



Teacher Resource

Jupiter Profile

Focus Questions

Discuss the BTN story as a class and record the main points of the discussion. Students will then respond to the following:

1. How many moons does Jupiter have?
 - a. 72
 - b. 82
 - c. 92
2. Astrophysicists try to answer big questions like...
3. How does the size of Jupiter compare to Earth?
4. Name three facts you learnt about Jupiter.
5. What questions do you have about the story?

Activity: See, Think and Wonder

After watching the BTN Jupiter Profile story, students will respond to the following questions:

- What did you SEE in this video?
- What did you LEARN from this story?
- What do you WONDER about this story?
- What QUESTIONS do you have about this story?

Activity: Class Discussion

Discuss the BTN Jupiter Profile story as a class. Ask students to record what they know about the planet. What questions do they have? Use the following questions to help guide discussion:

- Make a list of all the things you know about Jupiter.
- What did astronomers recently discover about Jupiter?
- Why does Jupiter look different to other planets?
- What is the weather like on the surface of Jupiter?
- Can humans survive on Jupiter? Why or why not?



EPISODE 2

14th February 2023

KEY LEARNING

Students will learn more about Jupiter and create a profile of the planet.

CURRICULUM

Science – Year 5

The Earth is part of a system of planets orbiting around a star (the sun).

Scientific knowledge is used to solve problems and inform personal and community decisions.

Science – Years 5 & 6

With guidance, pose clarifying questions and make predictions about scientific investigations.

Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena and reflects historical and cultural contributions.

Activity: Glossary

Students will brainstorm a list of key words that relate to the BTN Jupiter Profile story. Here are some words to get them started.

PLANET	SOLAR SYSTEM	GAS GIANT
MOON	GALAXY	GRAVITY

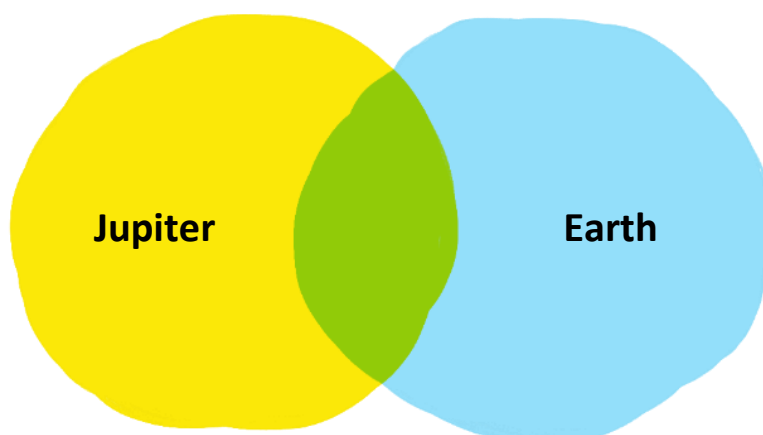
Activity: Profile of Jupiter

Create a profile of Jupiter using a range of sources of information. The following questions will help guide students' research:

- Who discovered Jupiter and when was it discovered?
- How was it named?
- Where is Jupiter in the solar system?
- What is Jupiter's distance from the sun (kms)?
- Jupiter is a gas giant. What does that mean?
- What does Jupiter look like? Describe the surface of the planet using words and pictures.
- Describe Jupiter's atmosphere.
- How long is a day on Jupiter?
- How long is a year on Jupiter?
- Describe the weather on Jupiter.
- List 10 interesting facts about Jupiter.

Activity: Venn diagram

Use a Venn diagram to compare and contrast Jupiter with Earth. Compare and contrast the size of the planets, the distance from the sun and its physical features.



Activity: Make a model of our solar system

Students will make a scale model of the planets in our solar system. In small groups, students will represent the size of the Sun and the planets in our solar system as accurately as possible. Students need to agree on an approximate scale for their model. The model should begin with the Sun and show planets in order. Use [this calculator](#) to help determine size and scale.

Students will respond to the following:

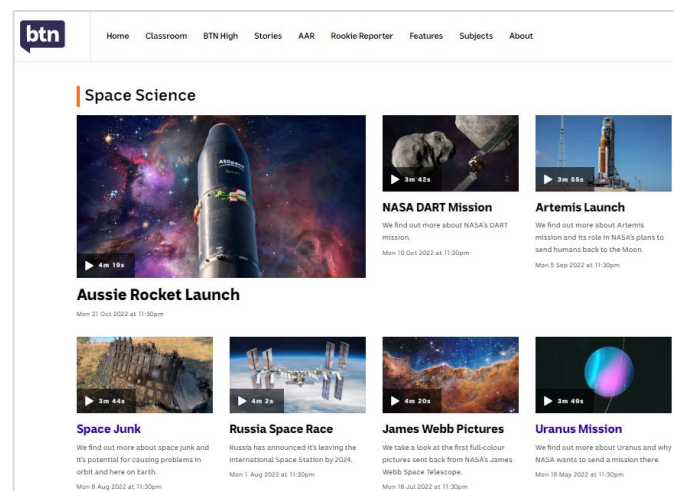
- What scale will you use to model the solar system?
- What materials or found objects will you use to represent the Sun and each of the planets?
- What surprised you about you about this activity?

Following this activity, students will agree on a scale to represent the distance of the planets from the Sun. Calculate and record the distances using a spreadsheet. Consider modelling your findings on your school oval. In this [BTN story](#) we demonstrate the scale of our solar system, using a bowling ball, a pin, a peppercorn, a pecan, a hazelnut and a peanut, on a racecourse!

BTN Space Science stories

Visit BTN's collection of stories which focus on space science and space exploration. After watching any one of the BTN videos ask students to respond to the discussion questions (to find the discussion questions and teacher resources go to the related BTN Classroom Episode and download the Episode Package).

[Link to collection of BTN Space Science stories](#)



Useful Websites

- [Jupiter's moon count jumps to 92, breaking Saturn's Solar System Record](#) – ABC News
- [Jupiter now has the most moons in the solar system, say astronomers](#) – Newsround
- [Jupiter Moons](#) – NASA
- [Jupiter Overview](#) – NASA
- [Jupiter](#) – NASA

Activity: Jupiter Quiz

1. Which is the biggest planet in the solar system?

A. Saturn

B. Jupiter

C. Uranus

2. Jupiter is the closest planet to the Sun.

A. True

B. False

3. One year on Jupiter is equivalent to how many years on Earth?

A. 2

B. 6

C. 12

4. How many moons does Jupiter have?

A. 72

B. 82

C. 92

5. What is Dr Sara Webb's job?

A. Archaeologist

B. Astrophysicist

C. Astronaut

6. All of Jupiter's moons have names.

A. True

B. False

Quiz Answers: 1B, 2B, 3C, 4C, 5B, 6B