



<b>Title:</b> Searching for Oil Scavenger Hunt--Careers	
<b>Author:</b> Kathy Rusert Acorn High School Mena, AR	
<b>Course:</b> Science	<b>Duration:</b> One 45 minute class period
<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. They will “strike oil” when they unscramble the letters in the boxes. In <i>Careers in Oil and Natural</i> lesson, students will research a career from the list.	
<b>Standards: CCSS, Arkansas State Frameworks, Next Generation Science Standards, Other</b>	
<b>Code:</b>	<b>Standard:</b>
ESS.8.8.11  (may want to link Careers from other areas, as well)	Investigate careers related to changes in the Earth.
<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> • Lab Sheet	
<b>Formative Assessment:</b> Lab Sheet	
<b>Teaching Notes:</b> Websites and salary information change frequently, update as needed.	
<b>Student Activity:</b> 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	



Handout section for a printable worksheet.

- 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

Student Instructions:

Use the website 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.

- 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](http://www.howstuffworks.com/environmental/energy/oil-drilling2.htm)

- A \_\_\_ \_\_\_ \_\_\_ \* \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ is a professional who notes the conditions surrounding the construction of a well. The expected salary is around \$53,000 per year.

[www.youtube.com/watch?v=iV2J54gd4Y8](http://www.youtube.com/watch?v=iV2J54gd4Y8) or [www.wisegeek.com](http://www.wisegeek.com) if YouTube is blocked.

- 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](http://www.trinidaddrilling.com/Careers/Jobdescriptions.aspx)

- A \_\_\_ \_\_\_ \_\_\_ \_\_\_ \* \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ is responsible for maintenance and housekeeping of the rig. The expected salary is about \$42,868.

[www.trinidaddrilling.com/Careers/Jobdescriptions.aspx](http://www.trinidaddrilling.com/Careers/Jobdescriptions.aspx)

- A \* \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ confirms land ownership and negotiates agreements with land owners for drilling or production rights. The salary is around \$74,000 per year.

[www.stephenlhaynes.com/our-roots.php](http://www.stephenlhaynes.com/our-roots.php)



6. A \_\_\_\_\_ \* \_\_\_\_\_ is a heavy hauling truck driver. The salary is around \$52,000 per year.

[www.careersinoilandgas.com/working-in-oil-gas-/a-day-in-the-life-/day-in-the-life-craig-bed-truck-operator-/aspx](http://www.careersinoilandgas.com/working-in-oil-gas-/a-day-in-the-life-/day-in-the-life-craig-bed-truck-operator-/aspx)

7. A \_\_\_\_\_ \* \_\_\_\_\_ precisely measures hundreds of small earthquakes and compiles three-dimensional maps of sub-surface rock formations and petroleum reservoirs. The expected salary is about \$136,000

[www.oilfieldworkjers.com/seismicjobs.php](http://www.oilfieldworkjers.com/seismicjobs.php)

8. A \_\_\_\_\_ \* \_\_\_\_\_ is a seismic operator's helper. The expected salary is about \$40,079

[www.oilfieldworkers.com/seismicjobs.php](http://www.oilfieldworkers.com/seismicjobs.php)

9. A \_\_\_\_\_ \* \_\_\_\_\_ 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.

<http://www.pge.utexas.edu/about/petroleum>

Unscramble the boxed (\*) letters:

\_\_\_\_\_

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: o l r t m e p u e / petroleum

**See Student Handout**