



Career Web

Essential Question: What are direct and indirect careers in the mineral or energy industries in Alaska?

Time: 30 minutes

Overview: Students will list the direct and indirect careers associated with the mineral and/or energy industries in Alaska on a diagram showing how they are interconnected.

Assessment: Students can explain the wide range of careers that are associated with natural resource industries in Alaska. Students can tie a career they are interested in back to the resource industry in some capacity.

TEACHER INFORMATION AND PROCEDURE

Prior Knowledge for Students: General idea of where resource projects are located would be helpful, but not necessary. A general understanding of the process of mining/oil and natural gas extraction/electrical generation from renewables would be ideal, but again not necessary.

Source: ARE

Materials Needed: Worksheets

What to do in Advance: Print one career web worksheet per student

TEACHING THE LESSON

Gear-up: Discuss the project(s) that you will be listing careers for. Look at where it is on a map and brainstorm what day-to-day might look like at the site.

Explain the difference between a direct hire (hired by the industry company) and an indirect (hired by a company that supports the industry company) or support service job. Have a student who currently works explain what type of positions the company they work for hires directly, then discuss all the people who help support that company so they are able to do business. For example, a fast food company direct hires cooks, cashiers and managers. The support services are the people who deliver the food products and the people who work for the manufacturing company that make the to-go boxes etc.

Explore: Discuss what kind of jobs the site you are looking at might hire directly. For example, a mine would hire miners and an oil platform would hire drillers. Fill in the center bubble with as many jobs as the students can think of. As a group, fill out the web. Start with the direct jobs that a specific location would hire. Help the students come up with four to six specific careers that company might hire. Make sure they are actual positions not a general field. Give the students a few minutes to try and think of the different categories of jobs that might be the "title" for each of the surrounding support bubbles.

Label the ones that they thought of that would be options. Help guide them to the right answers. i.e. Camp: Where is the project located? Is it close to town? Do they get to go home every night? Where do people live and eat while they are working? Transportation: Where is the project located? Is it close to town? How do the people get to work? How do they get the materials they need to do their job? How does the final product leave the site? Continue until all bubbles are filled out.

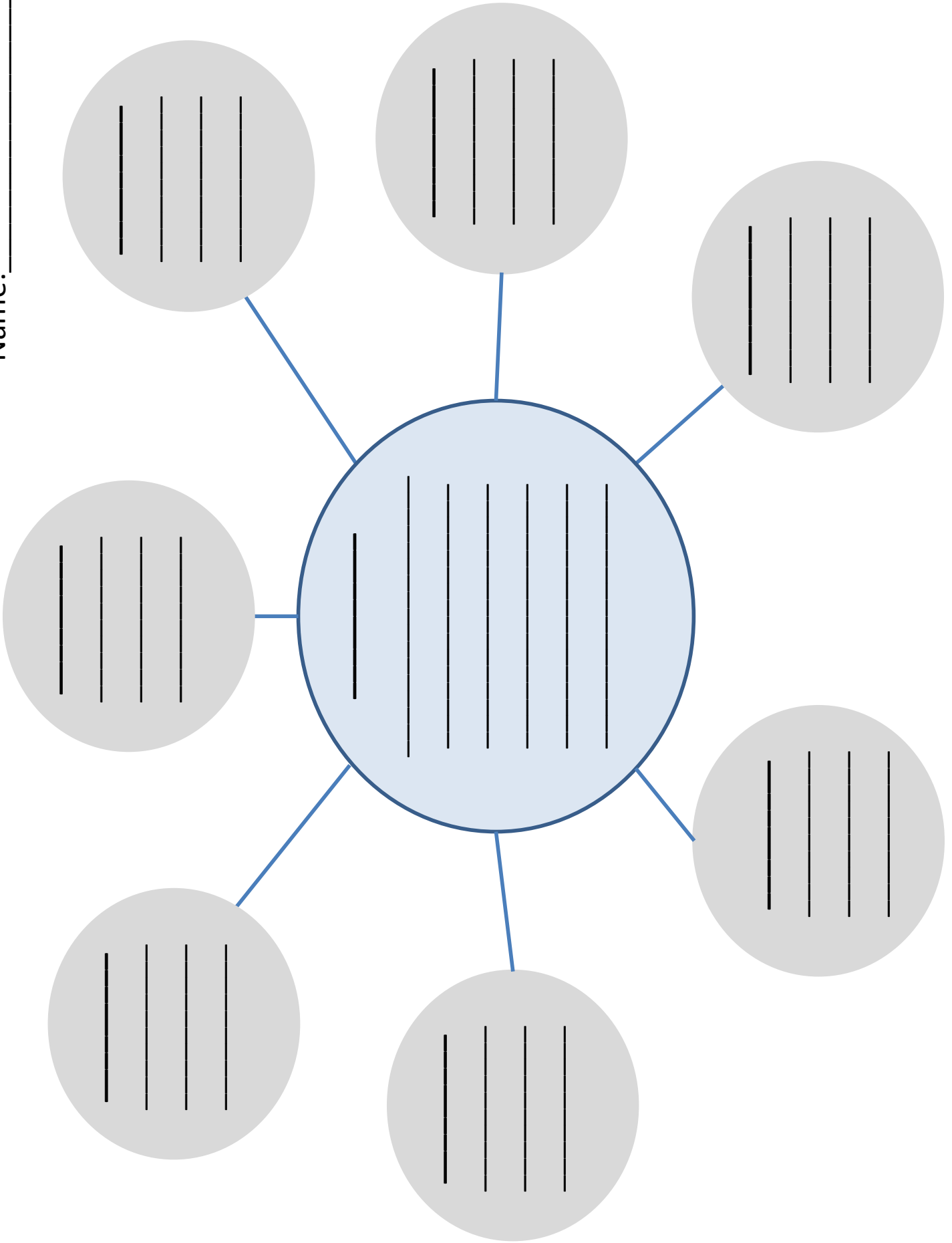
Generalize: Ask the following questions: How many jobs do you think support each of the support services? Can you brainstorm some of them?

Assess: Have each student write down what they are interested in doing for a job, then find a way to relate that back through the bubbles to the resource industry in Alaska. Careers such as an engineer, biologist, welder, and mechanic will be more direct. However, they may have to get more creative with ones such as a teacher: more people who live in an area to develop a natural resource = more families, = more students, = need for more teachers. Same for retail, beautician, etc. Military could be that they defend our country, which has our resources in it.

Extensions, Adaptations and More Resources: Have students pick a bubble and research more careers in Alaska that would fit in that category. Have students try to create even more bubbles showing the next level of support web to each of the ones you listed together.

Direct Hire Careers and Support Service Industries

Name: _____





Pathway to a Successful Career

Essential Question: What is the best career pathway for me, and how will I be successful at it?

Time: 1.5 hours

Overview: Students will learn about the fundamental values associated with a successful career, as well as develop their own career pathway.

Assessment: Can students fill out a career pathway stating the average salary, education requirements, locations in Alaska for obtaining that education and types of companies that hire a specific career they are interested in?

TEACHER INFORMATION AND PROCEDURE

Prior Knowledge for Students: Types of career opportunities in the natural resource industry. See Career Web lesson.

Source: ARE

Materials Needed: Pyramid to a successful career PowerPoint, flow chart, ARE career cards (available at www.akresource.org).

What to do in Advance: Print: A pyramid worksheet for each student, a flow chart worksheet for each student and a career Pathway worksheet for each student.

TEACHING THE LESSON

Gear-up: Present and discuss the Pyramid to a successful career PowerPoint. Have students give examples of times they had to deal with skill, values or knowledge issues at work, school or home.

Pass out Pyramid worksheets to students. Explain the three tiers of the pyramid to success: fundamental skills, knowledge, and values.

Discuss that getting the skills and knowledge for jobs can come in many different forms. Some people go straight from high school to a career and learn on the job, some go to a technical training program and others attend two or four-year colleges. Go through the flow charts and discuss some of the different options in Alaska.

Explore: Have students decide on a type of career they would be interested in from the natural resource industry. (Use career cards to help.) Have the students fill out their own career pathway. They may need to research online the department of labor website (<http://labor.alaska.gov/jobseek/>) and (<http://www.jobs.state.ak.us/energy/index.html>) are helpful websites. Finding average salaries for many jobs can be found here: <http://www.jobs.state.ak.us/energy/learn-more.htm>.

Generalize: Explain there are many options available in Alaska and discuss how easily they can try out different careers through the different apprentice programs before they commit.

Assess: Have the students present the pathway worksheet with specifics for their career to the class.

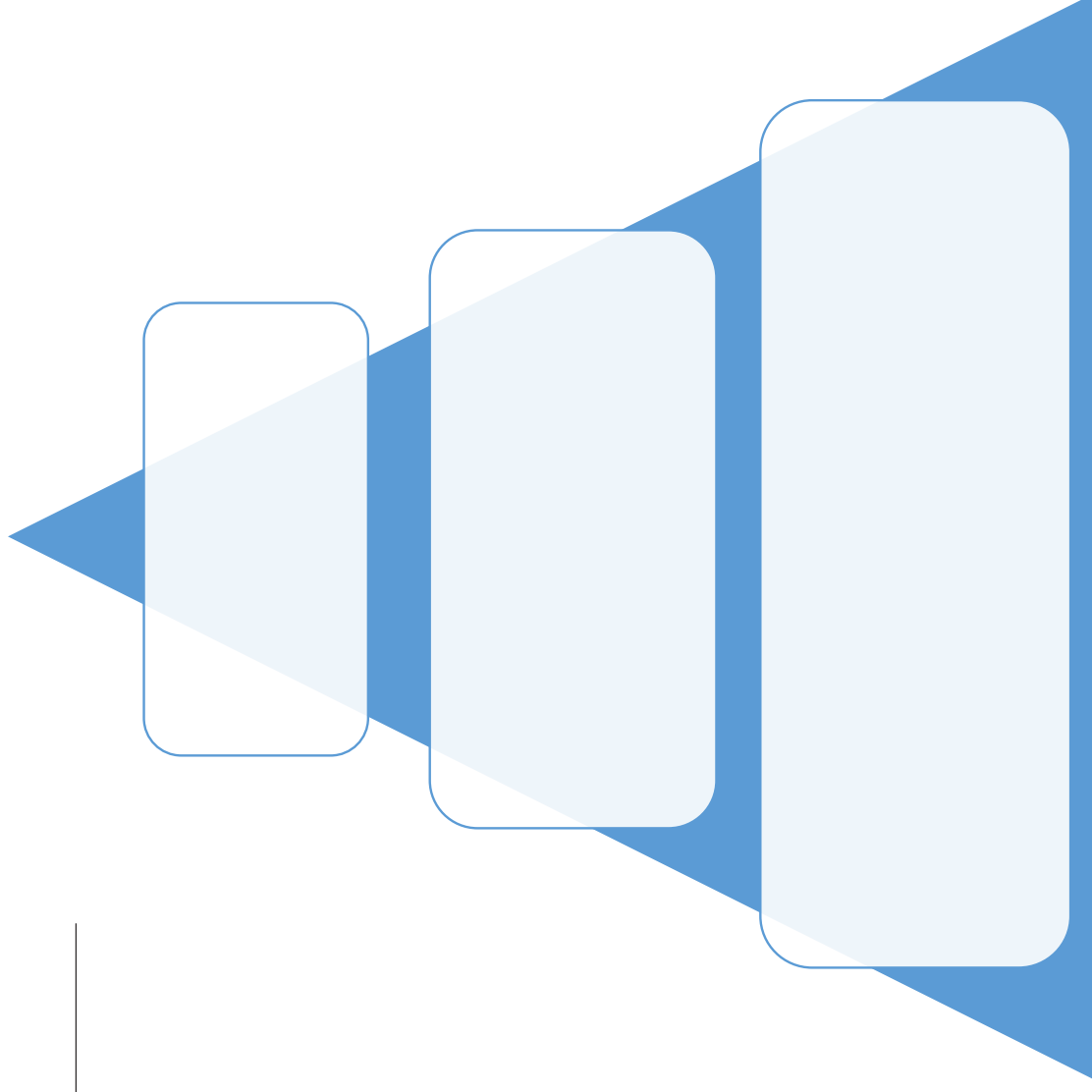
Extensions, Adaptations and More Resources: AKCIS resources <https://acpe.alaska.gov/PLANNING/AKCI>

Career pyramid What career are you interested?

What fundamental skills do you need to do that job?

What type of knowledge or background information would you need to do that job?

What values would you need to be successful in that job?



Now Make YOUR own pyramid:

What fundamental skills do you have?

What is YOUR background / current knowledge (related to your career interests)?

What are YOUR values?

