

Our Solar System · Conversation & classroom guide

Learning with a grown-up · Ages 4–8 · Flexible participation

How can we compare planets using reliable clues?

Learning aim: Use two labeled facts to compare planets while recognizing the diagram is not to scale.

A five-minute conversation

Find the Sun first and explain that it is a star. Follow the planets in order, pausing wherever your child is curious. Compare two poster facts, such as the smallest and largest planet. Remind your child that the picture fits everything onto one page, so the sizes and gaps are not shown to scale.

Remember: The Moon travels around Earth and reflects sunlight. Where is Earth among the planets that travel around the Sun?

Start here: Find Earth, then choose one other planet to name.

Explore further: Compare Mercury and Jupiter using their facts, then explain why measuring the drawing would not give their true sizes.

Which planet is our home?

Answer cue: Earth.

Which planet is largest, and which is smallest?

Answer cue: Jupiter is largest; Mercury is smallest.

What comes after Earth as we move away from the Sun?

Answer cue: Mars, then Jupiter, Saturn, Uranus and Neptune.

Keep the idea clear

The Sun is a star, and the Moon is not one of the eight planets. Use the labels rather than measuring the drawing.

Try: Make a two-planet comparison

Materials: The poster and an adult; optional paper and drawing materials. Describing or pointing is enough.

1. Choose two planets from the poster.
2. An adult reads their labels. Draw, dictate or point to one fact for each.
3. Explain a similarity or difference using those facts; distinguish our Sun and Moon from the eight planets.

What this can show: Accept a comparison grounded in the text, such as smallest and largest. Colors, drawn gaps and measured picture sizes are not a scale model.

Return to it: When you return, choose a different pair. What new question would you like an adult to help investigate?

Our Solar System · In the classroom

A 20-minute classroom lesson

Prepare: Read the poster, answer cues and misconception note. Prepare only the materials named in the activity; keep a picture-only or described option available.

Words to explore

planet — A large world traveling around a star; this poster shows the eight planets of our solar system.

orbit — A path around another object in space.

3 min · Reconnect and wonder: How can we compare planets using reliable clues? Invite an initial idea; record it without marking it right or wrong.

4 min · Look together: Find Earth, then choose one other planet to name. Introduce planet using the poster.

8 min · Investigate or represent: Use “Make a two-planet comparison.” Let pairs take turns noticing and recording, with adult help and the activity’s stated boundaries.

5 min · Explain and return: Ask the core check: How can we compare planets using reliable clues? Accept pointing, words, signing or a drawing. If the learner is ready, offer this optional extension: Compare Mercury and Jupiter using their facts, then explain why measuring the drawing would not give their true sizes.

Understanding check: How can we compare planets using reliable clues?

Answer guidance: A child can compare two labeled facts, such as Mercury being the smallest planet and Jupiter the largest. The drawn sizes and gaps cannot be measured as their true sizes and distances. Accept a comparison grounded in the text, such as smallest and largest. Colors, drawn gaps and measured picture sizes are not a scale model.

Accept pointing, speech, signing, a drawing or adult dictation. Describe the illustration and use labels/position as well as color. Offer one contrast first, and use the extension when the learner is ready.

A response to keep

My idea or question

What I noticed (date/time if useful)

What I think now / my next question

<https://kiddos.ai/learn/learning-with-gina-and-ollie/solar-system>

Related story: Gina and the Great Gravity Hug — Continue their questions about how things move and fall.

Our discovery record

Use words, marks, a drawing or an adult's notes. Keep this page with you; nothing needs to be uploaded.

Date / time (if useful): _____

My question or idea

What I noticed

What I think now

What I want to explore next

Stories to continue together: <https://kiddos.ai/books>

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