**LESSON PLAN**

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**Unit Topic or Theme:** Science

**Grade Level:** 4th grade

**Lesson Topic:** The Solar System

**Objectives:**

-The student will be able to name all the planets in the solar system.

-The students will be able to correctly identify and have an understanding of planets, and other astronomical objects in space after learning characteristics, and specific details of each.

-By the end of the lesson the Students will be able to draw and describe the physical characteristics of the planet of their choosing along with 5 or more important facts and specific details or characteristics of their planet or astronomical object.

**Instructional Technique:**

-Discussion before the lesson

-Use interactive website individually as follow up of previous lesson

-Independent work to create their picture of the planet of object they chose along with important facts about their choosing.

-The students will then get in front of the class and present their work. This will allow the children to see others art work and information they found interesting. Their work will be displayed in classroom.

**Instructional Materials:**

-Interactive website

-Information sheet to fill out while taking quiz and after

**Theoretical Perspective:**

-It is important for students to know about the Solar System because they must have a good understand of what surrounds us. Children have a fascination of everything around them, so it is important for them to know what is truly in this world and this lesson will do such thing.

**Procedure:**

1. **Introductory Activity:**

This lesson should be taught after a classroom has been studying the solar system and the planets.A good way to start off this lesson is having the students list the planets in order closest to the sun along with objects that we may find in space, while you write them on the board. The visual will make the students remember better what the order is. Once done, go back to the first planet said and have the students raise their hands and give information about that planet or object in space (climate, geography, appearance, other important facts) if important information is missed the teacher will inform them or give them clues to what they have missed. Now that they know the solar system, tell the class they are going to be going on the computers to a website that overviews and quizzes them on the Solar System as well for further information.

1. **Step-by-step:**
2. Before sending every student to the computer, find the start page of The Solar System website so there is no trouble finding it with the students.
3. Hand out to students the review worksheet they will be filling out during the website quest. This worksheet will not be graded but it will be collected at the end of the class time to make sure they filled out the worksheet properly, and to see how they did on the website itself.  This worksheet will also make the students write which questions they got correct the first time or the questions they got wrong the first time.
4. Next, I will talk the students through the directions for the quiz. Read the index of the website and explain to them how the quiz is going to work. (Hit the space ship on the bottom to start. If you get the answer wrong, read the information why the answer you picked is wrong and then click the spaceship again to try the question again. Once they get the answer correct, they will be told extra information and additional links to websites they have to read to learn more facts and information about the answer. .
5. Students are advised and recommended to click on the links given to them about each planet on the quiz. They will need the additional information on later projects about the Solar System.
6. Once completed with the online activity, the students will wait for the teacher to begin once everyone is finished, in the meantime students should finish filling out there informational sheet. Once they are, the teacher will advise everyone to turn off the computers so they can start a classroom discussion.
7. Then hand out white computer paper to each student along with a lined piece of paper. Have crafts at each desk so students are not up and walking around. Then tell them that they are to draw a picture of their favorite planet or object in space that they have learned in class and why it is their favorite planet in the solar system. They should then include at least 5 important facts about this planet. Walk around and make sure that the students write and draw correct characteristics and facts of their planet they choose. Keep pictures up of the planets for the students to look at just in case they are struggling.
8. **Closure:** To end this lesson and class time, have all the children stop what they are doing and have some of the students come up to the front of the classroom to show us their drawing and just a few of their interesting facts they found about their planet or why it is their favorite. After, I will review with the class what we have learned over all.
9. **Adaptations for different learners:** For students who struggle with the reading or using the computer, they will be working with another student so they can get assistance from their peer. The pairs of students would also be asked to work on the worksheet together if necessary. I will also be walking around helping the students. This lesson is easily adapted for different learners. The website is not timed so the student can spend as long as they may please working with the computers. This website also does lets you have many guesses to the questions given, allowing you to learn all about the Solar System. For students who have trouble remembering characteristics of information of the planets, they have the worksheet that they will be filling out, but they will also be given the opportunity to stay on the computers to research if needed.
10. **Homework:** There is no homework for this lesson. Unless the student did not finish the project in class and would like to take it home and finish it for the beginning of class the next day.

**Evaluation:**

1. How/ when will you determine if you have met your objectives?

I, as a teacher will be able to see if I met my objective why I assess the students throughout the lesson. I will also know if I have met my objectives if students can easily answer questions about all of the planets and their characteristics at the ending of the lesson.

During the lesson, the worksheet that will be handed out will give the students an idea of what they should know and asses. This worksheet will also show how many they got right the first time and how many tries it took them to find the answer. Having the teacher get an idea of what they need more help on. At the end of the Interactive website, the students will pass in their worksheet that the teacher will look over. Students will then pick their favorite planet and draw a picture of it and 5 interesting facts. This allows the teacher to see who really knows what and if they have gathered proper information.

1. Concerns or questions you have about teaching this lesson?

There can be many concerns in this lesson plan. One concern is that the students will lie about whether or not they got the answer correct, or that the students will just click on the planets randomly to find the correct one to move on.  Another concern is that one student will do more work than the other student if they are paired together. This lesson is also based around a majority of the internet, so if the internet did not work this day we would have to change our whole plan around.