

Lesson Plan

Learning Segment Focus Natural Resources & Recycling

Lesson 1 of 5

Course & topic addressed Earth Sciences

Date 3-20-20

Grade 7th

Student Outcomes

| | |
|---|---|
| Specific learning objectives for this lesson. | Students will learn about natural resources, their value and scarcity, and the need to recycle. |
| Justify how learning tasks are appropriate using examples of students' prior academic learning . | Previous state standards in Science indicate that students should be prepared to learn this material. |
| Justify how learning tasks are appropriate using examples of students' personal, cultural, linguistic, or community assets . | These tasks are appropriate because most, if not all students, have been introduced natural resources and the need to recycle. Also, this lesson is centered on the celebration of Earth day which strengthens its appropriateness. |

State Academic Content Standards

| | |
|---|---|
| List the state academic content standards with which this lesson is aligned. Include abbreviation, number & text of the standard(s). | ESS3.A: Natural Resources ♣ Humans depend on Earth's land, ocean, atmosphere, and biosphere for many different resources. Minerals, fresh water, and biosphere resources are limited, and many are not renewable or replaceable over human lifetimes. These resources are distributed unevenly around the planet as a result of past geologic processes (7-ESS3-1) |
|---|---|

Key Vocabulary

| | |
|---|--|
| What vocabulary terms/content specific terminology must be addressed for students to master the content? | Resources, natural resources, renewable resources, nonrenewable resources, recycle |
|---|--|

Academic Language Support

| | |
|---|--|
| What are the Academic Language Function(s) (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? What planned Academic Language Supports 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 Academic Language Demands (vocabulary, syntax, and discourse) ? | The academic language presented in this lesson allows students to learn terminology associated with environmental resources and recycling those resources. These terms are central to discussing the environment, and specifically Earth Day. The vocabulary will be used throughout the lesson verbally, by creating lists, and used within the spreadsheets. |
|---|--|

Materials

| | |
|--|---|
| Materials needed by teacher for this lesson. (such as books, writing materials, computers, models, colored paper, etc.) | Smartboard, Computer, Excel, Handouts, Index Cards with classroom recycling data, Text Book |
| Materials needed by students for this lesson. (computers, journals, textbook, etc.) | Smartboard, Computer, Excel, Index Cards, Pen, Paper, Text Book |

Lesson Timeline with Instructional Strategies & Learning Tasks

| Amount of Time | Teaching & Learning Activities (This should be a BULLETED LIST) | 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) |
|-----------------------|---|---|
| 5 min | <p><u>Introduction:</u> Introduce Earth Day</p> | <p>Ask students what they know about Earth Day and play a video.</p> |
| 45 mins | <p><u>Instruction:</u></p> <p>Day 1: Learn about Natural Resources</p> <p>Day 2: Discuss and identify types of Resources</p> <p>Day 3: Discuss Recycling</p> <p>Day 4: Finalize Details of Project</p> <p>Day 5: Introduce project to others</p> | <p>Day 1:</p> <ul style="list-style-type: none"> • Read Chapter 8 in textbook using Reciprocal Teaching in designated groups of 4 students. <p>Day 2:</p> <ul style="list-style-type: none"> • Use a blank art diagram on the Smartboard of a condensed version of the Earth and label it with the students to identify resources and where we find them in everyday life. <p>Day 3:</p> <ul style="list-style-type: none"> • What can we recycle and how can we recycle different things. • What are the positive outcomes of recycling? • What happens if we do not conserve our resources? • Talk about class project ideas to use in our school to recycle. • Introduce Classroom recycling project <p>Day 4:</p> <ul style="list-style-type: none"> • Discuss the types of things we want to recycle • Decide on the classes we will include in our project • Discuss how we will collect data and keep a record of our progress via spreadsheets • Assign groups and roles for students • Announce our findings and a class winner on Earth Day April 22nd, 2020 <p>Day 5:</p> <ul style="list-style-type: none"> • 4 Groups of 6 students will go to designated classrooms to introduce the project, classroom goals, and expectations for this project. |

| Amount of Time | Teaching & Learning Activities (This should be a BULLETED LIST) | 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) |
|----------------|--|---|
| | | Recycle Project: <ul style="list-style-type: none"> • For 30 days, classrooms will collect items to recycle in boxes placed in the classroom. • Teachers will also be included in this project/competition. We will place boxes in the teacher lounge as well. • Students in our own class will bring items to recycle and include them in the class/teacher group's boxes for the room where they have been assigned. • Specific items to recycle include: aluminum cans, glass bottles/jars, paper, and plastic bottles. • Totals will be calculated at the end of each week. • Students will work in groups to write down totals for each class's collection of materials. • Students will input data into spreadsheets to record and track information. • On Earth Day our class will announce the totals and a class winner. |
| 5 min | Closure: Q&A | Answer any questions from students not addressed during class |

Accommodations/Modifications

| | |
|---|---|
| How might I modify instruction for: <i>Remediation?</i> <i>Intervention?</i> <i>IEP/504?</i> <i>LEP/ESL?</i> (All students who have plans mandated by federal and state law.) | Group students strategically to ensure those with particular weaknesses can be helped by students with certain strengths. Students with modifications can be given specific tasks to enhance their own strengths. |
|---|---|

Differentiation

| | |
|--|--|
| 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.) | Model instruction, provide templates for spreadsheets, give examples, provide hands on learning etc. |
|--|--|

Assessments: Formative and/or Summative

| | | |
|---|--|--|
| Describe the tools/procedures that will be | <input checked="" type="checkbox"/> Formative / <input type="checkbox"/> Summative | Assess students understanding during Q&A |
|---|--|--|

| | | |
|---|--|--|
| used in this lesson to monitor students' learning of the lesson objective(s) (include type of assessment & what is assessed). | X Formative / <input type="checkbox"/> Summative | Assess spreadsheets to determine understanding and comprehension |
| | X Formative / <input type="checkbox"/> Summative | Final project peer assessments |

Research/Theory

| | |
|--|--|
| 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 . | Direct Instruction (Teacher Centered) to introduce lesson and explicit instruction to detail goals and expectations. Reciprocal Teaching (Teacher & Student Centered) Allows students to comprehend text and lead their own learning. Cooperative Learning (Student Centered) Groups of 4 students will work together to collect and input data. |
|--|--|

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> |
|---|---------------------------------------|

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/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>