

Title: Searching for Oil Scavenger Hunt—Careers

Author: Kathy Rusert

Acorn High School

Mena, AR

Course: Science, Careers **Duration:** One 45 minute class

period

Grade Level: 8

Objective:

Students will learn about jobs in the Oil and Natural Gas Industry.

Summary of Lesson:

Students will use the internet to learn about careers in Oil and Natural gas. They will "strike oil" when they unscramble the letters in the boxes. In *Careers in Oil and Natural* lesson, students will research a career from the list.

Standards: Arkansas State Frameworks

Standards. Arkansus state Franceworks			
Subject:	Code:	Standard:	
Science	ESS.8.8.11	Investigate careers related to changes in the Earth.	
	(may want to link Careers from other areas, as well)	changes in the Earth.	

Teacher Enhancement Support Systems:

Managing Classroom Procedures, Managing Student Behavior, Engaging Students in Learning

Instructional Strategies and Practices:

Identifying Similarities and Differences, Practice, Setting Objectives and Providing Feedback, Game, Technology

Bloom's Level: (Highest Level Only)

Analyzing

Materials and Resources:

Lab Sheet

Formative Assessment:

Lab Sheet

Teaching Notes:

Websites and salary information change frequently, update as needed.



Student Activity:

- 1. To reinforce a study of careers in oil and natural gas, students will use the websites listed in the student handout to unscramble the career names. See the **Student Worksheet** for a printable copy.
- 2. In a separate lesson (*Careers in Oil and Natural Gas*), students will research one of the jobs listed.

Lab Sheet Careers in Oil and Natural Gas Teacher Key

This list is a small sampling of careers in the Oil and Natural Gas Industry.

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			
	zle by unscrambling the letters in ite is no longer available, use ke is the one in our per year.	n the boxes. Some of these web sites y words and phrases to find more responsible for finding oil. The			
2. A * is a professional who notes the conditions surrounding the construction of a well. The expected salary is around \$53,000 per year. http://www.wisegeek.com/what-does-a-mudlogger-do.htm					
3. A* works with mud systems, monitors weight and mixes weight properly while staying in contact with Engineers and Drillers. The expected salary is around \$55,368 www.trinidaddrilling.com/Careers/Jobdescriptions.aspx					
4. A <u>*</u>	refers t	to a worker who maintains all things			
+· ^		to a worker who maintains all things rig personnel. Working in oil fields			



https://en.wikipedia.org/wiki/Roustabout			
5. A* is the professional who acquires the subsurface mineral rights from landowners for the purposes of oil and gas exploration. That means they make sure their company owns the minerals it will find in the ground. The salary is around \$74,000 per year. https://www1.cfnc.org/Plan/For A Career/Career Profile/Career Profile.aspx?id=LOsdvCpqXZiW1Rj LFGi2dwXAP3DPAXXAP3DPAX			
<u>LFGIZUWAAP3DPAAAAP3DPAA</u>			
6. A			
https://careersinoilandgas.com/careers/swamper-2/			
7. A <u>*</u>			
determines the presence and the extent of oil and gas deposits in a particular area using seismic equipment. They do so through four key phases: surveying, line clearing, seismic drilling, and data acquisition and recording. Most seismic work occurs in remote locations. The expected salary is about \$136,000 http://careers-oil-gas.freshwatercreative.ca/careers/seismic-operator			
8. A * is a seismic operator's helper. The expected salary is about \$40,079 www.oilfieldworkers.com/seismicjobs.php			
9. A *			
Answer Key: 1. geologist 2. mudlogger 3. derrickhand 4. roustabout 5. landman 6. swamper 7. seismic operator 8. jughound 9. petroleum engineer letters to unscramble: olrtmepue / petroleum			
Student Handouts: See web site for a printable copy: ttp://www.arkansasenergyrocks.com/educators/lesson-plans-k-8/			



Student Handout Lab Sheet Searching for Oil Scavenger Hunt Careers in Oil and Natural Gas

This list is a small sampling of careers in the Oil and Natural Gas Industry.

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			
Student Instructions: Use the websites indicated to identify the career titles and fill in the blanks that match the descriptions. Then solve the puzzle by unscrambling the letters in the boxes. Some of these web sites may change over time. If a web site is no longer available, use key words and phrases to find more current resources. 1. A * is the one responsible for finding oil. The expected salary is around \$83,000 per year. www.howstuffworks.com/environmental/energy/oil-drilling2.htm					
2. A* is a professional who notes the conditions surrounding the construction of a well. The expected salary is around \$53,000 per year. http://www.wisegeek.com/what-does-a-mudlogger-do.htm					
	<u> </u>				
3. A <u>*</u>		works with mud systems, monitors			
weight and mixes weight properl	y while staying in contact with E	ngineers and Drillers. The expected			
salary is around \$55,368					
www.trinidaddrilling.com/Career	rs/Jobdescriptions.aspx				
4. A * * * * * * * * * * * * * * * * * *	sification of <u>natural gas</u> and <u>oil r</u> os requiring little training. The e	to a worker who maintains all things rig personnel. Working in oil fields expected salary is about \$42,868.			
5. A**rights from landowners for the p company owns the minerals it wi	urposes of oil and gas exploration	o acquires the subsurface mineral on. That means they make sure their is around \$74,000 per year.			



https://www1.cfnc.org/Plan/For A Career/Career Profile/Career Profile.aspx?id=LOsdvCpqXZiW1Rj LFGi2dwXAP3DPAXXAP3DPAX 6. A___ __ acts as a safety lookout for the truck driver by giving him clear hand signals to avoid potential hazards whenever driver is required to back-up. This person sometimes greases, paints, scrubs and cleans trucks and equipment as needed. The salary is around \$52,000 per year. https://careersinoilandgas.com/careers/swamper-2/ determines the presence and the extent of oil and gas deposits in a particular area using seismic equipment. They do so through four key phases: surveying, line clearing, seismic drilling, and data acquisition and recording. Most seismic work occurs in remote locations. The expected salary is about \$136,000 http://careers-oil-gas.freshwatercreative.ca/careers/seismic-operator is a seismic operator's helper. The expected salary is about \$40,079 www.oilfieldworkers.com/seismicjobs.php evaluates potential oil and gas reservoirs, oversees drilling activities, and uses advanced computers for analysis of exploration data. The expected salary is about \$110,000 per year. https://www.glassdoor.com/Job-Descriptions/Petroleum-Engineer.htm Unscramble the starred (*) letters: