

## 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)
<b>Lesson Title:</b> <u>Smartphone gold mines</u>						<b>DEFINE</b>
<b>Content Area:</b> <u>Science</u> <b>Grade Level(s):</b> <u>7-8</u>						
<b>Unit Description:</b> _____						
<b>Length of lesson:</b> <u>Two 90- minute class periods</u> <b>Number of ELs:</b> _____						
Proficiency Levels						
ELs (numbers and/or names)						
<b>Program Model:</b> Co- taught, pull out _____						
<b>Other relevant student information:</b> _____						
<b>Standards and Objectives</b>						<b>DEFINE</b>
	Language Objectives	English language proficiency standards				
1	Students will be able to discuss specific statements from a text and respond to classmates.	TESOL Standard 4: English language learners communicate information, ideas, and concepts necessary for academic success in the area of science.  WIDA Standard 4: English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.				
2	Students will be able to listen and comprehend classmates to successfully contribute to a group conversation.	TESOL Standard 1: English language learners communicate for social, intercultural, and instructional purposes within the school setting.  WIDA Standard 1: English language learners communicate for Social and Instructional purposes within the school setting.				

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	Content Objectives	Content Standards	
1	Students will be able to summarize a text and determine the author's purpose.	<u>CCSS.ELA-LITERACY.RST.6-8.2</u> Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.	
2	Students will be able to distinguish author's opinion from evidence to support the argument.	<u>CCSS.ELA-LITERACY.RST.6-8.1</u> Cite specific textual evidence to support analysis of science and technical texts.	

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<p><b><u>Incorporating all four language domains</u></b></p> <p>Identify how the language demands of the tasks are related to each language domain.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #c1d57e;"> <th style="width: 5%;"></th> <th style="width: 45%;">Written</th> <th style="width: 5%;"></th> <th style="width: 45%;">Oral</th> </tr> </thead> <tbody> <tr> <td style="background-color: #c1d57e; text-align: center; vertical-align: middle;">Receptive</td> <td> <p>Reading</p> <p>Students will read a text multiple times.</p> </td> <td style="background-color: #c1d57e;"></td> <td> <p>Listening</p> <p>Students will listen to each other in a small group setting and respond to each other.</p> </td> </tr> <tr> <td style="background-color: #c1d57e; text-align: center; vertical-align: middle;">Productive</td> <td> <p>Writing</p> <p>Students will independently write a summary.</p> </td> <td style="background-color: #c1d57e;"></td> <td> <p>Speaking</p> <p>Students will participate in a structured discussion about the text.</p> </td> </tr> </tbody> </table>					Written		Oral	Receptive	<p>Reading</p> <p>Students will read a text multiple times.</p>		<p>Listening</p> <p>Students will listen to each other in a small group setting and respond to each other.</p>	Productive	<p>Writing</p> <p>Students will independently write a summary.</p>		<p>Speaking</p> <p>Students will participate in a structured discussion about the text.</p>	<b>MODIFY</b>
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<p><b><u>Key language for students</u></b> (words and phrases, grammatical structures, sentence types, structure and amount of speech/text, organization of ideas, genre, etc.)</p> <p>Active Voice: compare/ contrast active vs. passive voice. <a href="#">Text structure: linear vs. spiral.</a></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #c1d57e;"> <th style="width: 50%;">General academic language</th> <th style="width: 50%;">Language specific to the content area</th> </tr> </thead> <tbody> <tr> <td>                     By-products, mine, mined, conduct, conductive, metal, source, lithium-ion batteries, electrical, thermal, sustainable, monopoly, demand, thwart, wean, ubiquitous, globalized, spoiling, domestic, retired, recycling, persuade, evidence, argument                 </td> <td>                     Mineral, circuits, rare earth elements, alternative energy, radioactive waste, tailing ponds, habitat, endangered                 </td> </tr> </tbody> </table>				General academic language	Language specific to the content area	By-products, mine, mined, conduct, conductive, metal, source, lithium-ion batteries, electrical, thermal, sustainable, monopoly, demand, thwart, wean, ubiquitous, globalized, spoiling, domestic, retired, recycling, persuade, evidence, argument	Mineral, circuits, rare earth elements, alternative energy, radioactive waste, tailing ponds, habitat, endangered									
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<p><b><u>Key characteristics of teacher talk</u></b> (ways to make the content comprehensible for all students, ways to model key language, etc.)</p> <p>Use visuals, monitor your rate of speech and slow down</p>																
<p><b><u>How the lesson will incorporate bilingualism/students’ native languages as resources</u></b></p> <p>Encourage students to include connections to home languages on the “Own the Word” template. Also, group students according to home language so that students may discuss content using their home language.</p>				<b>CULTIVATE</b>												
<p><b><u>Materials and Texts</u></b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #c1d57e;"> <th style="width: 25%;">Name</th> <th style="width: 25%;">Genre (e.g., narrative)</th> <th style="width: 10%;">Level</th> <th style="width: 40%;">Connection to Students (What will this mean to them? How can you make it even more meaningful?)</th> </tr> </thead> <tbody> <tr> <td><a href="#">Where to Find Rare Earth Minerals</a></td> <td>Non-fiction persuasive</td> <td style="text-align: center;">7</td> <td>Ask students to make a list of all the technology they use throughout the day. Then, think about what those devices are made of.</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?)	<a href="#">Where to Find Rare Earth Minerals</a>	Non-fiction persuasive	7	Ask students to make a list of all the technology they use throughout the day. Then, think about what those devices are made of.					
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<p><b><u>Supplementary Materials and Realia</u></b></p> <p>A video is embedded in the text, <a href="#">Where to Find Rare Earth Minerals</a>. The embedded video is about 4 minutes long, but the <a href="#">full program can be found here</a> (2 hours).</p>																

# Lesson Plan Template

Lesson Information and Activities	SI Strand(s)
<p><a href="#">A World of Minerals in Your Mobile Device</a></p> <p><a href="#">Online English learners' dictionary</a></p>	

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Lesson Information and Activities	SI Strand(s)
<p>Estimated Time: Two 90- minute class periods</p> <p><b>Language Domains:</b> <input checked="" type="checkbox"/> Reading <input checked="" type="checkbox"/> Writing <input checked="" type="checkbox"/> Listening <input checked="" type="checkbox"/> Speaking</p> <p><b>Grouping:</b></p> <p style="padding-left: 40px;"><input checked="" type="checkbox"/> Independent Work <span style="margin-left: 150px;"><input type="checkbox"/> Pair</span> <span style="margin-left: 150px;"><input checked="" type="checkbox"/> Small Group</span> <span style="margin-left: 150px;"><input checked="" type="checkbox"/> Whole class</span></p> <p>Reason for grouping:</p> <p><input checked="" type="checkbox"/> First language <span style="margin-left: 40px;"><input type="checkbox"/> English proficiency</span> <span style="margin-left: 80px;"><input checked="" type="checkbox"/> Reading level</span> <span style="margin-left: 80px;"><input type="checkbox"/> Content understanding</span> <span style="margin-left: 80px;"><input type="checkbox"/> Interest</span> <span style="margin-left: 80px;"><input type="checkbox"/> Other:</span></p> <p><b>Preview:</b> Connections to past learning or the larger unit sequence</p> <ol style="list-style-type: none"> <li>1. Ask students to make a list of all the technology they use in a day. They should think about phones, computers, etc... How many different devices did they list?</li> <li>2. Tell students that all those devices are made of elements that are mined from the earth.</li> <li>3. Pre-teach vocabulary: To understand the readings, students must first understand the following words: rare earth elements, minerals, persuade, mine (mining, mined), purpose</li> <li>4. Complete one “Own the Word” template together as a class. Students will complete the vocabulary word template for each word. The teacher should offer ideas and suggestions to guide students in completing the templates for each word. The teacher may choose to place students into groups for this activity. <a href="#">This website</a> is a helpful online dictionary for English learners.</li> <li>5. Watch the 4-minute video that is embedded in the text, <a href="#">Where to Find Rare Earth Minerals</a>.</li> </ol> <p><b>Presentation:</b> Primary activity steps associated with lesson implementation</p> <p>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"> <li>1. Explain that students will read a non-fiction persuasive article about the minerals that are used to make phones and other technology.</li> <li>2. First the teacher will read the text to the class. Then, you’ll discuss it together. Finally, students will read it in pairs.</li> <li>3. Project the article onto the white board. Distribute paper copies of the text to individual students, as well.</li> <li>4. <b>Teacher reads</b> the article, <a href="#">Where to Find Rare Earth Minerals</a>. Pause to explain and summarize or ask students to summarize after each paragraph.</li> <li>5. <b>Put students into groups of 3. Distribute 2 colors of highlighters</b> for each student. Explain that the group members will take turns reading the text. As they read, each student will highlight, using 2 colors. 1 color will be for highlighting the author’s argument or opinion. The other color will be used to highlight evidence to support the opinion.</li> <li>6. <b>Save the Last Word Strategy:</b> Distribute index cards (one per student). Explain that on one side of the index card, they will write a quote from the text. On the other side of the index card, they will write a few sentences explaining why they chose that quote. Maybe the quote reminded them of something or they had a connection to the quote that they wanted to explain.</li> <li>7. In each group, label one student A, one B, and one C. Student A will read the quote and show it to students B and C. Students B and C will discuss the quote. After a few minutes of discussion by</li> </ol>	<p><b>MODIFY APPLY</b></p>

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<p>students B and C, student A will have the last word and share what he/ she wrote on the back of the card. The process continues with student B sharing the quote and students A and C discussing and so on.</p> <p>8. <b>Think- Pair Share:</b> Ask students, “Why did the author write this text?” “What was the author’s purpose for writing this text?” “How do you know?” Students will think and then talk in their groups. Choose one or two students to share out to the whole group.</p> <p><b>Assessment:</b> 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><b>Exit ticket:</b> On a notecard, students will write a \$2 summary. Each word is worth 10 cents. Students must write a summary of the text and it must add up to \$2. Provide a word bank for students who will benefit. (rare earths minerals, technology, smartphones, persuade, evidence, argue)</p>	
<p>How are parents, families, and the community invited into or associated with the content, delivery, or extension of this lesson?</p> <p>Invite a guest speaker with experience in the industry.</p>	<b>CULTIVATE</b>

### 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**