

## Space

### *Upper Primary*

### Key Inquiry Questions

1. What is the solar system?
2. What is in our solar system?

### Learning Outcomes

1. Students will be able to name the planets in order from the sun by the end of the lesson.
2. Students will be able to give a presentation of a planet they researched with their group by the end of the lesson.
3. Students will be able to present in various forms (song, acronym, facts) of the things they learned about the solar system by the end of the lesson.

### Overview

In this lesson, students get the opportunity to learn about all of the planets in the solar system. Students begin the lesson by creating their own planet. They are asked to draw a picture of what it looks like as well as provide the name of the planet, the average temperature on the planet, answer the question can people live here, and give the number of moons their planet has. After this activity, students will watch a video about the planets in the solar system. The video is a song which helps the students remember the planets a little better. As students are watching the video, they will write down facts they found interesting while watching the video. Once the video is over, students will be separated into 8 groups. Each group will be assigned a specific planet and will read a source and answer questions about it. Students will present their planet to the class as the students listening will write down notes about each one presented. At the end of the lesson, there is an optional homework the teacher can assign that can help the students remember the order of planets.

### Materials

#### **SolarSPELL Resource:**

1. “Planets in our Solar System” video (Science > Earth and Space > Planets > Planets in our Solar System)
2. “Planets” folder (Science > Earth and Space > Planets)
3. “Make Your own Planet” worksheet (included below)
4. “Planet Research” worksheet (included below)
5. “Solar System Homework” worksheet (included below)

**Other:**

1. Writing Utensil.
2. Paper.

## Suggested Procedure

*Before Lesson:*

- Begin by asking the question: “what is the name of the planet we live on”?
  - Answer: Earth.
- Explain to students, for today’s warm-up they are going to create a planet.
  - Remind students they can be as creative as they want: it can be just like Earth or nothing like it.
- Give each student a copy of the worksheet labeled “Make Your own Planet”.
  - Allow 15 minutes for students to fill out the worksheet
- **If you are not able to print:**
  - Give each student a sheet of paper.
  - Explain to the students, on this sheet of paper they need the following information to create their own planet:
    - A drawing of what the planet looks like.
    - Name of the Planet.
    - Average Temperature on the Planet.
    - Answer: Can people live here?
    - The number of moons it has.
- After students have completed the activity, have students partner with the person next to them and explain the planet they created.
  - Give 5 minutes for students to share with each other.
- Once students have shared, ask the students to put their planet to the side until later.

*During Lesson:*

- Ask students to take out a half sheet of paper.
- Tell students they will be watching a video about the planets in our solar system.
- Ask students if anyone knows what a solar system is.
  - Answer: A solar system consists of the sun and all the things that surround it: planets, stars, comets, etc.
- Explain to students to write down three facts they thought were interesting on their sheet of paper while watching the video.
- Watch the video “Planets in our Solar System”
- Ask students to share a few facts they thought were interesting from the video.
  - Call on 7 or 8 students to share.



*After Lesson:*

- Separate students into 8 equal groups.
  - I.e: If there are 24 students, there will be 8 groups of 3 students.
- Give each student a worksheet labeled “Planet research”.
- **If you are not able to print:**
  - Give each student a piece of paper.
  - Tell students they need to collect all of this information on their piece of paper:
    - Planet Name.
    - How many moons and rings does it have?
    - What is the average temperature?
    - Where is it in respect to the sun (1st, 4th, 5th, etc.)?
    - Fun Facts about the planet.
    - Picture of what it looks like (with its moons):
- After students are separated into their groups, assign each group one of the following planets:
  - Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, or Neptune.
- Once each group has their assigned planet, allow them to have 20 minutes to research the planet with their group mates.
  - Students can find the information about their planet on the SolarSPELL:
    - Folder name: “Planets” (Science > Earth and Space > Planets)
- After students have had 20 minutes to research and complete their worksheet, each group will present their planet to the class.
  - While groups are presenting, ask students to write down this information about each planet:
    - Planet Name.
    - Where is it in respect to the sun.
    - The temperature of the planet.
    - Any other information they find interesting.
- **Presentations:**
  - Call on groups in order from the sun.
    - Order: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.
  - Students will present all of the information they found and show a picture of what the planets look like.

*Assessment:*

- Students will be graded by their presentations.



- Presenting all the information asked on the worksheet.
- Students will turn in their notes they took while other students were presenting.

*Homework (optional):*

After students have learned about the planets and have completed their presentations they can complete this assignment based off of their notes. If teachers decide to do this homework assignment, please do not collect the notes they took while their peers were presenting; they will need it for the homework assignment.

- Supplies needed:
  - Paper.
  - Colored utensils (if possible).
  - Writing Utensil.
- Send students home with the worksheet labeled “Solar System Homework” to complete and bring back the following day for a grade.
- **If you are not able to print:**
  - Give each student a sheet of paper.
  - Explain to students they will be creating an acronym to help remember the order of the planets from the sun.
    - An acronym is an abbreviation represented by letters or a phrase.
  - Show students the example:
    - **M**y **V**ery **E**nergetic **M**other **J**ust **S**erved **U**s **N**oodles =  
**M**ars **V**enus **E**arth **M**ars **J**upiter **S**aturn **U**ranus **N**eptune
  - Tell students their homework should be in the order like:
    - M V E M J S U N
  - Explain to students they can draw a picture with the acronym they made to help as well.

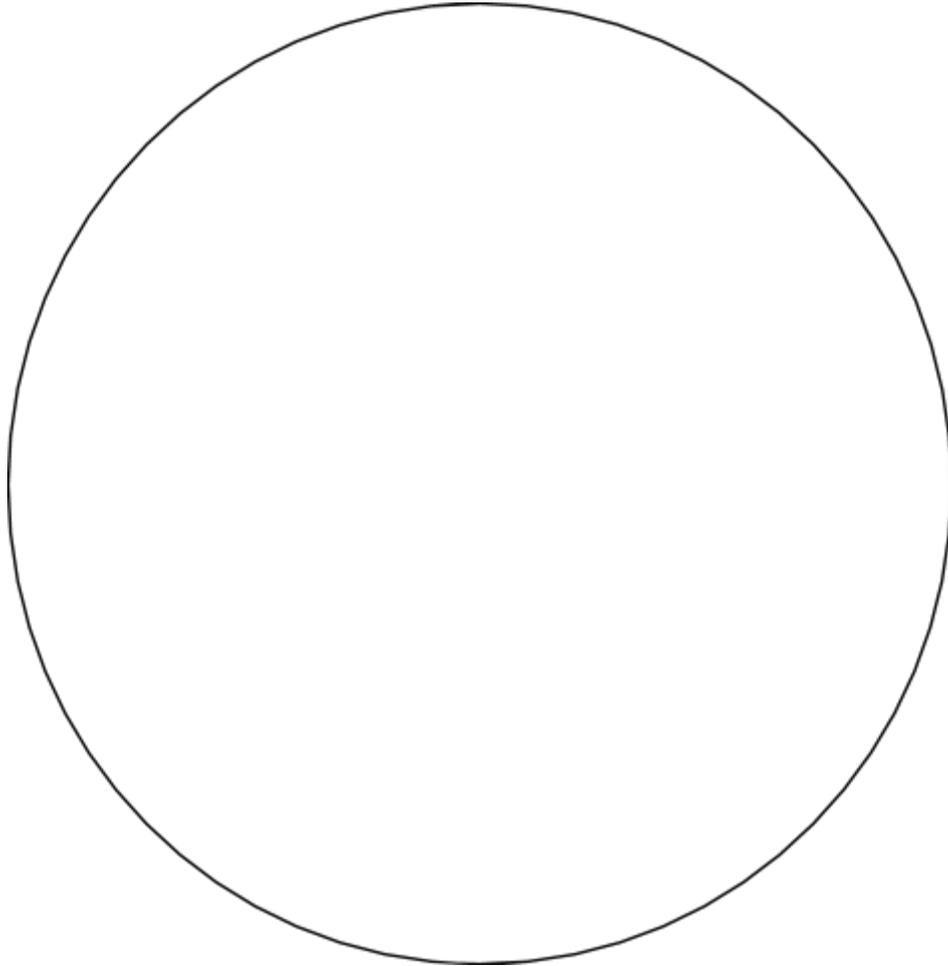


# Make Your Own Planet

Currently there are 8 planets in the solar system but scientists believe they have discovered another.

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*Below, draw and create the new discovered planet.*



Name of the Planet:

Average Temperature of the Planet:

Can people live here:

How many moons does it have:

# Planet Research

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*Complete the questions below for the planet.*

Planet Name:

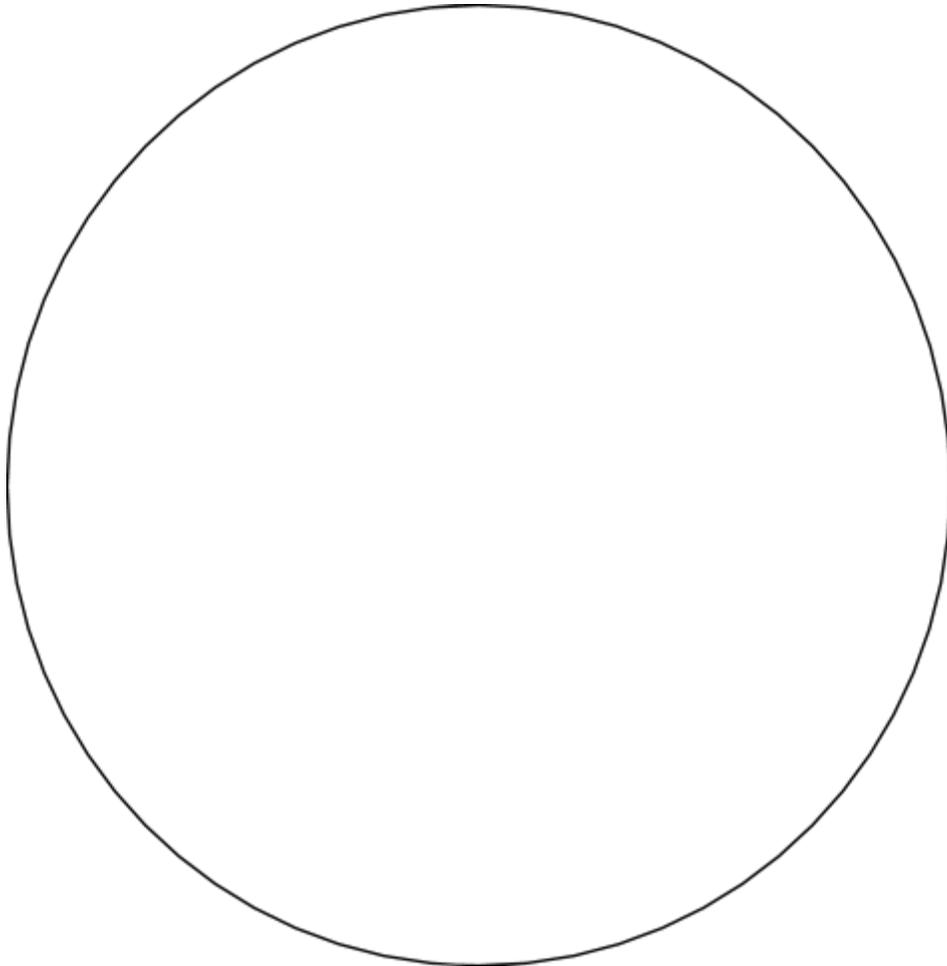
How many moons and rings does it have?

What is the average temperature?

Where is it in respect to the sun (1st, 4th, 5th, etc.)?

Fun Facts about the planet:

What does it look like (with its moons):



# Solar System Homework

Create an acronym to help memorize the order of the planets from the sun.  
An acronym is an abbreviation represented by letters.

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Example for Planet Order: *My Very Energetic Mother Just Served Us Noodles =  
Mars Venus Earth Mars Jupiter Saturn Uranus Neptune*

*M*

*V*

*E*

*M*

*J*

*S*

*U*

*N*

