

# Solar Lesson Plan Format

**Age Level:** 5th

**Subject(s) Area:** Science

**Materials Needed:** Planet question cards, Student question sheet, answer key, pencils, clipboards, activeboard, laptop

## Standards:

**Code and description:**

- **5-ESS1-2.B: Earth and the Solar System**
  - The orbits of Earth around the sun and of the moon around Earth, together with the rotation of Earth about an axis between its North and South poles, cause observable patterns. These include day and night; daily changes in the length and direction of shadows; and different positions of the sun, moon, and stars at different times of the day, month, and year. (5-ESS1-2)

## Objectives:

- The students will **analyze** facts about the solar system with 100% accuracy.

**Cognitive Level of Lesson (Bloom's Taxonomy):**

- Level 4: Analysis

## Learning Activities:

**Opening Element:**

- I will begin the lesson with a YouTube video that explains the different planets and some facts to go with them.
  - <https://www.youtube.com/watch?v=ZHAqT4hXnMw> (We are the Planets)

**Reflective Questions:**

- How many planets are in our solar system?
- What's the order of the planets? (From the Sun)
- How many gaseous planets are there?
- How many planets are made of rock?
- Why are some gas and some rock?

**Technology:**

- Active Board
- Laptop
- YouTube <https://www.youtube.com/watch?v=ZHAqT4hXnMw> (We are the Planets)

**Required Vocabulary:**

- N/A

**Instructional Methods:**

1. After watching the video, I will quickly review some of the information about the solar system from the test they took yesterday.
  - a. How many planets are there?
  - b. What is the order of the planets?
  - c. How many gaseous planets are there?
  - d. How many planets are made of rock?
  - e. What are the inner and outer planets?
  - f. Etc.
2. After a quick review, I will explain the scavenger hunt:
  - a. "We are going to do a scavenger hunt to find interesting facts about the solar system.
  - b. To begin, each of you have your own question sheet. You should already know some of the answers from your test yesterday, but you can find the answer sheet to check your answer anyway.
  - c. The answers to the questions on your sheet are hidden around the room. Your job is to find those cards to answer the questions.
  - d. When you find the card, hide it from others and put it right back where you found it.
  - e. You are to work alone for the first 10 minutes of the scavenger hunt. If you can prove that you can handle the game with voices at a 0, you may work with one partner after those 10 minutes are up. Your voices will not be higher than a one.
  - f. Once you find all the answers, sit at your desk and fill out an exit slip.
    - i. You will fill out one interesting fact you learned today
    - ii. One fact you already knew
    - iii. And what planet you are most interested in.
  - g. If you finish that, you may read a book."
3. After explaining the lesson, I will let students go to find the cards
4. If they work quietly, they can work with one partner after 10 minutes
5. When they finish the activity, they will fill out an exit slip.

**Guided Practice Strategies:**

- We start reviewing as a whole group.
- The students then start the hunt by themselves.
- If earned, the students can work with a partner at the end to find the rest of the hidden facts.

**Independent Concrete Practice/Application:**

- The students will individually complete an exit slip.
- The students will be applying the information learned to a research project next week.

**Differentiation:**

- The students will work together to find some of the hidden facts.

- The students watch a fun review video. (Auditory and Musical)
- The students get to walk around the room to find the answers to the questions. (Bodily, Kinesthetic)
- The students have cards and question sheets with the questions and answers placed directly on them. The cards also have pictures. (Visual)

**Wrap-Up:**

- Once the students complete their scavenger hunts, they will complete an exit slip.
- On the exit slip, they will have to write one NEW interesting fact that they did not know prior, a fact that they already knew, and a planet they would most likely want to research for their research project.

## **Assessment:**

**Formative:**

- The students will complete an exit slip where they will have to write one NEW interesting fact that they did not know prior, a fact they already knew, and they must also write a planet they would most likely want to research for their research project.

**Summative:**

- Throughout the next few weeks, the students will be doing a research project on a planet.
- This research project will be used as their summative assessment.

## Reflection:

This science lesson took place on a Friday morning right before lunch. The students had a lot of energy but seemed to do really well. I told them right away that they needed to show me they could earn working with a partner. I had them work by themselves and hide the card where they found it. They ended up just setting it on the counter and writing what it said. They also fought because when one person found it, they wouldn't let anyone else read it. They argued a lot because of that. They also did not finish finding and writing all of the facts.

When there were five minutes left, I told them they could work quietly with their partners at a 1 volume. They really did not do too bad with that. They helped each other and found extra answers. When time was up, I shut off the light and had students put their stuff away. I had them line up by table too early so there was a lot of talking during that time. I talked to the students as a whole and we answered the questions they did not find. This part was a problem because the students had down time to talk. They did not really listen to each other or to me.

I had them think about a new fact they learned and they blew me off during that. I had the beginning people say their fact to me, but the other people did not.

If I was to do this lesson again, I would definitely do it on a Friday because of the energy. No matter what, walking around and doing an activity will cause some excitement. I enjoyed this lesson but it was kind of pointless. It taught them facts, but did not actually teach them anything. They had their test the previous day, so they already knew what they needed to know about planets. I wonder if we could have made an activity or a fun project rather than learning pointless facts. I think that would have made them remember and enjoy the class more.

I would do this lesson again as a pretest or just for a fun activity. I could use scavenger hunts for different concepts as well and develop a game out of it. I could have the students work in teams and act out different scenarios. Overall, it was a good lesson, but needs a little more excitement and purpose to it.