

# Lesson Plan

Learning Segment Focus: Space: The Solar System and it's Stars- QR Code App

Lesson: 3 of 6

Course & topic addressed: Science- The Solar System

Date: 03.09.2020

Grade: 5th

## Student Outcomes

<b>Specific learning objectives for this lesson.</b>	Students will be able to identify the 8 planets in the Solar System, know facts about the Sun/Earth, and know astronomical vocabulary by 95 percent.
<b>Justify how learning tasks are appropriate using examples of students' prior academic learning.</b>	Students will use their schema on the knowledge gained from the prior lesson about the Earth's systems, specifically the geosphere, biosphere, hydrosphere, and/or atmosphere interact and the a little introduction to the Solar System. Students will use their prior knowledge on using iPads to scan the QR codes to obtain information. This prior knowledge will lead to a scavenger hunt on the Solar System and the universe to lead into a discussion on the Solar System and the Universe.
<b>Justify how learning tasks are appropriate using examples of students' personal, cultural, linguistic, or community assets.</b>	My class has 8 white, 10 African American, 1 Asian and 5 Hispanic. I have 4 who have been identified as are English Language Learners and 2 who have been identified as SPED. My 4 ELL students are part of a pull- out program twice a week for 30 minutes each. My 2 SPED students are part of a resource class they have every day for an hour. I have 3 ACE students who are pulled for higher learning 2 days a week in the afternoon. With a great diversity in my classroom, my class is able to learn amongst their peers through cultural differences.

## State Academic Content Standards

<b>List the state academic content standards with which this lesson is aligned. Include abbreviation, number &amp; text of the standard(s).</b>	5-ESS1.A: The Universe and its Stars 5-ESS1.B: Earth and the Solar System RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. SL.5.5 Include multimedia components and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
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## Key Vocabulary

<b>What vocabulary terms/content specific terminology must be addressed for students to master the content?</b>	<b>Solar System</b> <b>Star</b> <b>Silicate</b>	<b>Planet</b> <b>Asteroid</b> <b>moon</b>	<b>Dwarf planets</b> <b>Meteoroid</b>	<b>Inner Planets</b> <b>Comet</b>	<b>Outer Planets</b> <b>Orbit</b>	<b>Sun</b> <b>Terrestrial</b>
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## Academic Language Support

<p>What are the <b>Academic Language Function(s)</b> (the content and language focus of the learning task represented by the active verbs within the learning objectives/outcomes) and explain how they are utilized in the lesson plan?</p> <p>What planned <b>Academic Language Supports</b> will you use to assist students in their understanding of key academic language to express and develop their content learning and to provide varying supports for students at different levels of Academic Language development? How do these supports address all three <b>Academic Language Demands (vocabulary, syntax, and discourse)?</b></p>	<p>Students will use the QR codes to go on a scavenger hunt of the Solar System. They will have a Solar System question worksheets as they go on the hunt and scan the QR code to learn about the solar system. They will have to write down the answers to the questions from the information they collected scanning the QR codes/websites.</p> <p>I will have an example of a poster with a QR code and show them how to scan the code with the iPad as a review and show them an example of how I want the question answered. This will help remind my students, especially the ELLs and SPED on expectations.</p>
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**Materials**

<p><b>Materials needed by teacher for this lesson. (such as books, writing materials, computers, models, colored paper, etc.)</b></p>	<p>Posters of each planet/ star with QR codes scissors tape 24 iPads (set QR reader app)</p>
<p><b>Materials needed by students for this lesson. (computers, journals, textbook, etc.)</b></p>	<p>24 iPads with QR reader app 24 Solar System question worksheets 24 pencils</p>

**Lesson Timeline with Instructional Strategies & Learning Tasks**

<p><b>Amount of Time</b></p>	<p><b>Teaching &amp; Learning Activities (This should be a BULLETED LIST)</b></p>	<p><b>Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson. (This should be VERY DETAILED)</b></p>
<p><b>5 minutes</b></p>	<p><b><u>Introduction:</u></b></p>	<p>“Hope lunch and recess were a good break! Let’s back to learning with a fun activity we are going to do today! Just as we learn about our planet Earth and it’s systems, today we are going to learn about where our Earth is located. Who can tell me where our Earth is located? *Student Raises hand and answers correctly* “Good job! The Solar System! We had a little introduction to space when we learned about the Earth’s layers of the atmosphere. Not only will we learn about the location of Earth, but about the 8 planets, the sun and other objects in space.”</p>
<p><b>35 minutes</b></p>	<p><b><u>Instruction:</u></b></p>	<p>“Alright class, you are going to take a virtual field trip to space! You will get a Solar System worksheet with questions about the space. This will help you remember what you saw and learned about Earth, the Sun, the Moon, the Planets, and the objects you see around you as you travel. For our virtual field trip, each person will travel to a different spot and I will ring a bell when it is time to travel another place. Each station has a poster with QR code. However, here is a secret. I have hidden these codes around the room and you must travel around and see if you can find them. Each QR code has the question it answers when you scan them. You will take your iPad and scan the QR code like this and a website or video will pop up where you must listen or research the page for the answer to the question. When you are finished, keep your paper at your desk because we will go over what you saw and experienced. This</p>

		<p>worksheet will also help you in the rest of our lessons as a dictionary or reference page when you do not understand a word or forget what something is. Later on we'll be learning facts about each planet. Right now we are starting with the basics.</p> <p>Alright, before you get your iPads, I am going to show you an example of what I want you to do. Oh look I found a QR code on the board. The question on the code is "What is the fifth planet from the sun?" I am going to open the QR Reader app. Put the camera facing the code so it can scan it. Look it scanned the code! Now it will take me to a video. I will listen to this video closely and see what planet it is going to talk about and see if what my answer is." *plays 2 minute video.* "Oh did everyone hear that? What is the fifth planet from the sun?" *Student raises his hand and answers correctly.* "Yes that is correct! It is Jupiter. I will go to my worksheet and put down Jupiter on the line beside the question. Since, we are working on writing our answers in complete sentences, your questions will require a little more information than my question did. After I am done with the answer I will go and search for another code. Remember this is an individual activity not a group activity.</p> <p>Okay class, go get your iPads from the charging station. Remember to put hand sanitizer on before touching the iPads. Come back to your desk for your worksheet, Liz is passing them out! When you hear the bell that means everyone is ready and you can start." *Bell rings* *Activity starts*</p>
<p>5 minutes</p>	<p><u>Closure:</u></p>	<p>Alright, boys and girls! It looks as if everyone found the codes! Good! What are some of the things you learned, saw and experienced?" *Students share experiences and some of the terms they learned* Awesome boys and girls! Sounds like you had fun! Turn in your paper so I can see all your different answers. I will give it back to you tomorrow to put in your science notebook as a reference and study guide as we continue with our unit of Earth and the Solar Systems!" "Let's turn in the questions and the get for art! You get to create planets!"</p>

**Accommodations/Modifications**

<p><b>How might I modify instruction for:</b>  <i>Remediation?</i>  <i>Intervention?</i>  <i>IEP/504?</i>  <i>LEP/ESL?</i></p>	<p>With ELL and IEP/504 students, depending on their level, I will provide different modifications. The lower level students will be assigned partners to take them around with a word bank/fill in the blank worksheet. Intermediate level students will receive sentence frames to help them build sentences and conversations. Gifted students will get harder questions to answer on the information provided</p>
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(All students who have plans mandated by federal and state law.)	by the QR code. If finished early, they will help other students with the questions and find QR codes if needed.
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**Differentiation**

<p>How might you provide a variety of techniques (enhanced scaffolding, explicit instruction, contextualized materials, highlighters/color coding, etc.) to ensure all student needs are met? (All students who are not on specific plans mandated by federal and state law.)</p>	<p>Students will have anchor charts around the room that provide information on what makes a complete sentence to answer questions correctly. There will be a poster to remind students on how to use a QR code. Advanced students will act as peer tutors if needed. They may even help create codes for future use of the scavenger hunt.</p>
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**Assessments: Formative and/or Summative**

<p>Describe the tools/procedures that will be used in this lesson to monitor students' learning of the lesson objective(s) (include type of assessment &amp; what is assessed).</p>	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	<p>Spoken question/answers</p>
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	<p>Solar System Question Worksheet</p>
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	<p>Class Discussion over what they experienced on the virtual field trip.</p>

**Research/Theory**

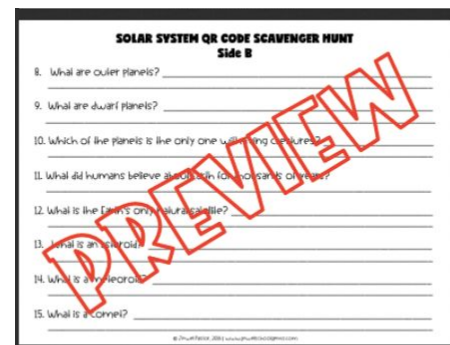
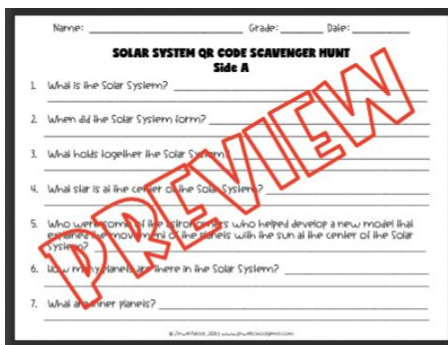
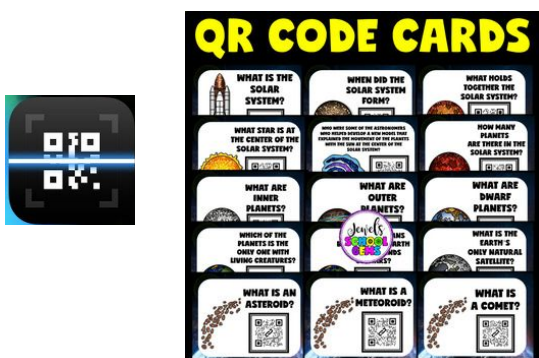
<p>Explain connections to theories and/or research (as well as experts in the field or national organization positions) that support the approach you chose and justify your choices using principles of the connected theories and/or research.</p>	<p>Vygotsky: There is social interaction and discussion amongst peers on the virtual field trip to space.</p> <p>Constructivism: Students must use their prior knowledge to collect information and answer questions using QR codes.</p>
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**Lesson Reflection/Evaluation**

<p>How well? What changes should be made? How will I use assessment data for next steps?</p>	<p><i>FILLED IN AFTER TEACHING</i></p>
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Include supporting material such as slides, pictures, copy of textbook, and handouts for any activities students will be using as part of your lesson.

**Resources For Lesson Plan:**



Updated 12-17-19 NLC

<https://www.teacherspayteachers.com/Product/Solar-System-Activities-Solar-System-OR-Codes-Scavenger-Hunt-2451756>

QR Reader APP

**\*adapted from:**

<http://webcache.googleusercontent.com/search?q=cache:EsQcNWuG1ZoJ:web.mnstate.edu/harms/StudentTeachers/edTPA-LessonPlan.doc+&cd=2&hl=en&ct=clnk&gl=us;>

[http://www.moreheadstate.edu/getmedia/cd3fd026-939f-4a47-a938-29c06d74ca01/Lesson-Plan-and-Reflections.aspx;](http://www.moreheadstate.edu/getmedia/cd3fd026-939f-4a47-a938-29c06d74ca01/Lesson-Plan-and-Reflections.aspx)

<http://www.mcneese.edu/f/c/9cb690d2/Lesson%20Plan%20Rubric%20Aligned%20with%20InTASC.docx>;<https://www.uwsp.edu/education/Documents/edTPA/Resource12.pdf>;

<https://www.uwsp.edu/education/Documents/edTPA/Resource11.pdf>;

<https://www.uwsp.edu/education/Documents/edTPA/Resource11a.pdf>;

<https://www.uwsp.edu/education/Documents/edTPA/LessonPlanTemplateSOE.docx>;

<https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanGuide.docx>;

<https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanTemplate.docx>