



**Title:** Introduction Activity: Agriculture, Food & Natural Resources Career Cluster

**Grade:** 6

**Career Development Model:**

Career Exploration

**Nebraska Career Readiness Standards:**

- Manages personal career development

**Objective:**

- Students will categorize varieties of career opportunities in Ag, Food & Natural Resources career cluster.

**Materials and Supplies Needed:**

- Copies for each student of "AFNR Career Cards" handout, preferably printed on cardstock
- One scissors per student
- Optional: Copies of Agriculture, Food, and Natural Resources Cluster at a Glance to enhance discussion.

**Class Instructions:**

Time: 30 - 40 minutes

Part 1

1. Ask the following questions one at a time and have students raise their hands if they have done this today:
  - a. Who has eaten or drank anything today?
  - b. Who dressed themselves this morning?
  - c. Who road in a vehicle to get to school today?
2. Tell the students that we're going to explore a few of the careers that made those things possible...the things we do nearly every day.
3. Hold up the "AFNR Career Cards" handout and explain the first task:
  - a. Tell the students that, in a moment, they'll get the "AFNR Career Cards" handout.
  - b. Once they get one, they'll need to get a scissors and cut out all 21 cards.
  - c. After cutting out the cards, they'll sort them into seven career pathways as

follows: (Write them on the board as you list them.) Agribusiness, Animal, Environmental Service, Food Products and Processing, Natural Resources, Plant, and Power, Structural and Technical Systems.

- d. Tell students that they may not have the same amount of careers in each pile, but they should have at least one per pathway.
- e. Direct students that they should be ready to share in minutes.
- f. Distribute the "AFNR Career Cards" handout to each student and give time to complete the task.

4. Lead a discussion about how the students split up the career cards. Ask the students to justify why they sorted the cards like they did and suggest any changes as needed. (Note: Some cards may cross over pathways, and that's fine – as long as the student can justify why they feel that way, and it makes sense).

Suggested possibilities for each pathway:

- a. Agribusiness: Agricultural Loan Officer, Commodity Broker, Agricultural Customs Agent
- b. Animal: Animal Breeder, Veterinarian, Farm & Ranch Manager
- c. Environmental Service: Landfill Manager, Environmental Engineer, Explosives Worker
- d. Food Products and Processing: Food Engineer, Agricultural Inspector, Biochemist
- e. Natural Resources: Water Treatment Plant Operator, Conservation Scientist, Fish & Game Warden
- f. Plant: Entomologist, Landscape Architect, Agronomist
- g. Power, Structural, and Technical Systems: Agricultural Engineer, Diesel Mechanic, Welder

## Part 2

1. Break students up into groups of three.
2. Each group needs to arrange themselves as follows:
  - a. Two people need to be seated in desks facing each other.
  - b. One person needs to stand directly behind one of the seated people, facing the other seated person.
  - c. The person standing up should have one set of the AFNR Career Cards mixed up, all facing one way in their hands.
3. Once arranged, tell the students that we're going to have a little career competition and give the following directions:
  - a. You each have just assumed a role based on the spot you chose in your group. The person standing is the "HOLDER;" the person sitting directly below the holder is the "GUESSER;" the person sitting across from the holder and

guesser is the "TELLER." Listen carefully to your role.

- b. HOLDER – You are to hold the career cards so the teller can see/read them and the guesser cannot. Flip to the next card once the guesser says pass or gets the career right.
- c. GUESSER – you are to guess the career based on the teller's description. If you don't know it, pass on the card and move on to the next card.
- d. TELLER – you are to read the description on the career card – not the actual career name on the top. Add any other descriptors for the guesser to help them guess the career name.

- 4. Clarify any questions on each person's role. Perhaps use one group to demonstrate how this may work with one card.
- 5. Tell students that when they hear "Go," they'll have seconds to get as many careers as they can.
- 6. Say "Go!"
- 7. When time is up, call time. Have each group tell you how many they got right.
- 8. Keep track on the board.
- 9. Have the students rotate to a new position and do another round for seconds.
- 10. Keep track on the board.
- 11. After three or more rounds, do a comparison of scores. Focus on the improvement of each group and the fact that they're now all familiar with 21 new career options!
- 12. Continue with AFNR exploration.

**Credits/Sources:**

Nebraska Career Education [www.education.ne.gov/nce](http://www.education.ne.gov/nce)

## AFNR Career Cards

<p><b>FOOD ENGINEER</b></p> <p>Design food and food packaging that is convenient and appealing to consumers</p>	<p><b>AGRICULTURAL INSPECTOR</b></p> <p>Work at processing facilities to inspect and assign quality standards to food products</p>	<p><b>ENTOMOLOGIST</b></p> <p>Study insects and their relationship with plants in an ecosystem</p>
<p><b>WATER TREATMENT PLANT OPERATOR</b></p> <p>Treat water so that it is safe to drink</p>	<p><b>ANIMAL BREEDER</b></p> <p>Selectively breed animals for specific characteristics that are desired</p>	<p><b>AGRICULTURAL ENGINEER</b></p> <p>Design equipment to get agricultural products from raw material to a consumable form</p>
<p><b>BIOCHEMIST</b></p> <p>Study the chemical composition of food products and how they interact when mixed</p>	<p><b>CONSERVATION SCIENTIST</b></p> <p>Manage, develop, and help protect soil and ecosystems</p>	<p><b>FISH &amp; GAME WARDEN</b></p> <p>Enforce the laws that protect fish and wildlife</p>
<p><b>VETERINARIAN</b></p> <p>Give medical care to companion or production animals</p>	<p><b>LANDSCAPE ARCHITECT</b></p> <p>Design outdoor areas using plants and other natural materials</p>	<p><b>FARM &amp; RANCH MANAGER</b></p> <p>Raise crops and livestock to supply a specified market</p>
<p><b>LANDFILL MANAGER</b></p> <p>Monitor landfill operations, including design, input, gas development, and water quality</p>	<p><b>AGRICULTURAL LOAN OFFICER</b></p> <p>Work as a banker with agricultural individuals and companies who need loans</p>	<p><b>ENVIRONMENTAL ENGINEER</b></p> <p>Create solutions to environmental problems affecting the welfare of humans and nature</p>
<p><b>EXPLOSIVES WORKER</b></p> <p>Use explosive devices to demolish rock for the purpose of mining</p>	<p><b>DIESEL MECHANIC</b></p> <p>Fix equipment with diesel engines, such as tractors and semi-trucks</p>	<p><b>AGRONOMIST</b></p> <p>Work as a scientist who specializes in field crops and their use as a fuel, feed, or fiber</p>
<p><b>COMMODITY BROKER</b></p> <p>Buy or sell agricultural materials in an open market system with the purpose of making a profit</p>	<p><b>AGRICULTURAL CUSTOMS AGENT</b></p> <p>Work as government employee who enforces laws on agricultural goods coming into/going out of the country</p>	<p><b>WELDER</b></p> <p>Fuse metals together to make agricultural equipment</p>

## Student Sheet for Careers that are a Bingo

Careers that are a Bingo Card


*Directions: Fill in your bingo card at random by selecting 16 of these 21 sample Agriculture, Food, and Natural Resource Careers.*

- Landscapers and groundskeepers
- Farmers and farm managers
- zoologists
- Water treatment plant operators**
- Food scientists**
- Animal breeders
- Animal caretakers
- Environmental engineers
- Gas and oil plant operators
- Agricultural inspectors
- Fish and game wardens**
- Conservation scientists
- Agricultural scientists**
- Explosives workers
- Food Quality Assurance Specialists
- Foresters
- Nursery workers
- Commercial fishers**
- Agriculture teacher
- Greenhouse managers**
- Graders and sorters

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