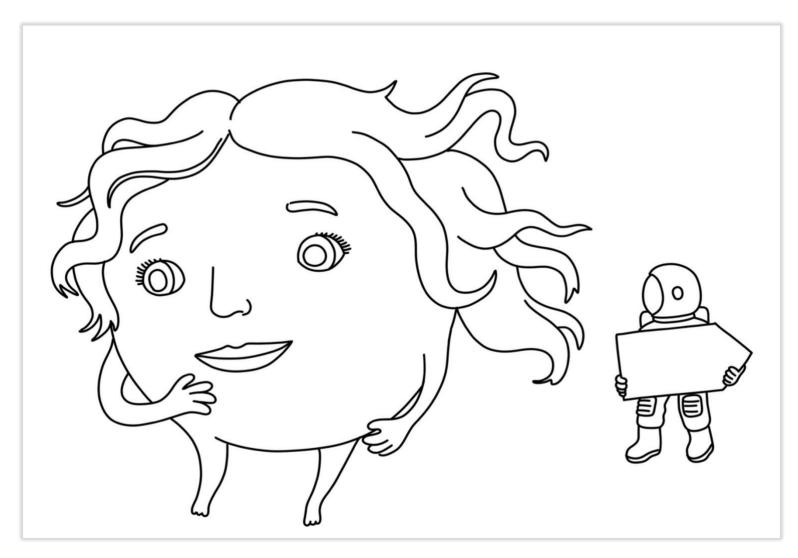
## Activity Pack – 6 to 7 years

## Activity 4 – Colour in your favourite Planet



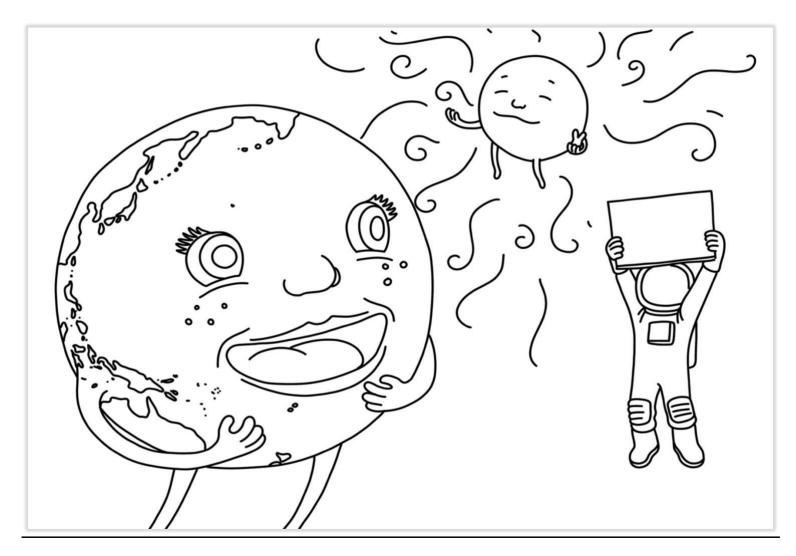
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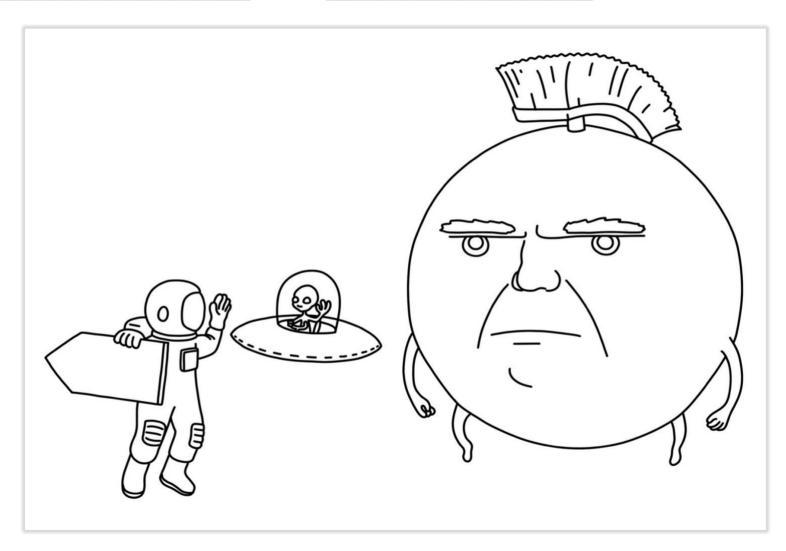
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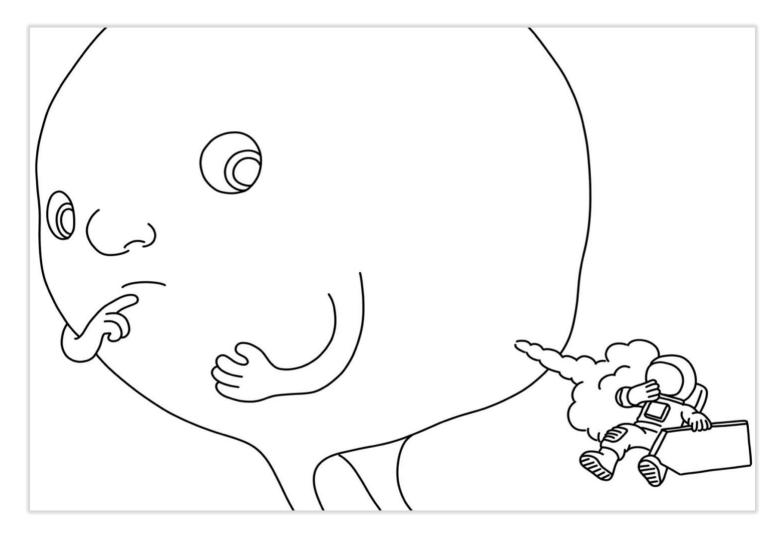
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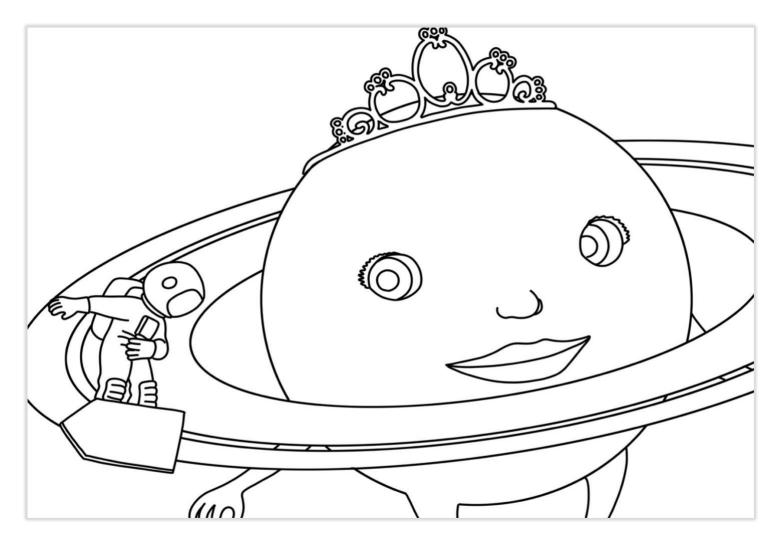
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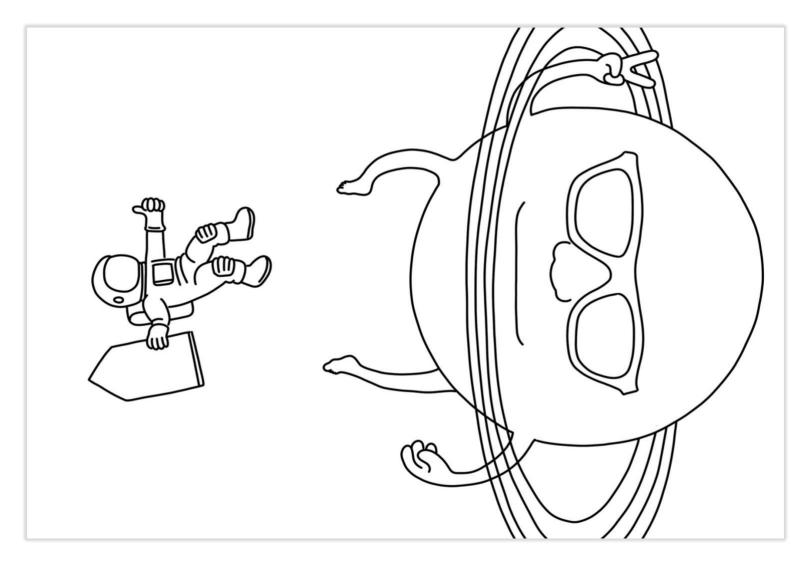
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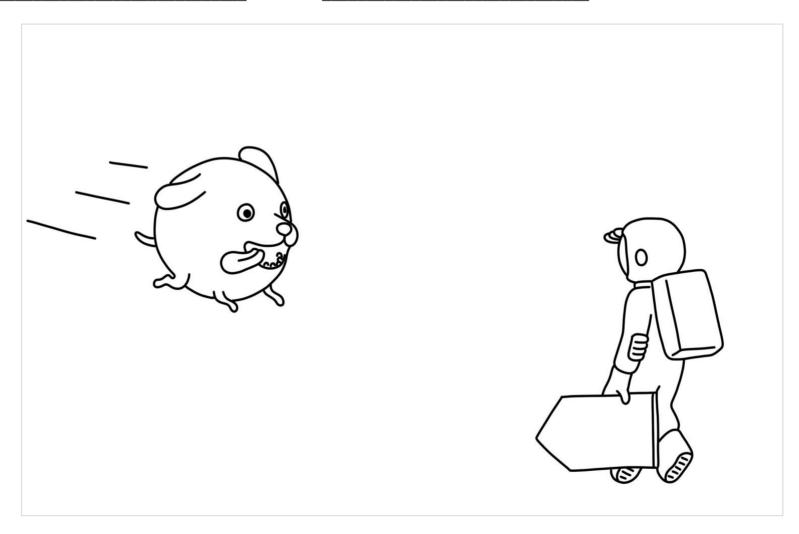
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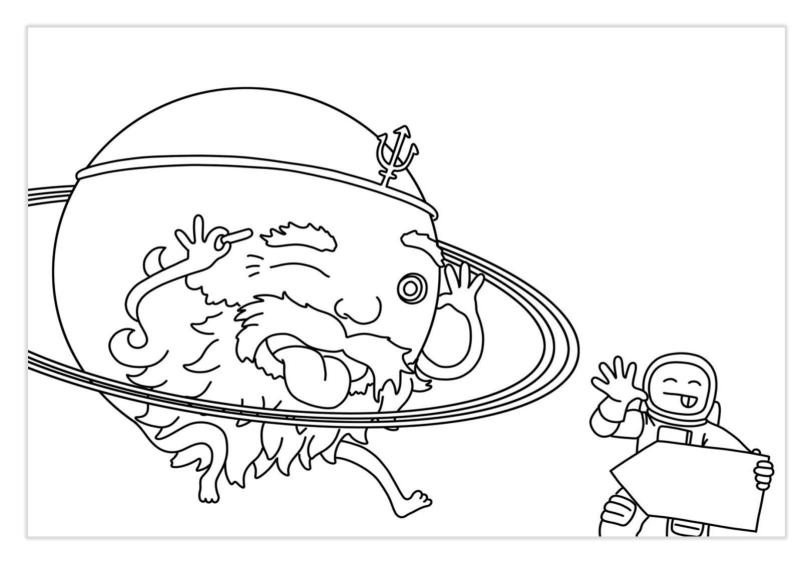
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