

The Solar System: Learning about Planets



Third Grade

Science,

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Use this lesson to have your students research about a planet of their choice and present it to the class! This lesson will also give the creative students of your class an opportunity to make their own planets!

Learning Objectives

Students will be able to identify the planets in the Earth's solar system. Students will be able to determine the position of the planets from the sun.

Materials and preparation

- Our Solar System worksheet
- Planets Crossword Puzzle worksheet
- Timer
- Small books about planets from library
- Notebook paper
- White paper
- Colored pencils
- Make a Planet worksheet
- Research a Planet worksheet

Attachments

- Make a Planet (PDF)
- Our Solar System (PDF)
- Planets Crossword Puzzle (PDF)
- Research a Planet (PDF)

Introduction (5 minutes)

- Tell your students that they will be learning about the planets today.
- Ask your students if they can name the planets.
- List the names of the planets on the board.

Explicit Instruction/Teacher modeling (15 minutes)

- Ask your students if they know where each planet is located in relation to the Earth.
- Explain to your students that there is a trick to remembering the planets in relation to the sun. Explain to your students that they can easily remember the planets' relation to the sun if they memorize the sentence, *My Very Energetic Mother Just Served Us Nachos*.
- Explain that the first letter of each word in that acronym represents the name of a planet in relation to the sun.

Guided Practice (20 minutes)

- Ask your students to complete the worksheet Our Solar System with a partner.
- Remind them to use the acronym to help them complete the worksheet.

- Set the timer to 5 minutes.
- Go over the worksheet as a class.
- Give each student the Planet Crossword Puzzle worksheet.
- Complete the crossword as a class by asking students to guess which planet is represented by each picture. Tell students a fact or two about each planet as you have them fill out the crossword. For example, Saturn has rings, Pluto used to be considered a full planet, and Jupiter has a famous red spot.

Independent working time (60 minutes)

- Take your students to the library.
- Ask the librarian in advance to pull out a few books on planets for the students.
- Direct each student to pick a planet.
- Ask the students to take their Research a Planet worksheets to the library. Have them fill out the worksheet as they look through books about their planets in the library.
- Ask students to finish their research at home if they don't finish by checking out books related to their planets.
- Instruct students to write a few more facts about their planets on notebook paper.

Differentiation

- **Enrichment:** Instruct your students to complete the Make a Planet worksheet. This activity will make students think creatively about what they would like to have in a planet.
- **Support:** Ask students to draw and color a picture of the solar system. This will enable students to visualize the position of the planets in relation to the sun. Have them label the names of the planets using the *My Very Energetic Mother Just Served Us Nachos* acronym.

Assessment (10 minutes)

- Ask students to take out a sheet of paper and answer questions about the planets. Potential questions include: *Which planet is closest to the sun? Which planet is the farthest from the sun? Which planets are closest to the Earth? Which is the fourth planet in the solar system?*

Review and closing (20 minutes)

- Ask students to present their Research a Planet worksheet to the class along with other facts that they found.

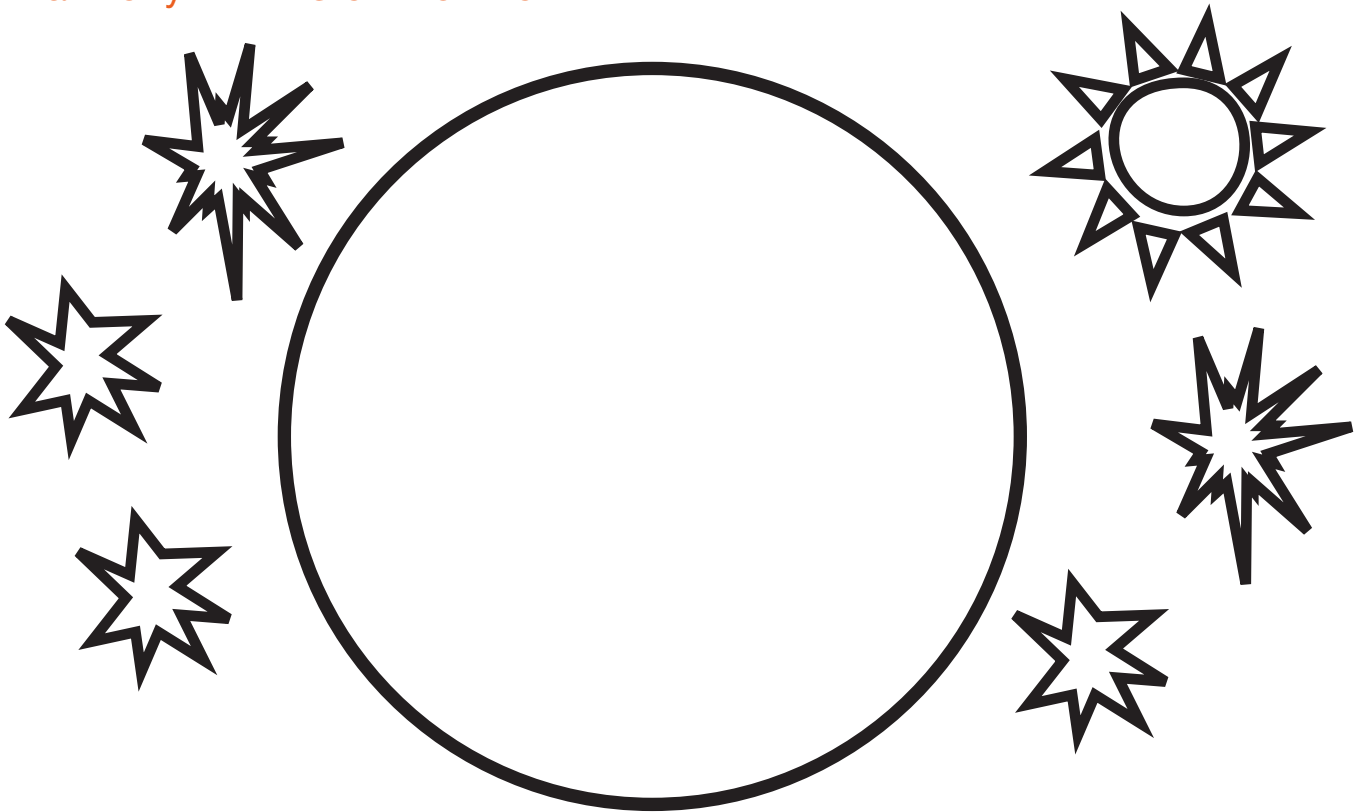
Name _____

Date _____

MAKE A PLANET

Billions and billions of stars thrive in our universe, and many more planets orbit around those very stars. Astronomers and space enthusiasts hope that one day we will find a planet like Earth and work towards inhabiting it.

Scientists have just discovered a new planet. Draw a picture of it and come up with ways that humans can live on this planet in harmony with its environment.



What is the name of your planet? _____

How will people be able to live there? _____

What steps will you take to protect the planet's environment?

Our SOLAR System

How many planets can you name?

5

4

3

2

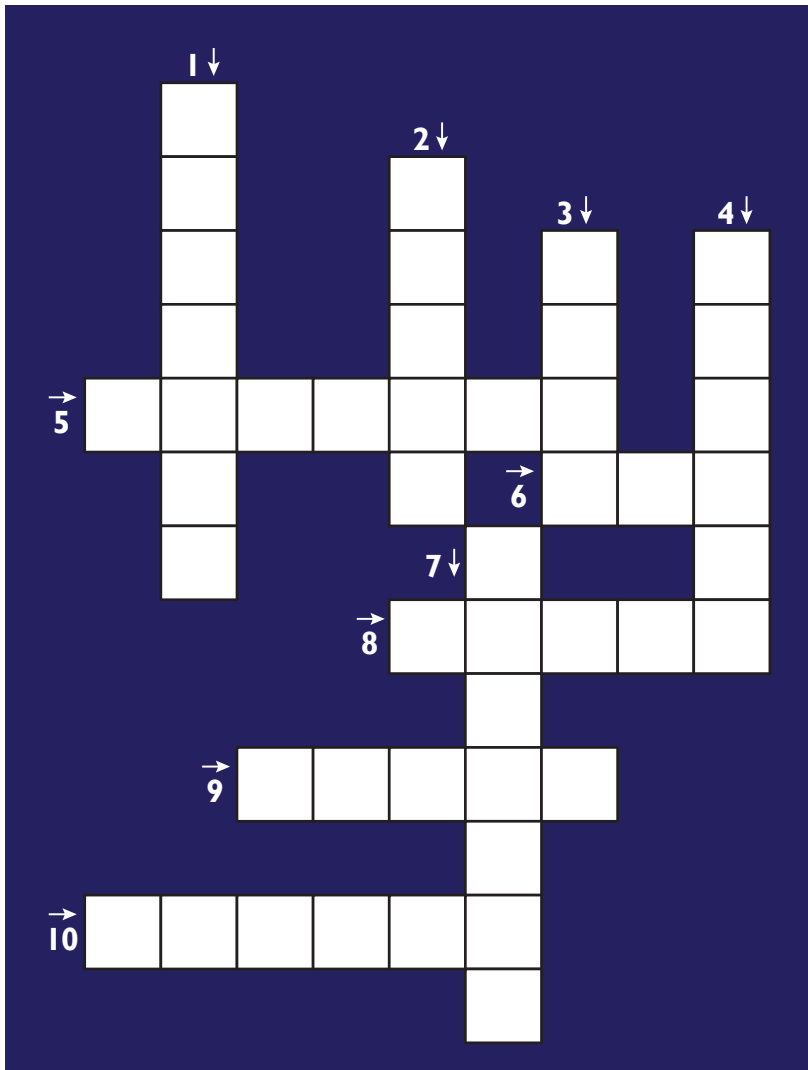
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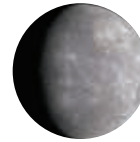
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Planets Crossword Puzzle

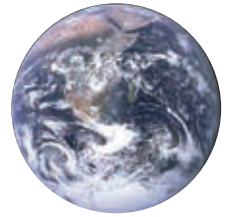


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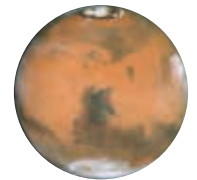
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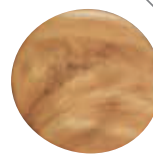
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9)



(a dwarf planet)

10)

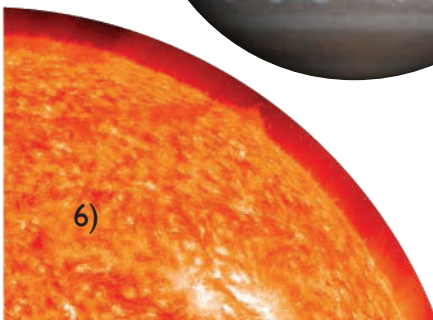


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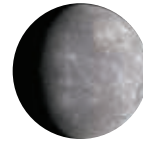


Planets Crossword Puzzle

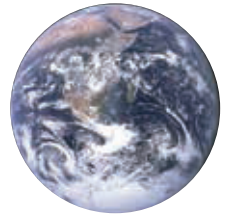


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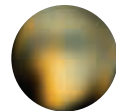
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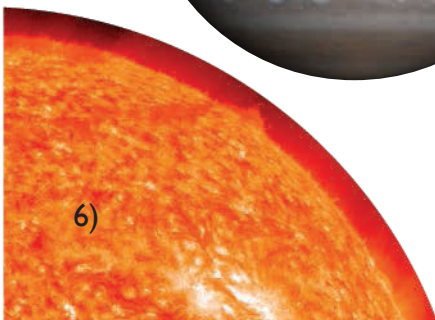


Across

5)



6)



Name _____

Date _____

RESEARCH A PLANET

Billions and billions of stars thrive in our universe, and many more planets orbit around those very stars. Our very solar system is still very much a mystery to us, and every day scientists make new discoveries about our neighboring planets.

Choose a planet in our solar system.
Research and answer the following questions below.

Planet name: _____

Number of moon(s): _____

Name of moon(s): _____

Planet temperature: _____

Distance from sun: _____

What is the planet made of? _____

Draw and color your planet below. Be sure to include any moons.