Lesson Information and Activities			SI Strand(s)
Lesson Title: Text to Graphics			DEFINE
Auth			
	Content Area: Science/ ELA Grade Level(s): 6-12 (adaptable based on text used)		
<b>Lesso</b> comp			
Leng	th of lesson: 90 minutes or 2- 45 minute s	essions Number of ELs:	
Pro	ficiency Levels		
	(numbers and/or nes)		
Class Progr Othe			
Stan	dards and Objectives		DEFINE
	Language Objectives	English language proficiency standards	
	Students will be able to describe the text to graphics strategy.	WIDA Standard 4: English language learners communicate information, ideas, and concepts necessary for academic success in the content area of Science.	
1		CA ELD Standard 9-12 Listening and Speaking (Intermediate): Listen attentively to stories and information and identify important details and concepts by using both verbal and nonverbal responses.	
	Students will be able to summarize a graphic representation and describe how it connects to the text.	WIDA Standard 1: English language learners communicate for Social and Instructional purposes within the school setting.	
2		CA ELD Standard 9-12 Comprehension (Intermediate): Read text and use detailed sentences to identify orally the main ideas and use them to make predictions about informational text, literary text, and text in content areas.	
	Content Objectives	Content Standards	

# Lesson Plan Template

Lesson Information and Activities			SI Strand(s)
1	Students will be able to determine how central ideas and key details are arranged and related and write an accurate summarizing statement.	CCSS.ELA-LITERACY.RST.11-12.2  Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.	
2	Students will be able to determine the structure of a text and create a visual representation of the text structure.	CCSS.ELA-LITERACY.RST.11-12.5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	
3	Students will analyze the structure and key ideas of a text to create a visual representation and summary of the information.	CCSS.ELA-LITERACY.RST.11-12.10  By the end of grade 12, read and comprehend science/technical texts in the grades 11-CCR text complexity band independently and proficiently.	

## **Incorporating all four language domains**

	Written	Oral
•	Reading	Listening
Recentive	Students read and interact with a complex text.	Students listen to classmates as they negotiate meaning of the text and create their graphic representation.
	Writing	Speaking
Droductive	Students write sentences to describe their graphic representation.	Students speak to classmates as they negotiate the meaning of the text, make suggestions, and create their graphic representation.

<u>Key language for students</u> (words and phrases, grammatical structures, sentence types, structure and amount of speech/text, organization of ideas, genre, etc.)

General academic language	Language specific to the content area
Sustainable, renewable, nonrenewable, demands, energy resources	Oil, gas, coal, natural bitumen, oil shale, uranium, geothermal, hydroelectric, fossil fuels
(prefixes: non, re) (suffixes: able)	

<u>Key characteristics of teacher talk</u> (ways to make the content comprehensible for all students, ways to model key language, etc.)

- Pre- teach vocabulary, use vocabulary words repeatedly throughout the lesson, use realia

### How the lesson will incorporate bilingualism/students' native languages as resources

Students could choose to write the sentences to accompany the graphic representation in their native language. Or, they could choose to draw the graphic and use native language labels to write their sentences in English. Identifying <u>cognates</u> to help students make connections between languages can also be helpful.

#### **Materials and Texts**

Name	Genre (e.g., narrative)	Level	Connection to Sts (What will this mean to them? How can you make it even more meaningful?)
The U.S. Geological Survey Energy Resources Program	Nonfiction	9-12	Students could research energy sources in their state/ town. They could research local jobs in the energy sector or environmental impacts of energy consumption. They could also keep a log or journal of the energy they consume on a daily basis.

**MODIFY** 

Lesson Information and Activities	SI Strand(s)			
Supplementary Materials and Realia	MODIFY APPLY			
Pictures of energy sources (oil, coal, solar, etc) and everyday objects that use energy. Students could match objects with energy sources.	AFFLI			
PBS Learning Media Video: Energy Sources (closed captioning possible on this video)				
Estimated Time: 90 min	l			
Language Domains: X Reading X Writing X Listening X Speaking	1			
Grouping:  X Independent Work				
<ol> <li>Prior to this lesson, the teacher might choose to pre-teach academic vocabulary associated with the reading (see key language section of this lesson plan). To build background knowledge, the teacher may choose to show the video PBS Learning Media Video: Energy Sources (closed captioning possible on this video).</li> <li>(5 min) Ask students to think about 2-3 things they do to help them understand what they read. Write down the strategies and be ready to explain them to someone else.</li> <li>(10 min) Give one, Get one, Move on Activity. Students mingle to music and stop when the music stops. Partner A shares and explains their strategy. Partner B listens, records the strategy, and asks one question. Then, partner B shares and explains a strategy. Partner A listens, records the strategy, and asks one question. Students continue to mingle to music, switching partners, and sharing strategies. Teacher may ask students to share a new strategy they learned from a partner.</li> </ol>				
4. Tell students that they will learn a strategy called "Text to Graphics" to help them understand and remember what they read. The teacher will model the strategy, students will practice it, and they will discuss how to use this strategy in other classes.				
5. (5 min)To activate students' background knowledge about the reading, first ask them to think about sources of energy—renewable or non-renewable (solar, wind, hydro, oil, coal, natural gas). Then ask them to think about all the ways they use energy (driving, charging electronics, heating homes).				
Presentation:  1. Tell students that they will read a government document about energy resources and learn how to use the strategy, text to graphics. The teacher will model the strategy, then students will practice the strategy.				

## SI Strand(s) **Lesson Information and Activities** 2. (10 min) Read only p. 1 of the document, The U.S. Geological Survey Energy Resources Program, as a whole group. Ask students to write down or highlight key points. As they read, they should create a picture in their mind to organize the information. 3. (15 min) Teacher guides the class to create a graphic representation of p. 1 of the document. Draw the graphic on the board. Write 2-4 sentences connecting the graphic to the text read. (See example) 4. (20 min, variable) Next, in small groups, students will read the remainder of the document, p. 2-6, and create their own graphic representations of the information on a poster. The teacher may choose one of the options for this activity: Divide students into 5 groups and assign one page of the document to each group. Each group will read their page and create a graphic representation poster for only their assigned page. Divide students into 3 groups. Each group reads the entire document and creates a graphic representation poster for the whole document. 5. (10 min) Individually, students write 2-4 sentences about their graphic representation and how it connects to the reading. Asking students to write individually holds all students accountable for their learning and helps them to process the activity. 6. (10 min) Ask groups to share their graphic representations with the whole group. Teacher may choose to lead a discussion about how the graphic representations are similar or different. 7. (5 min) Wrap-up: Ask students to think about when this strategy might be useful in other courses. How could they use this strategy on their own? Teacher could ask students to write their answers down on an exit ticket and share with the class. **Option for Technology integration:** Students could use LucidChart, Bubbl.us (find more options in the mind mapping folder here) to create computer-based graphic representation. Variation: For students in the entering, beginning, or developing stages of English proficiency (See WIDA Can- Do Descriptors), the teacher would use a text at a lower lexile level. The activity would be more teacherdirected. The teacher would have students preview the text and point out key concepts. The teacher would read the text aloud and point out how it is organized. With input from students, the teacher would create a graphic representation. Students (individually or as a whole group) should write sentences about the graphic. Teacher may choose to provide some students with sentence stems such as "This graphic shows how the text is organized. First, ... Then, ..." Assessment: The teacher may choose to use the sentences written by individual students as the assessment of this

lesson. The sentences along with the exit ticket explaining how they could apply this strategy in other

courses provide thorough feedback about students' progress toward mastery of the strategy.

# Lesson Plan Template

Lesson Information and Activities	SI Strand(s)
How are parents, families, and the community invited into or associated with the content, delivery, or extension of this lesson?	CULTIVATE
Students could ask family members to help them log or journal about their energy use for a day. Students could ask their parents if they have worked in the energy sector and share what their jobs entailed. Students could also research how their community gets its energy (coal, natural gas, solar, etc)	
Materials Needed:	
<ul> <li>Music and speakers for mingle to music</li> <li>Give one, Get one, Move on Activity.</li> <li>Copies of The U.S. Geological Survey Energy Resources Program</li> <li>Poster paper</li> <li>Markers</li> </ul>	

### **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