

The Fall

Lesson Segment Focus: The Gravitational Force is exerted down.

Lesson 1 of 1

Course & topic addressed: Science, Space Systems

Date: 4-23-19 Grade: 5th

Student Outcomes

Specific learning objectives for this lesson.	Students will
Describe the connection to previous lessons. (Prior knowledge of students this builds upon)	Students learn a lot about space in fifth grade. They have already studied the apparent brightness of the sun compared to other stars and realized that it is relative to the distance they are from Earth. They've also studied the changes in length of shadows, day and night, and the seasonal appearance of some stars due to the position and motion of Earth.
Knowledge of students background (personal, cultural, or community assets)	Students will all have experienced things falling. They know that unless there is something that causes the object to act against gravity (like helium) the object will hit the ground.

State Academic Content Standards

List the state academic content standards with which this lesson is aligned. Include state abbreviation and number & text of the standard.	Support an argument that the gravitational force exerted by Earth on objects is directed down. [Clarification Statement: “Down” is a local description of the direction that points toward the center of the spherical Earth.] [Assessment Boundary: Assessment does not include mathematical representation of gravitational force.]
--	--

Academic Language Support

What planned instructional supports might you use to assist students to understand key academic language to express and develop their content learning? What will you do to provide varying supports for students at different levels of academic language development?	The class will have a word wall with visuals and definitions. If there needs to be a small group intervention, the students can play the thumb challenge.
--	--

Key Vocabulary

What vocabulary terms/content specific terminology must be addressed for students to master the lesson?	Gravity, gravitational, force, mass, down, falling, spherical, weight, volume
---	--

Materials

Materials needed by teacher for this lesson .	Smart board, wifi, computer, tennis balls, rubber bands, Google form, Padlet boards, pens, paper, various objects that students can demonstrate the effects of gravity with
Materials needed by students for this lesson .	Smart board, wifi, computer, tennis ball, rubber band, Google form, Padlet board, pens, paper, various objects that they can choose from to demonstrate the effects of gravity

Lesson Timeline with Instructional Strategies & Learning Tasks (**This should be VERY DETAILED**)

Amount of Time	Teaching & Learning Activities	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson.
10 minutes.	<u>Introduction:</u> The students will watch a video.	Watch YouTube video until minute 7 (https://youtu.be/EwY6p-r_hyU)

Amount of Time	Teaching & Learning Activities	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson.
10 minutes	<p><u>Instruction:</u></p> <p>Student will conduct a gravity experiment.</p>	<ul style="list-style-type: none"> • The students will each get a tennis ball and a rubber band. They will put the rubber band around the tennis ball and their finger inside of the rubber band. They will observe that no matter where they put their finger, if they try to pull away from the tennis ball the rubber band will bring them back to it's surface.
20 minutes	<p>Students will work in their groups to study gravity.</p>	<ul style="list-style-type: none"> • Students will work in groups to research the force of gravity. They will explore their Padlet Boards and add new articles and websites that they find. Students will find one easy concept and demonstration of gravity to share with the class.
10 minutes	<p>Students will demonstrate their understanding of gravity through a demonstration and presentation.</p>	<ul style="list-style-type: none"> • Students will share out their knowledge.
10	<p><u>Closure:</u></p> <p>Students will complete an exit slip about gravity.</p>	<ul style="list-style-type: none"> • Students will fill out an Google form about what they've learned today,

Accommodations/Modifications

<p>How might I modify instruction for:</p> <p>Remediation?</p> <p>Intervention?</p> <p>IEP/504?</p> <p>LEP/ESL?</p>	<p>The Word wall, visuals, and the thumb challenge are all methods of modification that I have added to this lesson. If more accommodations are needed, they will be added.</p>
---	---

Differentiation:

How might you provide a variety of instructional methods/tasks/instructional strategies to ensure all student needs are met?	Videos, experiments, research, demonstrations, and assessments are various tasks that I have given the students to ensure that all learn g needs are met.
--	--

Assessments: Formative and/or Summative

Describe the tools/procedures that will be used in this lesson to monitor students' learning of the lesson objective/s (include type of assessment & what is assessed).	✓ Formative / <input type="checkbox"/> Summative	Exit Slip
	✓ Formative / <input type="checkbox"/> Summative	Check for understanding through the presentation and the Padlet Board.
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	

Research/Theory

Identify theories or research that supports the approach you used.	N/A
--	-----

Lesson Reflection/Evaluation

What went well? What changes should be made? How will I use assessment data for next steps?	<i>TO BE FILLED IN AFTER TEACHING</i> N/A
---	--

Include supporting material such as slides, pictures, copy of textbook, and handouts for any activities students will be using as part of your lesson.

*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.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/Resource11a.pdf](https://www.uwsp.edu/education/Documents/edTPA/Resource11.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>