

Lesson Plan Template

Instructions: This lesson plan template provides a space for you to plan lessons around the Education Connections model of Sheltered Instruction (SI), which includes four strands—*define, modify, cultivate, apply*. (See page 4 of this document for more information on the four strands). Fill out the information about your lesson plan in the space provided in the left-hand column, *Lesson Information and Activities*. While you plan, list which strand(s) relates to this portion of your planning in the right-hand column, *SI Strand(s)*, along with any notes about how the strand can be implemented effectively in this lesson.

| Lesson Information and Activities | | | | | | | SI Strand(s) | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--------------------|---------------------|--|---|---|--|---------------|----------------------------|--|--|--|--|--|--|---------------|
| <p>Lesson Title: Urban Water Cycle</p> <p>Content Area: Science Grade Level(s): 9-10</p> <p>Unit Description: This lesson engages all four domains: reading, writing, listening and speaking to examine the urban water cycle and how water is utilized in our communities. Students work in small groups and individually to read a text, categorize and label visuals, and describe the water cycle.</p> <p>Length of lesson: _____ Number of ELs: _____</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 20%;">Proficiency Levels</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>ELs (numbers and/or names)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>Program Model: _____</p> <p>Other relevant student information: _____</p> | | | | | | | Proficiency Levels | | | | | | | ELs (numbers and/or names) | | | | | | | Define |
| Proficiency Levels | | | | | | | | | | | | | | | | | | | | | |
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| <p>Standards and Objectives</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr style="background-color: #c6e0b4;"> <th style="width: 5%;"></th> <th style="width: 45%;">Language Objectives</th> <th style="width: 50%;">English language proficiency standards</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; vertical-align: middle;">1</td> <td style="padding: 5px;">Students will use ordinal and transitional words to describe a process.</td> <td style="padding: 5px;"> <p>TESOL Standard 1: English language learners communicate for social, intercultural, and instructional purposes within the school setting.</p> <p>WIDA Standard 1: English language learners communicate for social and instructional purposes within the school setting.</p> </td> </tr> </tbody> </table> | | | | | | | | Language Objectives | English language proficiency standards | 1 | Students will use ordinal and transitional words to describe a process. | <p>TESOL Standard 1: English language learners communicate for social, intercultural, and instructional purposes within the school setting.</p> <p>WIDA Standard 1: English language learners communicate for social and instructional purposes within the school setting.</p> | Define | | | | | | | | |
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| Lesson Information and Activities | | SI Strand(s) |
|-----------------------------------|---|--|
| 2 | Students will categorize pictures according to their association with the urban water cycle and explain why the pictures are placed in each category. | Define |
| | <p>TESOL Standard 4: English language learners communicate information, ideas, and concepts necessary for academic success in the area of science.</p> <p>WIDA Standard 4: English language learners communicate information, ideas and concepts necessary for academic success in the content area of science.</p> | |
| | <p>Content Objectives</p> | |
| 1 | Students will describe the sequence of the urban water cycle. | <p>Content Standards</p> |
| | | <p><u>CCSS.ELA-LITERACY.RST.9-10.5</u> Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., <i>force</i>, <i>friction</i>, <i>reaction force</i>, <i>energy</i>).</p> |
| 2 | Students will write an explanation of the urban water cycle based on a text. | <p><u>CCSS.ELA-LITERACY.RST.9-10.2</u> Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.</p> |

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|--|---|--|---|---------------------------|---------------------------------------|--|---|---|--|------------|---|--|--------|
| <p><u>Incorporating all four language domains</u></p> <p>Identify how the language demands of the tasks are related to each language domain.</p> <table border="1"> <thead> <tr> <th></th> <th>Written</th> <th>Oral</th> </tr> </thead> <tbody> <tr> <th>Receptive</th> <td> <p><i>Reading</i></p> <p>Students will read a text.</p> </td> <td> <p><i>Listening</i></p> <p>Students will watch and listen to a video. They will listen to group members as they discuss.</p> </td> </tr> <tr> <th>Productive</th> <td> <p><i>Writing</i></p> <p>Students will write about the urban water cycle.</p> </td> <td> <p><i>Speaking</i></p> <p>Students will discuss what they learned from a video and how to sort pictures.</p> </td> </tr> </tbody> </table> | | | | | Written | Oral | Receptive | <p><i>Reading</i></p> <p>Students will read a text.</p> | <p><i>Listening</i></p> <p>Students will watch and listen to a video. They will listen to group members as they discuss.</p> | Productive | <p><i>Writing</i></p> <p>Students will write about the urban water cycle.</p> | <p><i>Speaking</i></p> <p>Students will discuss what they learned from a video and how to sort pictures.</p> | Define |
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| <p><u>Key language for students</u> (words and phrases, grammatical structures, sentence types, structure and amount of speech/text, organization of ideas, genre, etc.)</p> <table border="1"> <thead> <tr> <th>General academic language</th> <th>Language specific to the content area</th> </tr> </thead> <tbody> <tr> <td>urban, cycle, collection, treatment, distribution, use, contaminated, modern, renewable, disinfection, processes, supply</td> <td>wastewater, groundwater, freshwater</td> </tr> </tbody> </table> | | | | General academic language | Language specific to the content area | urban, cycle, collection, treatment, distribution, use, contaminated, modern, renewable, disinfection, processes, supply | wastewater, groundwater, freshwater | Modify | | | | | |
| General academic language | Language specific to the content area | | | | | | | | | | | | |
| urban, cycle, collection, treatment, distribution, use, contaminated, modern, renewable, disinfection, processes, supply | wastewater, groundwater, freshwater | | | | | | | | | | | | |
| <p><u>Key characteristics of teacher talk</u> (ways to make the content comprehensible for all students, ways to model key language, etc.)</p> <p>Teach ordinal numbers and transition words. For example: first, second, third, next, then, last</p> <p><u>How the lesson will incorporate bilingualism/students' native languages as resources</u></p> <p>Encourage students to use their home languages throughout the lesson. The teacher may choose to place students in groups according to similar home languages. The teacher may also encourage students to write using their home languages during the chalk talk.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Genre (e.g., narrative)</th> <th>Level</th> <th>Connection to Students (What will this mean to them? How can you make it even more meaningful?)</th> </tr> </thead> <tbody> <tr> <td><u>The Urban Water Cycle: Sustaining our Modern Cities</u></td> <td>Nonfiction</td> <td>9</td> <td>Ask students to make a list of all the ways that they use water (drinking, flushing, washing dishes, washing clothes, cooking, etc.). Then, ask students where they think their water comes from.</td> </tr> </tbody> </table> | | | | Name | Genre (e.g., narrative) | Level | Connection to Students (What will this mean to them? How can you make it even more meaningful?) | <u>The Urban Water Cycle: Sustaining our Modern Cities</u> | Nonfiction | 9 | Ask students to make a list of all the ways that they use water (drinking, flushing, washing dishes, washing clothes, cooking, etc.). Then, ask students where they think their water comes from. | | |
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| <p>Supplementary Materials and Realia:</p> <p><u>Disinfection and Disinfection By-Products</u></p> | | | | | | | | | | | | | |

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|---|----------------------|
| <p>Estimated Time: Two 90- minute class periods</p> <p>Language Domains: <input checked="" type="checkbox"/> Reading <input checked="" type="checkbox"/> Writing <input checked="" type="checkbox"/> Listening <input checked="" type="checkbox"/> Speaking</p> <p>Grouping:</p> <p style="padding-left: 40px;"><input checked="" type="checkbox"/> Independent Work <input checked="" type="checkbox"/> Pair <input checked="" type="checkbox"/> Small Group <input checked="" type="checkbox"/> Whole class</p> <p>Reason for grouping:</p> <p><input checked="" type="checkbox"/> First language <input type="checkbox"/> English proficiency <input checked="" type="checkbox"/> Reading level <input type="checkbox"/> Content understanding <input type="checkbox"/> Interest <input type="checkbox"/> Other:</p> <p>Preview: Connections to past learning or the larger unit sequence</p> <ol style="list-style-type: none"> 1. Chalk talk: Tell students that they will do a chalk talk. They will write all the things they know about the water cycle, but they cannot talk while they do it. Drawing pictures about the water cycle is also very helpful. 2. Highlight some of the key words, phrases, sentences, or graphics. Most likely, students will respond in the chalk talk about the natural water cycle—not the urban water cycle. 3. Think-Pair-Share: “How do people in cities get their water? Where does this fit in the water cycle?” Tell students that there is another water cycle that perhaps they hadn’t thought of—the urban water cycle. OR, if someone mentioned the urban water cycle, ask students to discuss what it is. 4. Tell students that they will learn about the urban water cycle. Ask students what the word “urban” means. 5. Distribute the video guide. Tell students that as they watch, they should write three things they learned and three things that they want to know more about. 6. Watch video (total time: 6:46) 7. Pair, Share: “What did you learn? What do you want to know more about?” 8. Tell students that they will learn about groundwater and the urban water cycle. The urban water cycle happens in cities and has several parts. <p>Presentation: Primary activity steps associated with lesson implementation Differentiation, scaffolding, modifications, strategies employed, interaction activities, materials integrated that function to shelter language and content for the EL students</p> <ol style="list-style-type: none"> 1. Place students into groups of 3-5 students per group. Distribute the text, The Urban Water Cycle: Sustaining our Modern Cities. 2. Tell students to take turns reading the text aloud. Students can stop and start whenever they prefer. All students in the group should read at least one word, but most should read sentences and paragraphs. 3. Distribute the Urban Water Cycle Vocabulary Categorizing activity. 4. Tell students to work together to put the pictures into the following categories: Source, Use, Distribution, Treatment. 5. Then students should label the pictures according to which part of the water cycle it belongs to: Source, Water Treatment, Use, Water Distribution, Wastewater Collection and Wastewater Treatment. | <p>Modify</p> |

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| <p>6. Tell students that they should use the words first, second, third, next, then, and last, students should to describe the urban water cycle aloud.</p> <p>Assessment: Activities for formative and summative assessment during and after primary lesson activities. How does assessment account for the language demands embedded in core content for ELs?</p> <p>1. Quick Write: Describe the urban water cycle. Explain the difference between wastewater treatment and water treatment.</p> | Apply |
| <p>How are parents, families, and the community invited into or associated with the content, delivery, or extension of this lesson?</p> <p>Contact the local water department that serves our area and ask them to make a presentation to your class. Or, take a field trip to the local water treatment facility.</p> | Cultivate |

Education Connections' Four Strands of Sheltered Instruction

Sheltered Instruction is an approach that makes academic content, as well as language development, more accessible for EL students. The Education Connections activities are based on **Four Strands** of Sheltered Instruction. They are: Define, Modify, Cultivate, Apply.

Define

- Develop, define, refine, communicate, and assess *content objectives* for every lesson
- Develop, define, refine, communicate, and assess *language objectives* for every lesson
- Ensure objectives derive from, and are aligned with, English language proficiency (ELP), as well as content standards

Modify

- Differentiate instruction through lesson adaptation and instructional modifications
- Scaffold instruction in response to students' individualized language and content learning needs
- Identify the language demands and domains embedded in lessons and explicitly address language use and needs for both teaching and learning

Cultivate

- Explicitly identify and acknowledge the cultural competence, human capital, knowledge, experiences, and resources students bring to the classroom
- Invite parental and/or familial involvement in the school and classroom and make connections that extend beyond the core curriculum
- Support native language maintenance, additive bilingualism, and biliteracy development

Apply

- Directly promote language use through interaction with peers, teachers, as well as the core content
- Encourage and facilitate language use in both English, as well as students' home languages
- Develop and implement activities that require use of all four language domains