# Visit the Planets

# Grade Level: K - 3 Content Areas: Music, Art, Science, Technology, and Language Arts

Time Frame: 100 minutes

# **MATERIALS**

Visit the Planets Book

Kindergarten Time by George Ryon

Paper

**Pencils** 

# **OBJECTIVES**

#### Students will:

- Be able identify stars, planets, and satellites
- Learn how stars, planets, and satellites move in relation to one another

# **VOCABULARY:**

# Key vocabulary

Before reading, focus on vocabulary. Read the glossary words and their definitions.

**Atmosphere -** The layer of gases that surrounds the planets

**Gravity** - The force the attracts all objects towards each other

Mass - The amount of matter a substance contains

Orbit - To move around an object

**Milky Way** - A galaxy, or large group of stars, in which our Solar System is located

**Solar System -** A star with a group of planets that orbit around it

Star - A sphere of hot, glowing gas in the sky

### FREE SONG

<u>Click here</u> to download or stream the Visit the Planets song.

Find other Cantata Learning songs and books at <a href="http://www.cantatalearning.com">http://www.cantatalearning.com</a>.



# PROCEDURES/ACTIVITIES

#### **Preparation:**

Start out this lesson by asking students if they ever notice the position of the sun throughout the day. Have students share their thoughts on why the sun is in a different position at night and in the morning.

Watch <u>Kindergarten Time</u> in order to show students the different positions the sun is in throughout the day. After you watch the video have students share what they observed throughout the video. How did the sun change? And again ask why they think this change could occur?

#### **Lesson Procedure:**

- 1. Have students name what they can see in the sky and ask them if they know the name of any of the objects they can see. As the student's name what they can see make a list of what the students come up with.
- Read <u>Visit the Planets</u> book in order to put names to some of the objects that the students named.
- Go through the list and divide the objects into moving and nonmoving groups. The only things in the nonmoving group should be the sun and stars. In the moving group should be planets and satellites, including the moon.
- 4. Ask students to define star and what they think a star's purpose is. After the class has discussed explain that stars give us heat and light.
- Explain to students that the planets orbit around the sun and satellites orbit around planets. And that the two movements our planet has are rotation and revolution.
- Explain that rotation is when the Earth spins on its axis. Let students know that this is the reason we have day and night. Tell students that one rotation takes 24 hours, or 1 day.
- 7. Explain to students that revolution, or orbit, is when the Earth moves around the Sun. Tell students that this is what gives us the four seasons, and that one rotation takes 365 days, or 1 year.
- Tell students they are now going to be parts of the solar system and to act out the motion of the planets.
- 9. Start by having one student stand in the middle to be the sun. Have another student walk around the sun and spin to represent the Earth. Have another student rotate around the Earth to represent the moon. Have other students participate by representing the other planets. (This is a terrific PE extension.)
- Have students return to their desks in order to create a tree graph with Our Universe as the starting root. Next, have student draw three branches to Stars, Planets, and Satellites.
- 11. For younger students have the students draw Stars, Planets and Satellites. For older students have the students put in details about the branches.
- 12. Give students time to work on their tree charts and then share as a class what you came up with.

#### **Language Extension:**

Let's use our imaginations for this one!

Your students will pretend they are in traveling through our Solar System and come across a planet where there is life.

Have them imagine what it is like.... what do they do? What do you they use for transportation? What do they eat? Do they have families? Do they go to school? What do they do for fun?

Ask your students to write a story describing what they see and how they feel.

Now, change it around and have your students take on the role of an alien. What does life on Earth look like to them? What do they think of children? What do they eat? What are their occupations?

Your students can write a story or poem describing the point of the view of the alien too.

#### **Art Extension:**

As for an art extension, have your students draw, paint and create what they think Earth looks like to an alien.

And what about changing that up a bit.... What does the aliens' world look like? Are there kids our age? Do they like football? The list could go one and one.

# **Technology Extension:**

Students can explore and research Planets for Kids and...

Solar System Exploration from NASA.

If you have Capstone's <u>PebbleGo</u>, the Science database also has a wonderful spot for researching and learning about planets and space. They include voice to text, videos, activities for each article too.

#### Standards:

Next Generation Science Standards:

1-ESS1-2 Earth's Place in the Universe - Make observations at different times of year to relate the amount of daylight to the time of year.

#### Common Core:

Kindergarten: CCSS.ELA-LITERACY.SL. K.1, CCSS.ELA-LITERACY.SL. K.5, CCSS.ELA-LITERACY.SL.K.6, CCSS.ELA-LITERACY.L.K.1, CCSS.ELA-LITERACY.L.K.1

First Grade: CCSS.ELA-LITERACY.SL.1.1, CCSS.ELA-LITERACY.SL.1.5, CCSS.ELA-LITERACY.L.1.1, CCSS.ELA-LITERACY.L.1.8, CCSS.ELA-LITERACY.W.1.8

Second Grade: CCSS.ELA-LITERACY.SL.2.1, CCSS.ELA-LITERACY.L.2.1, CCSS.ELA-LITERACY.L.2.6, CCSS.ELA-LITERACY.W.2.8

Third Grade: CCSS.ELA-LITERACY.SL.3.1, CCSS.ELA-LITERACY.SL.3.5, CCSS.ELA-LITERACY.L.3.1, CCSS.ELA-LITERACY.W.3.2