



<b>Title:</b> Careers in Oil and Natural Gas		
<b>Author:</b> Kathy Rusert Acorn High School Mena, AR		
<b>Course:</b> Science, Careers, Computer Science, Language Arts, Library Media	<b>Duration:</b> One to two—45 minute class periods	
<b>Grade Level:</b> 8		
<b>Objective:</b> Students will learn about jobs in the Oil and Natural Gas Industry.		
<b>Summary of Lesson:</b> Students will use the internet to learn about careers in Oil and Natural gas. Students will choose a career from the list provided to research and create a “foldable”* to share with the class.  *“Foldables” are basically 3 D graphic organizers.		
<b>Arkansas Standards:</b>		
<b>Subject:</b>	<b>Code:</b>	<b>Standard:</b>
Science	ESS.8.8.11  (may want to link Careers from other areas, as well)	Investigate careers related to changes in the Earth.
Computer Science	CC.9.7.1	Describe how computer science enhances other career fields.
Language Arts	RI.8.2	Examine a grade-appropriate informational text. ● Provide an objective summary of the text. ● Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas.
	W.8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
	W.8.8	Gather relevant information from multiple print and digital sources, using search terms effectively.



		<ul style="list-style-type: none"> <li>● Assess the credibility and accuracy of each source.</li> <li>● Quote or paraphrase the data and conclusions of others while avoiding plagiarism.</li> <li>● Follow a standard format for citation.</li> </ul>
	SL.8.4	Present claims and findings, emphasizing the most important points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
Library Media	IL.1.8.7	Select and interpret various types of information on a topic using a variety of print/non-print/digital resources.
	IL.2.8.1	Apply and refine organizational strategies to record information using available resources.
	PG.8.8.1	Demonstrate knowledge gained from reading self-selected informational texts.
<b>Teacher Excellence and Support System:</b> Managing Classroom Procedures, Managing Student Behavior, Engaging Students in Learning		
<b>Instructional Strategies and Practices:</b> Identifying Similarities and Differences, Practice, Setting Objectives and Providing Feedback, Game, Technology		
<b>Bloom's Level:</b> <i>(Highest Level Only)</i> Analyzing		
<b>Materials and Resources:</b> <ul style="list-style-type: none"> <li>● Lab Sheet</li> <li>● computer or iPad</li> </ul>		
<b>Formative Assessment:</b> Teacher monitoring Rubric to assess presentation		
<b>Teaching Notes:</b> Other classroom references may be used to expand the list of careers that can be researched.		



**Careers in Oil and Natural Gas  
Presentation Rubric**

<b>Process</b>	<b>Below Avg.</b>	<b>Satisfactory</b>	<b>Excellent</b>
1. Has clear vision of final product	1, 2, 3	4, 5, 6	7, 8, 9
2. Properly organized to complete project	1, 2, 3	4, 5, 6	7, 8, 9
3. Managed time wisely	1, 2, 3	4, 5, 6	7, 8, 9
4. Acquired needed knowledge base	1, 2, 3	4, 5, 6	7, 8, 9
5. Communicated efforts with teacher	1, 2, 3	4, 5, 6	7, 8, 9
<b>Product (Project)</b>	<b>Below Avg.</b>	<b>Satisfactory</b>	<b>Excellent</b>
1. Format	1, 2, 3	4, 5, 6	7, 8, 9
2. Mechanics of speaking/writing	1, 2, 3	4, 5, 6	7, 8, 9
3. Organization and structure	1, 2, 3	4, 5, 6	7, 8, 9
4. Creativity	1, 2, 3	4, 5, 6	7, 8, 9
5. Demonstrates knowledge	1, 2, 3	4, 5, 6	7, 8, 9, 10
6. Other:	1, 2, 3	4, 5, 6	7, 8, 9

Total Score: \_\_\_\_\_

Teacher(s) Comments:

**Student Activity:**

1. Using the computer or iPod, students will complete the Lab Sheet included in the Student Handout
2. Student will create a "foldable" representing the information collected and will share this with the class

**See Student Handout: For a printable copy go to**

<http://www.arkansasenergyrocks.com/educators/lesson-plans-k-8/>



## Lab Sheet

### Careers in Oil and Natural Gas

This list is a small sampling of careers in the Oil and Natural Gas Industry. Others may be found in classroom resources.

Chemical Engineer	Mechanical Engineer	Petroleum Engineer
Geologist	Mudlogger	Oil Well Firefighter
Floorhand	Truck Driver	Communications Advisor
Bed Truck Operator	Derrickhand	Landman
Geophysicist	Vacuum Truck Operator	Heavy Equipment Operator
Steam Ticketed Operator	Millwright and Machinist	Hydrovac Operator
Oil Production Consultant	Rig Operator	Seismic Operator
Data Analyst	Accountant	Deep Sea Welder
Swamper	Draftsman	Civil Structural Superintendent
District Operations Manager	Roustabout	Jughound

1. Choose one of the careers listed to research. Be sure to include the following:

- \_\_\_\_\_ job description
- \_\_\_\_\_ training required
- \_\_\_\_\_ location of current jobs
- \_\_\_\_\_ beginning salary
- \_\_\_\_\_ expected median salary
- \_\_\_\_\_ safety
- \_\_\_\_\_ company names of employers
- \_\_\_\_\_ government regulations relating to job
- \_\_\_\_\_ at least one other interesting fact about that career

2. Create a foldable to share with the class.