

Rachel Riter

Sis. Watts

SPED 200, sect. 2

12/15/10

Microteaching Reflection

For my microteaching I chose to a Hawaii fifth grade state standard in science: "Explain that the planets orbit the sun and that the moon orbits the Earth".

Which aspects of the lesson were effective and why? Accommodations?

I think one of the strengths of my lesson was that I liked what I was teaching. I specifically chose science because to me it is really interesting. I think I planned out my lesson really well for the amount of time I was allotted. I could have done a lot of different and more engaging things in my lesson, but with only twenty minutes, I feel like I did a good job. I think in theory, my lesson plan was organized. Even if I do not executed it very well. But I had good transitions, breaks, and group learning. I think my anticipatory set was very effective. It first got the students to think about what we would be learning that day, and the video aspect helped with both visual and musical learners. I also really liked all my visual that were included in my PowerPoint. I thought it was important for the students to see real pictures for the planets; not silly little animated ones. Also the pictures that showed the size differences between the planets and the sun were not only really cool, but help the students understand the true nature of these planets.

I think my graphic organizers were also a big and important part of my lesson. Note taking is always an essential part of science lessons; so fill in the blank, teacher made notes are a good accommodation. This specific accommodation helps with memory transfer, among other things.

Which aspects were less effective and why? Accommodations?

I think the least effective part of my lesson was that my lesson did not entirely match its objectives. My objective was about the planets and how they orbit, but I really only focused on the planets. If I have had more time I could have done a better job at explaining the objective entirely. I am not blaming my lack of orbiting aspects entirely on the time. I had already made my lesson plan, and honestly I really did not want to change it too extensively. I think it is hard to apply lesson like these to the kid's lives, so they see relevance and can identify with it. I think some students won't want to pay attention during lessons like this because how does a giant planet millions of millions away affect them. I think tying in more modern aspects and findings would have help the students identify with the material more. I also should have had the students trade and grade each others quizzes; it makes it go by faster and provides immediate feedback.

What were some of the comments shared by your peers and your thoughts regarding them? Impressions from watching yourself on video?

I think my peers were very responsive to my lesson. I received very positive and complimentary feedback. A lot of people enjoyed my lesson, and some even learned a thing or two. The main suggestions I received about how to improve my lesson was to have the students actually draw the solar system to help them even more engage in the material.

As for watching myself on the video that was a completely different story. I sound like an elf when every time I get recorded. I also noticed that I sounded nervous and a little monotone. This is the fourth time I have had to watch a microteaching video and every time it is still painful. I just think that I can be really awkward in front of people. I hold my arms and hands in weird positions, I get tongue-tied. There are all not good qualities for a teacher to have. Besides my overall feeling for self-loathing when it comes to watching myself, I think the lesson went pretty well. But I did notice that I like to say random things in while I'm teaching, and a lot not to relevant.

What are your overall thoughts and feelings of this microteaching experience?

I have had to do three other microteachings before I did this one. And overall I really enjoyed my microteaching experience. It was my first taste of "real" teaching. From the idea stage, to planning, and finally execution. I never realized how much effort and how detailed and time consuming it all was. Then you put accommodations into the equation and it makes it ten times harder.

Doing exercises like microteaching just makes you realize how demanding being a teacher is. We only had to do a twenty minute lesson and it took days to create. Real teachers not only have to plan for the whole day, but the whole year. They have to do this every day, never taking a break or slacking. Because if they do their students suffer. Microteaching is like a huge wakeup call to what being a teacher really is. It makes us rethinking all of our assumptions about teaching and that we have a lot of work ahead of us before we can even begin to even consider ourselves teachers.

UDL Science Lesson Plan Planet's and their Orbits (5th Grade)

Title: Earth in the Solar System

Author: Rachel Riter

Subject: Science

Grade Level: 5th grade

Unit Description: Students will learn about the planets and how they orbit around the sun, and how the moon orbits the Earth.

Lesson Description for the Day: Students will be able to identify the different planets in order and specific characteristics that they have and how long it takes them to orbit around the sun.

State Standard:

Topic

Earth in the Solar System

Benchmark [SC.5.8.3](#)

Explain that the planets orbit the sun and that the moon orbits the Earth

Sample Performance Assessment (SPA)

The student: Explains that the Earth and other planets orbit the sun and the moon orbits around the Earth.

Rubric

Advanced

Proficient

Partially Proficient

Novice

Demonstrate and explain how the planets orbit the sun and how the moon orbits the Earth

Explain that the planets orbit the sun and that the moon orbits the Earth

Recognize that the planets orbit the sun and that the moon orbits the Earth

Recall that planets orbit the sun or that the moon orbits the Earth

Goals

Unit Goals

- Identify the different planets in order.
- Students will be able to understand the definition of an orbit and how long each individual planet takes to orbit the sun.
- Students will also be able to comprehend how the moon orbits Earth and how it affects the Earth.

Lesson Goals:

-Students will be able to...

- Define key vocabulary: planet, orbit, heliocentric.

- Identify each planet by name and the specific order of alignment.
- Understand that each planet has an individual orbit and time it takes to revolve around the sun.
- And how each planet has its own unique characteristics

Instructional Methods:

Anticipatory Set

The introductory activity will include two parts;

1. Students will be asked to take out a blank piece of paper and write down any names of the planets that they know. And if they do know the planets names, and then ask them to put them in order of alignment.
2. Next to further motivate the student’s background knowledge a short YouTube clip will be played. It is a clip for the TV show Animaniacs, where they specifically sing a song about the planets.

Recognition “What” Multiple means of Representation	Strategic “How” Multiple means of Action and Expression	Affective “Why” Multiple means of Engagement
1.3 Alternatives for visuals 3.1 Background knowledge	4.3 Assistive technologies 3.4 Support memory	7.2 Enhance relevance

Introduce and Model New Knowledge:

-Teacher will present new vocabulary on the powerpoint, starting with what a planet is, then what is an orbit, and finally heliocentric.

- Students will be taking notes at this time, not word for word, but enough to retain the information.
- The teacher will tell them the correct order of the planets starting with the sun (heliocentric). Use mnemonic devices to help remember the planets: My very elegant mother just served us nothing!
- Go into detail about what an orbit is,
- Use the example that an orbit is like a rollercoaster track; it is something that a planet has to follow and cannot get off of. Draw on the board to better encourage understanding.
 - If time permits explain why Pluto is no longer a planet; it has not cleared its orbit and the Kuiper Belt.

- Next after understanding the basic elements of the solar system, the teacher will then go into detail about all eight planets and their orbits; all facts will be presented on the powerpoint.
 - Each student will receive a graphic organizer that will help them transfer information from the board to their personal notes.
 - They will have to fill in the blanks from the information the board and when the teacher verbally says

Recognition “What” Multiple means of Representation	Strategic “How” Multiple means of Action and Expression	Affective “Why” Multiple means of Engagement
1.1 Display of information 2.1 Define vocabulary 3.2 Highlight critical features 3.4 Memory transfer	5.3 Provide ways to scaffold 6.3 Facilitate managing information 6.4 Enhance capacity of monitoring process.	8.1 Heighten salience of goals and objectives. 8.2 Vary levels of challenge and support.

Guided Practice:

After reviewing each vocabulary term, students will be given opportunities to demonstrate their new knowledge.

-Teacher will separate class into groups

- Each group will be given cutouts of the labeled planets and a blank sheet a paper.
- The students will have FIRST put the planets in order-Mercury, Venus, Earth, Mars, Jupiter, etc.
- It is a cooperative activity and notes are allowed.
- After each group has correctly arranged the planets, the students, still in their individual groups, will come up with a mnemonic device to help them remember the planets on the blank sheet of paper and put it on the board. Ex: My Very Elegant Mother Just Served Us Nothing!

Recognition “What” Multiple means of Representation	Strategic “How” Multiple means of Action and Expression	Affective “Why” Multiple means of Engagement
3.3 Guide information processing 3.4 Support memory and transfer	4.1 Varied ways to respond 4.1 Interaction with materials	8.2 vary levels of challenge and support 8.4 Increase feedback

Independent Practice

- Without using their notes students will fill out a blank graphic organizer.
 - The graphic organizer will be identical to the one the students took notes on except it will be blank, and definitions at the bottom with a word back.
 - This activity is both independent and silent.

Recognition “What” Multiple means of Representation	Strategic “How” Multiple means of Action and Expression	Affective “Why” Multiple means of Engagement
2.5 Illustrate key concepts non-linguistically	6.2 Support planning 6.3 management of information and resources	7.1 Increase individual choice and autonomy 7.3 Reduce threats and distractions

Wrap-up

-Teacher will overview the important points of the day including”

- Vocabulary terms (planet, orbit, and heliocentric)
- The teacher will play a digital simulation of the planets orbiting around the sun.

Recognition “What” Multiple means of Representation	Strategic “How” Multiple means of Action and Expression	Affective “Why” Multiple means of Engagement
2.2 Clarify syntax	6.1 Guide effective goal setting	7.1 Increase individual choice and autonomy

Assessment

Formative (Informal)

-Teacher will be able to gauge the student’s comprehension of the new material through the student’s notes and group discussions and responses to questions, especially concerning big ideas/concepts and vocabulary, throughout the lesson.

Summative (Formal)

-Worksheet that the teacher had the students work on their independent practice will be collected.

Recognition “What” Multiple means of Representation	Strategic “How” Multiple means of Action and Expression	Affective “Why” Multiple means of Engagement
1.1 Customizing display of information	4.1 Varied ways to responded	9.3 Self-assessment and reflection

Materials

- PowerPoint Presentation
- Handouts:
 - Completed graphic organizer
 - Blank graphic organizer with definitions and word bank

-Videos

- YouTube clip-Animaicas’ “Planet Song”
- Planetary orbit simulation

-Labeled planet cutouts

-Blank sheets of paper

Name: _____

Date: _____

Neptune _____ be seen with the naked eye. It takes Neptune _____ years to orbit around the sun.

Uranus spins _____. It takes Uranus _____ years to orbit around the Sun.

Saturn has the biggest _____. It takes Saturn _____ years to orbit around the Sun.

SUN

Jupiter is the _____ planet. It has a giant _____ spot. It takes Jupiter _____ years to orbit the sun.

Mars has the biggest _____ ranges. It orbits around the sun in _____ days.

Earth's axis has a tilt of _____ degrees. It takes Earth _____ to orbit around the sun.

Venus is the _____ planet. It takes Venus _____ days to orbit around the sun.

Mercury is the _____ and _____ closest to the sun. Its orbit is just _____ days.

Pluto

Neptune

Uranus

Saturn

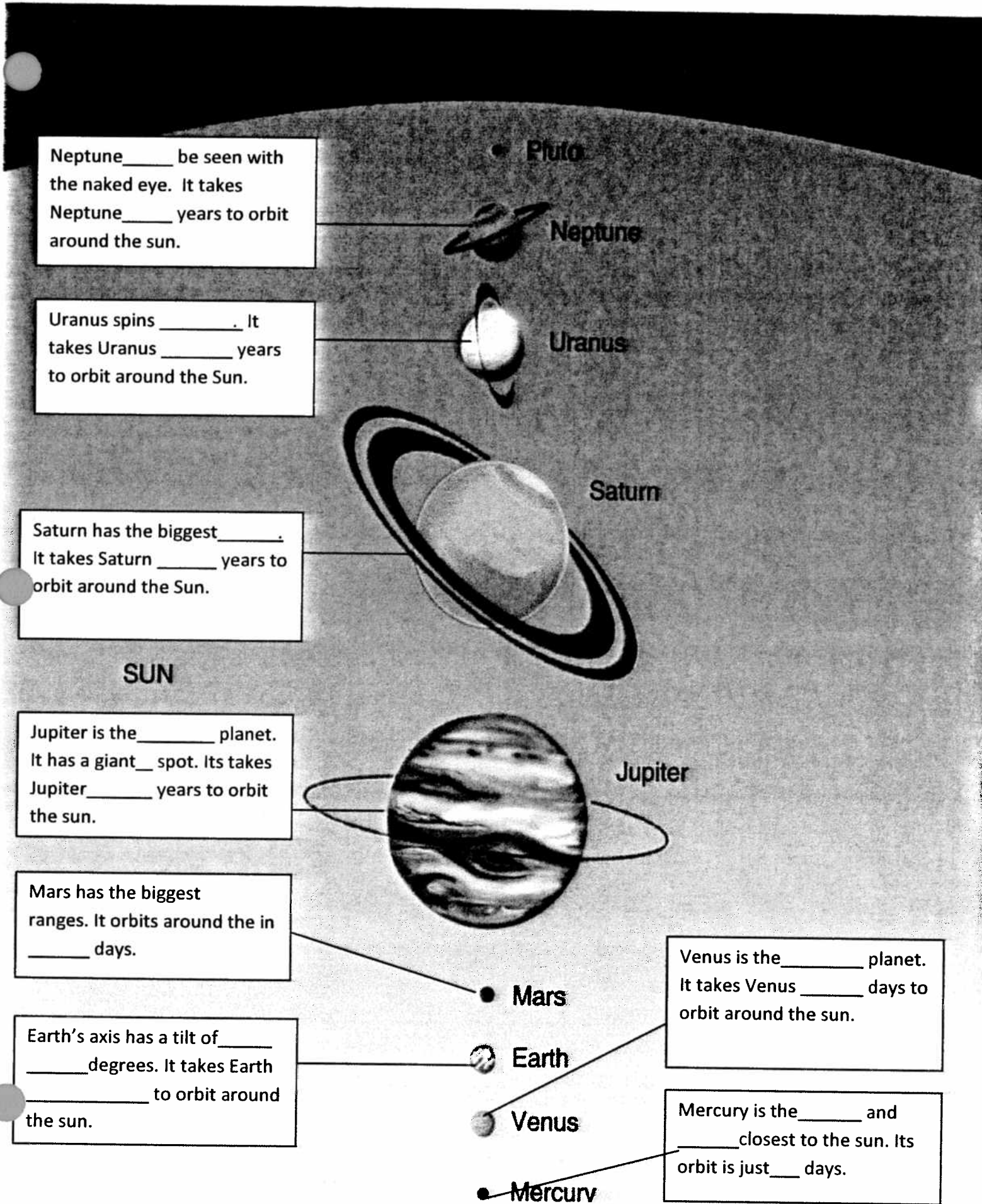
Jupiter

Mars

Earth

Venus

Mercury

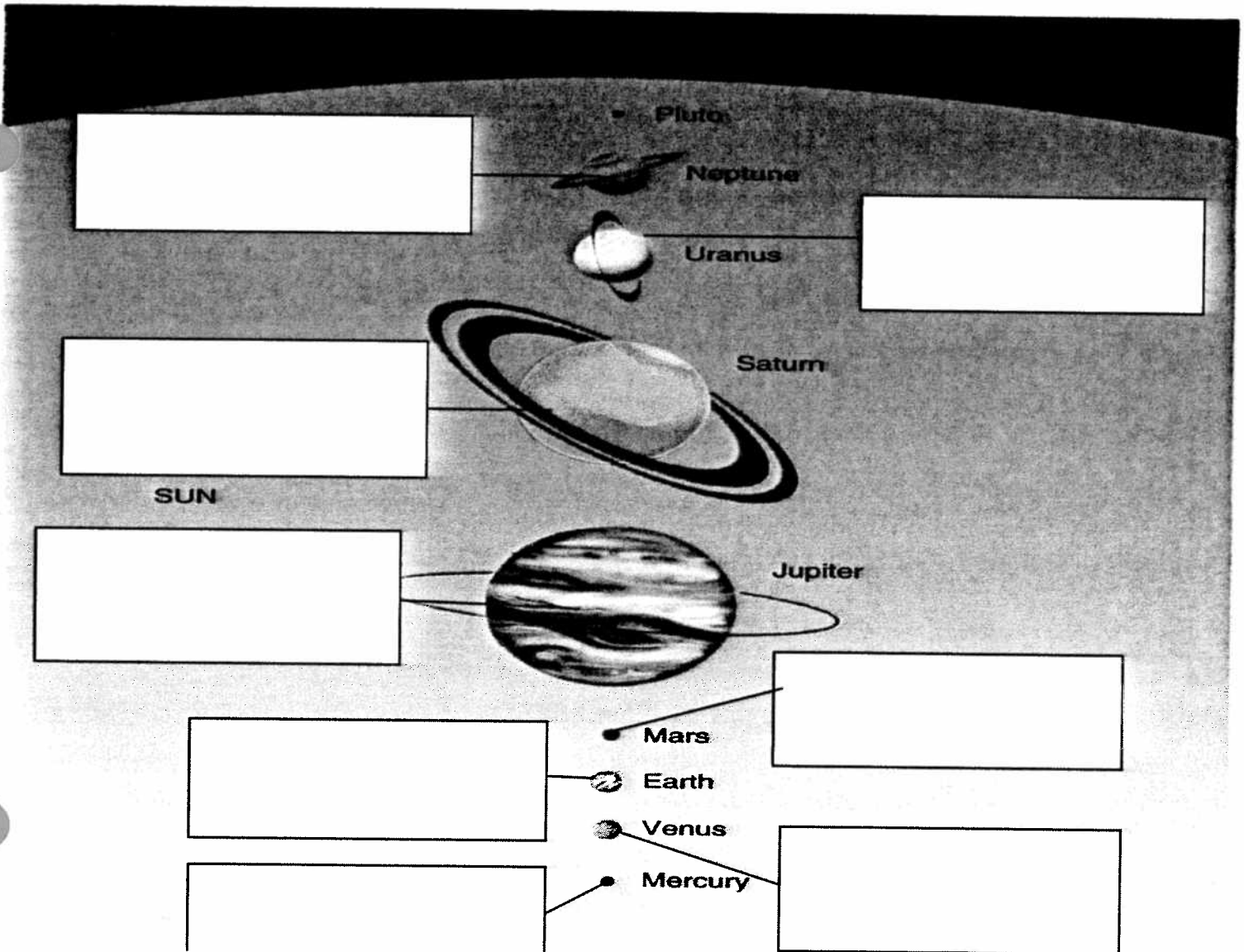


Use the words provide to complete the following questions.

Orbit	Heliocentric	Planet
-------	--------------	--------

1. A _____ is defined as a celestial body-a physical form that exist in space, that is in orbit around the Sun, cleared the neighborhood around its orbit.
2. Having the sun at the center means _____.
3. The path followed by an object in space as it goes around another object is called an _____.

Fill out each box with as much information as possible. Try to be as specific as possible.



UDL Lesson Plan

Your task, along with the other people at your table, is to begin brainstorming ideas of what you're going to teach, step by step, in your lesson. And as you're brainstorming ideas of specific activities and instructional models you're going to be looking at the 3 ways UDL outlines various ways that you can incorporate flexibility in your lesson plan for diverse learners.

	Overview	What You're Actually Going to Teach
State Standards	National or local content area standards are listed verbatim with the specific section of the standard addressed in the lesson highlighted in some way (e.g., bold, underline, italics, etc).	Physical, Earth, and Space Sciences: Earth and Space Science: Understand the Earth and its processes, the solar system, and the universe and its contents
Lesson Goals – Outcomes	Student provides an overview of the goals (and/or lesson objectives) that will be covered in the lesson that day.	Describe the relationships (size & distance) of Earth to other components in the solar system.
	Methods	
Anticipatory Set	Student teacher provides an introductory activity, which stimulate his or her students' thinking about the lesson and connects the lesson to all of his or her students' prior knowledge.	• Have the classroom decorated with planets stars, comets... "Space-101" Have each table assigned a planet. Maybe have the theme to Star Wars playing when they first come in.
Introduction and model new knowledge	Student teacher completely yet concisely describes the new concept that will be the subject of the day's lesson	• Continue with our space unit, we'll be making our solar system. Review from past lessons - distance, size
Guided Practice	Student teacher model's various ways that their students can engage with the new content and guides them as they engage with it in various meaningful ways.	• Demonstrate how to make the model (what details you want includes, asteroid belt, kiper belt)
Independent Practice	Students in the class are provided with the opportunity to engage with the content independently.	• Make their own model with supplies provided
Wrap Up	Student teacher reviews all important points of the lesson as reflected by the lesson's objectives for all students.	• Review planets order & distance from earth
Assessment of Student Learning – Formative and Summative	Student teacher describes an assessment plan that directly matches the lesson's objectives which address both the lesson goals and the unit goals (eg: short, formative forms and end of the unit summative assessments)	• Get Get out a sheet of paper and name all the planets in order & characteristics
Materials	All materials are listed and clearly relate to the lesson.	• Black construction paper, chalk, glue, colored cotton balls, various round colored objects that could represent planets
Differentiated-Accommodation Strategies	Student teacher provides specific instructional strategies/accommodations appropriate for all of the students in the target audience.	• pairing students together who might need help. Say the instructions as well as have a poster on the board

Microteaching UDL Lesson Plan

	Overview	UDL Checklist Areas – 3 areas	Accommodations	Multiple Intelligences
Lesson Overview	Lesson itemizes the basic elements of the lesson (title, author, subject, grade level)	1.1 Display of info.	• Objective on Review/picture	• Visual - Spatial
Unit Description	Student teacher provides a complete description of what the unit will entail, how long it will take and which UDL approaches are used.	3.4 Support memory & transfer	• Build on what they already know. Tell them exactly what we will learn about	• With a UDL approach we shall be able to provide for each & account type of learner
Lesson Description	Student teacher describes what will be taught in the lesson that day.	6.1 Guide effective goal setting	• Let the students know the goals or outcomes of the lesson	
State Standards	National or local content area standards are listed verbatim with the specific section of the standard addressed in the lesson highlighted in some way (e.g., bold, underline, italics, etc).	9.1 Guide personal goal-setting & expectations	• Ask probing questions to help students clarify & extend their answers	• Student Understanding
Unit Goals	Student teacher provides an overview of the goals (and/or lesson objectives) that will be covered in the lesson over the course of the unit.	8.2 vary levels of challenge & support	• allow extra time for completion (maybe homework)	• Fine-motor skills.
Lesson Goals – Outcomes	Student teacher provides an overview of the goals (and/or lesson objectives) that will be covered in the lesson that day.	d.5 Develop self-assessment & reflection	• Summarize at the end of lecture & encourage students to ask questions about what they may have missed on their notes	• Visual
	Methods			
Anticipatory Set	Student teacher provides an introductory activity, which stimulate his or her students' thinking about the lesson and connects the lesson to all of his or her students' prior knowledge.	3.1 Provide or activate background knowledge	• Show pictures of planets & ask who can name them in order, characteristics etc...	• Visual - Spatial
Introduction and model new knowledge	Student teacher completely yet concisely describes the new concept that will be the subject of the day's	1.3 Provide alternative content, materials, or methods	• Pictures on the blackboard, & actual objects they can hold	• Visual - Spatial

	lesson			
Guided Practice	Student teacher model's various ways that their students can engage with the new content and guides them as they engage with it in various meaningful ways.	3.2 Highlight critical features by using arrows and markings	• Describe the relationship of numbers in the solar system. Use arrows to show numbers in order with pictures	• Visual-spatial • Kinesthetic
Independent Practice	Student in the class are provided with the opportunity to engage with the content independently.	4.2 Provide varied ways to interact with materials	• offer hands on projects ex: Make a diagram of the solar system	• Visual • Kinesthetic • Interpersonal
Wrap Up	Student teacher reviews all important points of the lesson as reflected by the lesson's objectives for all students.	5.3 Provide ways to scaffold content for students	• Build upon what they already know about planets & characteristics Explain why Pluto is no longer a planet	• Define words simply as possible
Assessment of Student Learning – Formative and Summative	Student teacher describes an assessment plan that directly matches the lesson's objectives which address both the lesson goals and the unit goals (eg: short, formative forms and end of the unit summative assessments)	8.4 Increase mastery-oriented feedback	• On the back of their paper they will quickly write down in planets in order & any characteristics	• This will allow me to see what was understood and what I need to teach again
Materials	All materials are listed and clearly relate to the lesson.	4.2 Provide varied ways to interact with materials	• grid, black paper, chalk, round objects that look like planets	• Visual-spatial • Kinesthetic • Interpersonal
Differentiated-Accommodation Strategies	Student teacher provides specific instructional strategies/accommodations appropriate for all of the students in the target audience.	2.2 Clarify Syntax and structure	• Space is a pretty abstract idea or might be boring to some, so I will try to be as descriptive & have multiple ways of describing things.	

