

**Grade** 6<sup>th</sup>

**Topic** Planets of the Solar System

**Title** “Cruizin' the Universe” (45 min. each Lesson)

**Standards:**

- 6.3.1 Compare and contrast the size, composition, and surface features of the planets that comprise the solar system, as well as the objects orbiting them. Explain that the planets, except Pluto, move around the sun in nearly circular orbits.
- 6.2.7 Locate information in reference books, back issues of newspapers, magazines, compact disks, and computer data bases.
- 6.3.3 Explain that the earth is one of several planets that orbit the sun, and that the moon, as well as many artificial satellites and debris, orbit around the Earth.
- 6.3.4 Explain that we live on a planet which appears at present to be the only body in the solar system capable of supporting life.

*Language Arts/Reading* 6.2.4

**Objectives:**

- Students will be able to identify various characteristics about the planets in the solar system including size, location, and physical features.
- Students will gather information from available resources (science books, encyclopedias, and informational books) in the form of notes, summaries, and outlines.
- Students will use notes and outlines to write an expository essay that provides information about a chosen planet, following the Simple 6-writing rubric.
- Students will present their planet facts in a brochure format, using available resources.
- Students will use a Venn diagram to compare two planets.

**Materials:**

For student –

- Pre-assessment sheet (data spreadsheet)
- Science journal
- Example of Earth Brouchur I & II (from IN Standards resource guide)
- Planet Brochure rubric
- Informational books about the planets
- Access to encyclopedias and internet for additional research.
- Venn Diagram for planet comparisons
- Crayons, markers, colored paper, construction paper

**Procedure:**

1. Give students the pre - assessment to complete. Collect them.
2. Ask students to name the planets in order as one student records them on the board in column format. Once students are done, make column lines between each planet.
3. Instruct students to collectively or individually list as many physical characteristics of the many planets under the column headings on a chalkboard.
4. Read some of the responses from the board, discussing similarities/differences.

5. Distribute the BLM Earth Brochure I & II (already copied in 2 sided format to look like a tri-fold brochure), and then explain to them that is a brochure that advertises the planet Earth as a vacation destination.
6. Briefly, go over the brochure, pointing out the physical features of the Earth (including ht size, composition, surface features, distance from sun, and map of planet location in solar system).
7. Then tell the students that they will be working in groups of 2 or 3 to create travel brochures of the other planets in our solar system.
8. Divide the students into 8-10 groups (You may or may not include the sun, Earth, or Pluto. That is teacher discretion).
9. Encourage the students to use the Earth brochure as a guide.
10. Distribute the Planet brochure rubric and discuss with the students what you are looking for in the brochure and the point value assigned to each one.
11. Make available for the students, encyclopedias, planet informational books, national geographic website to research their planets.
12. The students will then spend the next 4-5 days, meeting with their group during Writer's Workshop and Reader's Workshop; brainstorming, researching, writing, and developing their brochure.
13. The students will be given construction paper, colored paper, scissors, crayons, markers, glue, exploring paper, yellow draft paper, and final draft paper, and computer to complete this assignment.
14. The students will work on this project during the Reader's and Writer's Workshop portions of the day.

#### **During Reader's Workshop:**

1. The teacher will meet with the individual planet groups (guided reading groups) while the other students are working on their brochure or doing independent reading.
2. When the teacher meets with each group, he/she will provide the group with a couple of informational books to read about their planet. Students and the teacher will cover the following skills: main ideas and supporting details, outlines, and summarizing. For each informational book, they will record the main ideas and supporting details in an outline form.
3. They will also summarize in writing what they read as well in their science journals.
4. They will also keep a list of interesting vocabulary words that they could use in their brochure and essay.

#### **During Writer's Workshop:**

1. The teacher will meet with the groups individually while the other groups are moving along with the different stages of the writing process. Follow the Simple 6 Writing Rubric and the district "Writing Process Guide" for the writing process.
  2. The students will begin with a brainstorming session based on their findings in their guided reading group and finish up with a final draft of the essay.
  3. Their written essay will be an Expository essay.
  4. The students will be using their outlines, summaries, and vocabulary lists that they generated during Reader's Workshop to compile and organize their facts for their essay.
  5. The students will then use their outlines, summaries, and vocabulary lists that they generated during Reader's Workshop to produce their brochure.
15. Once the groups have completed the brochure for presentation, the teacher will provide a copy for the other students in the class.
  16. The teacher will distribute a Venn Diagram graphic organizer. Each student will then use the Venn Diagram to compare their planet with other planet as each group presents their brochure.
  17. Each group will be given an opportunity to present their brochure to the class.
  18. Once all of the groups have presented their brochure, the teacher will ask various students to share

something new they learned from this project.

19. The teacher will then collect the brochures.

20. On the final day, the teacher will distribute the posttest for student completion.

### **Assessment:**

- Pre/Post Assessment Sheet
- Planet Brochure rubric
- Planet Brochure
- Venn Diagram graphic organizer
- Expository Essay
- Simple Six Rubric
- Science Journal

### **Resources:**

- 6<sup>th</sup> grade Scott Foresman Science book
- Simple 6 Writing Process
- IN Standards resource guide

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