

Breaking Them Down: Careers in Ag

Grades 3-5

English Language Arts



Objectives

Students will explore some agriculture-related careers while decoding words with common suffixes.

Vocabulary

agriculture- the science or occupation of farming

career- what you do for a living; a job or profession that someone does for a long time

engineer- a person who has scientific training and who designs and builds complicated products, machines, systems, or structures

industry- a group of businesses that provide a particular product or service

processing- a series of actions that produce something or that lead to a particular result

Background

The average person works 2,000 hours a year and 80,000 hours in a lifetime. That means the average person works from age 20 to 60, for an average of 40 hours a week and 50 weeks a year. Since you will spend most of your adult life working, you might want to learn about all kinds of **career** possibilities.

One of the largest **industries** in Oklahoma and the US is **agriculture**. When people think about agriculture, they usually think about farming, or production agriculture—growing crops and livestock on the farm or ranch. But, agriculture is much more than this. When you talk about agriculture, you're still talking about farming or ranching. You're also talking about all the businesses that **process**, distribute, and market agricultural products. Agriculture also includes all the **engineers** who develop agricultural products, all the scientists who research new methods for growing and processing food, and people who fight pests and disease.

Careers related to agriculture:

- agricultural machinery mechanic
- forester and forestry aide
- agricultural supplies sales associate
- dairy farmer
- golf course groundskeeper
- game farm manager
- agriculture education instructor
- plant genetics researcher
- baker
- trucker
- reporter
- many others

Breaking Them Down: Careers in Ag (continued)

Background on Word Origins

4 languages have had the most influence on contemporary English.

A brief overview of the origin of the English language

Three periods roughly correspond to the major developments in the English language.

- Old English 450 – 700 A.D.
- Middle English 1100 – 1500 A.D.
- Modern and Contemporary English 1500 A.D. - now

Old English 450 -700 A. D.

1. Anglo-Saxon Layer

Anglo-Saxon Characteristics

- Common words – basic sight words, labels for environment, family members, body parts, farm and forest animals, basic feelings, etc.
- Base words with single morphemes
- Prepositions, articles, conjunctions
- Digraphs – ch, sh, wh, ng
- Vowel teams – oa, ee, ea, ai, ay
- Compound words – playground, rainbow, doghouse Silent letters - kn, gn, wr, gh (-igh)
- Six syllable types

Anglo-Saxon words

sky, earth, moon, sun, water, sheep, dog, horse, cow, hen, head, arm, finger, toe, heart, shoe, shirt, pants, socks, coat, brother, father, mother, sister, hate, love, think, want, smell

Middle English 1100-1500 A. D

2. French Layer

- William the Conqueror invades England – 1066 A.D.
- Added French-Norman – upper crust words
- Normans rule England for more than 200 years.
- Peasants continue to speak Old English, gradually absorbing some of the French words.
- French words have to do with food, fashion, abstract social ideals, and relationships

French Structure

French words are generally based in **Latin**, but they have their own spelling structure, and are often word of class rather than words of intelligence.

- final e pronounced /ā/: fiancé, sauté, risqué
- -et pronounced /ā/: ballet, buffet, croquet, gourmet, beret ge /zh/: barrage, genre, lingerie, beige
- ch /sh/: charade, chic, parachute, chateau
- ou /ōō/: soup, coupon
- -que /k/: antique, oblique, unique, critique
- final eau /ō/: bureau, trousseau, nouveau, beau, plateau
- soft c and g when followed by e, i: city, nice, gentle, giant

Taken from Tools 4 Reading, Mary E. Dahlgren, Ed. D.

Breaking Them Down: Careers in Ag (continued)

Modern and Contemporary English 1500 A.D. – now

3. Latin Layer

- Old English & French layers have merged
- Printing press begins spelling standardization
- Renaissance creates interest in adding words from two languages: Added Latin & Greek – scholar's and expert's words

Latin Structure

- Latin words follow a strict structure.
- **Prefixes** must be placed before the **root** and **suffixes** must follow the root: in vis ible
- Latin roots (spect, dict, ject, rupt) are unlikely to stand alone as an English word.
- Many roots are closed syllables (short vowels).
- The Latin root often receives the accent or stress:
e ject'
contra dict' ion
- There is often a schwa:
ə dapt

4. Greek Layer

- When the Romans didn't have a word in their language; they brought one in from another language
- Many words came from Greek, often through Latin, especially those that were for the **performing arts, mathematics and sciences**.
- Greek words are made up of combining forms in a fashion similar to compounding words. Two word parts are combined as in *photo, graphy, bi, cycle, hemi, sphere* with both parts carrying meaning.
- These morphemes are not assigned specific roles as prefixes, suffixes, or roots, and may occur in a flexible order.

Greek Sounds and Spellings

- ch for /k/: chorus, technology, Christmas, anchor
- ps for /s/: pseudonym, psychology, psalm
- ph for /f/: graph, sphere, epitaph, phase
- th: theology, theater, thesis, sympathy
- y for /i/ and /ī/: symphony, typhoid, rhythm
- x for /ks/: dyslexia, lexicon
- x also represents /z/: xenophobe, xylophone
- long final e: epitome, hyperbole, psyche
- uncommon vowel split: chaos, create, duet, poem
- Greek combining forms: micro, scope, graph, logy, bio, photo.

Taken from Tools 4 Reading, Mary E. Dahlgren, Ed. D.

Breaking Them Down: Careers in Ag (continued)

Additional Reading

Baretta, Gene, *Now & Ben: The Modern Inventions of Ben Franklin*, Square Fish, 2008.

Kinsey-Warnock, Natalie, *A Farm of Her Own*, Dutton, 2001.

Marsico, Katie, *Working on a Farm (Junior 21st Century Library)*, Cherry Lake, 2008.

Mayer, Cassie, *Farming (Our Global Community)*, Heinemann, 2007.

Orr, Tamra B., *Organic Farmer (Cool Careers)*, Cherry Lake, 2009.

Owen, Ruth, *Growing and Eating Green: Careers in Farming, Marketing and Producing Food (Green-Collar Careers)*, Crabtree, 2009.

Pohl, Dathleen, *What Happens at a Dairy Farm? (Where People Work)*, Weekly Reader, 2006.

Somervill, Barbara A., *Food Scientist (Cool Careers)*, Cherry Lake, 2009.

Websites

www.etymoline.com

Careers in Agriculture

Activity 1

Grades 3-5 Teacher Resources and Standards

Activity 1: Careers Ending with Noun Suffixes, (ELA) 2 50 minute class periods

Students will decode professions using base words, roots, and suffixes.

Oklahoma Academic Standards

Activity 1: Careers Ending with Noun Suffixes (ELA)

- | | |
|-----------|--|
| 3.2.PWS.2 | Students will decode multisyllabic words by applying knowledge of structural analysis: all major syllable patterns, common roots and related prefixes and suffixes |
| 3.4.R.2 | Students will use word parts (e.g., affixes, Greek and Latin roots, stems) to |
| 4.4.R.2 | define new words and determine the meaning of new words. |
| 5.4.R.2 | |

Materials

- Activity 1 Worksheet 1 “**Word Origin Sort**”
- Activity 1 Worksheet 2 “**Careers Ending with Noun Suffixes**”

Procedures

1. Read and discuss the background about word origins with students.
2. Hand out copies of **Activity 1 Worksheet 1 “Word Origin Sort”**
3. Discuss each word and which column to place it.
4. Discuss the noun suffixes “-er,” “-or,” and “-ist.” Brainstorm words that have all of these suffixes. Add some of the agricultural careers included with this lesson to the list.
5. Discuss the differences between words ending in the “-er”, “-or”, and “-ist” suffixes. Words of Anglo-Saxon origin **often** use the suffix “-er.”
6. Words with Latin origin **often** use the suffix “-or.”
7. Words with a Greek origin **often** use the suffix “-ist.”
—All mean “a person who does an action.”
8. Hand out copies of the **Activity 1 Worksheet 2 “Careers Ending with Noun Suffixes”**
—Students will fill in the blanks by reading the description of the agricultural career in the center column and adding “-er” “-or” or “-ist” to one of the words.
—Students will attempt to find the answers on their own before working in pairs to discuss possible answers.
9. Last, have students check word origin in an online resource such as www.etymonline.com

Careers in Agriculture

Activity 1 Worksheet 1: Word Origin Sort



Name: _____ Date: _____

Directions: Cut out all of the words. Use Anglo-Saxon, Latin, and Greek as the category headers. Discuss why each word belongs in a certain category. Students will glue the words under the correct category header.

ANGLO-SAXON	LATIN	GREEK
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hydrology	bake	bank
meteorology	agronomy	ranch
farm	harvest	mill
garden	irrigate	tractor
educate	combine	forest

Careers in Agriculture

Activity 1 Worksheet 1: Word Origin Sort

ANSWER KEY



Name: _____ Date: _____

Directions: Cut out all of the words. Use Anglo-Saxon, Latin, and Greek as the category headers. Discuss why each word belongs in a certain category. Students will glue the words under the correct category header.

ANGLO-SAXON	LATIN	GREEK
bake	irrigate	hydrology
bank	tractor	meteorology
farm	educate	agronomy
garden	combine	
ranch		
harvest		
mill		
forest		

Careers in Agriculture

Activity 1 Worksheet 2: Careers Ending with Noun Suffixes.



Name: _____ Date: _____

Many career titles end with the noun suffixes “-er”, “-or”, and “-ist”. These suffixes are added to words to make nouns describing someone who performs a specific action. Words of Anglo-Saxon origin often use the suffix “-er.” Words with Latin origin often use the suffix “-or.” Words with a Greek origin often use the suffix “-ist.” Read the definition of the agricultural career in the center column. Add the suffix “-er”, “-or”, or “-ist” to one of the root words in the column at right to create the career matching the definition. Write the word in the left column.

CAREER TITLE	DEFINITION	BASE/ROOT WORDS
1.	1. a person who works on a farm	meteorology
2.	2. a person who owns or operates a ranch	forest
3.	3. a person who works in, operates or owns a mill	bank
4.	4. a person who manages forests.	educate
5.	5. a person who works in a garden	farm
6.	6. a person who grows or produces goods or services for sale	hydrology
7.	7. a person who studies the weather	garden
8.	8. a person or machine that harvests a crop	harvest
9.	9. a person who drives a truck	mill
10.	10. a person who helps assess and protect our water supply and water quality	agronomy
11.	11. a person who studies insects	produce
12.	12. a person who works in a business that lends, exchanges, takes care of, or issues money	ranch
13.	13. a person who deals with the methods used by farmers to raise crops and care for the soil	entomology
14.	14. a person who teaches or instructs	truck

Careers in Agriculture

Activity 1 Worksheet 2: Careers Ending with Noun Suffixes.

ANSWER KEY



Name: _____ Date: _____

Many career titles end with the noun suffixes “-er”, “-or”, and “-ist”. These suffixes are added to words to make nouns describing someone who performs a specific action. Words of Anglo-Saxon origin often use the suffix “-er.” Words with Latin origin often use the suffix “-or.” Words with a Greek origin often use the suffix “-ist.” Read the definition of the agricultural career in the center column. Add the suffix “-er”, “-or”, or “-ist” to one of the root words in the column at right to create the career matching the definition. Write the word in the left column.

CAREER TITLE	DEFINITION	BASE/ROOT WORDS
1. farmer	1. a person who works on a farm	meteorology
2. rancher	2. a person who owns or operates a ranch	forest
3. miller	3. a person who works in, operates or owns a mill	bank
4. forester	4. a person who manages forests.	educate
5. gardener	5. a person who works in a garden	farm
6. producer	6. a person who grows or produces goods or services for sale	hydrology
7. meteorologist	7. a person who studies the weather	garden
8. harvester	8. a person or machine that harvests a crop	harvest
9. trucker	9. a person who drives a truck	mill
10. hydrologist	10. a person who helps assess and protect our water supply and water quality	agronomy
11. entomologist	11. a person who studies insects	produce
12. banker	12. a person who works in a business that lends, exchanges, takes care of, or issues money	ranch
13. agronomist	13. a person who deals with the methods used by farmers to raise crops and care for the soil	entomology
14. educator	14. a person who teaches or instructs	truck

Careers in Agriculture

Activity 2

Grades 3-5 Teacher Resources and Standards

Activity 2: Matching Careers, (ELA) 1 50 minute class periods

Students will match duties with the corresponding careers.

Oklahoma Academic Standards

Activity 2: Matching Careers (ELA)

- | | |
|---------|--|
| 3.4.R.5 | Students will use a dictionary or glossary (print and/or electronic) to determine or |
| 4.4.R.5 | clarify the meanings of words. |
| 5.4.R.5 | |

Materials

- **Activity 2 Worksheet 1 “Matching Careers”**

Procedures

1. Hand out copies of **Activity 2 Worksheet 1 “Matching Careers.”**
—Students will draw a line to match the career with the duties performed by the career.
2. Students will write a paragraph about how agricultural careers impact the daily life of the student, their family, and their community.
3. Students will reflect on a potential career in the agriculture industry.

Careers in Agriculture

Activity 2 Worksheet 1: Matching Careers



Name: _____ Date: _____

People involved in the careers listed below are all around you. Draw a line from the career to the duties performed by people in the career.

CAREER

DUTIES

food inspector

Help landowners manage the use of their land. Study the effects of land use and develop new practices to sustain or restore the land.

soil conservationist

Feed and check cattle/calves, tag and vaccinate calves, repair and maintain equipment, brand cattle, move cattle from pasture to pasture

equipment mechanic

Teach high school classes in production agriculture, agricultural mechanics, horticulture, forestry and other agriculture subjects.

butcher

Appraise farm property, check farm credit, arrange for farm loans, answer customer questions, help farmers budget their incomes so they can repay loans.

agriculture teacher

Inspect food at food-processing facilities, check food shipments before they leave or enter the country at ports and border crossings.

truck driver

Gather, write and edit news of interest to farmers and others in farm communities and photographs events like fairs and livestock shows.

crop farmer

Maintain, repair and overhaul farm machinery and equipment, prepares new machinery and equipment for delivery.

farm loan officer

Cut, trim, bone, tie, slice or grind meat for consumption.

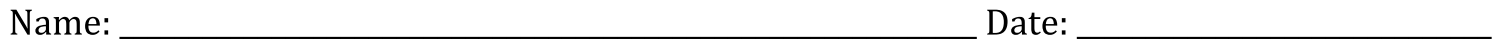
agriculture reporter

Haul freight from one location to another. Operate and perform general maintenance on trucks, deliver and pick up shipments.

ranch hand

Use knowledge of soils and plants to determine fertilizer & irrigation needs, prepare the soil for planting, harvest crops and sell them.

Activity 2 Worksheet 1: Matching Careers, continued

[illegible]

Put a star by any career you have an interest in pursuing.

1. food inspector
2. soil conservationist
3. equipment mechanic
4. butcher
5. agriculture teacher
6. truck driver
7. crop farmer
8. farm loan officer
9. agriculture reporter
10. ranch hand

Careers in Agriculture

Activity 2 Worksheet 1: Matching Careers

ANSWER KEY



Name: _____ Date: _____

People involved in the careers listed below are all around you. Draw a line from the career to the duties performed by people in the career.

CAREER	DUTIES
food inspector	Help landowners manage the use of their land. Study the effects of land use and develop new practices to sustain or restore the land.
soil conservationist	Feed and check cattle/calves, tag and vaccinate calves, repair and maintain equipment, brand cattle, move cattle from pasture to pasture
equipment mechanic	Teach high school classes in production agriculture, agricultural mechanics, horticulture, forestry and other agriculture subjects.
butcher	Appraise farm property, check farm credit, arrange for farm loans, answer customer questions, help farmers budget their incomes so they can repay loans.
agriculture teacher	Inspect food at food-processing facilities, check food shipments before they leave or enter the country at ports and border crossings.
truck driver	Gather, write and edit news of interest to farmers and others in farm communities and photographs events like fairs and livestock shows.
crop farmer	Maintain, repair and overhaul farm machinery and equipment, prepares new machinery and equipment for delivery.
farm loan officer	Cut, trim, bone, tie, slice or grind meat for consumption.
agriculture reporter	Haul freight from one location to another. Operate and perform general maintenance on trucks, deliver and pick up shipments.
ranch hand	Use knowledge of soils and plants to determine fertilizer & irrigation needs, prepare the soil for planting, harvest crops and sell them.

Breaking them Down: Careers in Agriculture

Activity 3

Grades 3-5 Teacher Resources and Standards

Activity 3: Career Research, (ELA) 2-4 50 minute class periods

Students will research and present over agriculture-related careers.

Oklahoma Academic Standards

Activity 3: Career Research (ELA)

- | | |
|---------|--|
| 3.1.W.1 | Students will report on a topic or text with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences at an appropriate pace. |
| 4.1.W.1 | |
| 5.1.W.1 | Students will give formal and informal presentations in a group or individually, organizing information and determining appropriate content for audience. |
| 3.6.W.3 | Students will summarize and present information in a report. |
| 4.6.W.3 | |
| 5.6.W.3 | |

Materials

- Computer
- Accurate Agriculture Books

Procedures

1. Read and discuss background and vocabulary with students.
2. Based on the background and previous lessons, students will create a list of agricultural related careers.
3. Students will each select one of the careers and use online or library resources to research and report on the career.
4. Written and oral reports should include:
 - Daily career requirements and duties.
 - Education and training is necessary.
 - Career pay range.
 - What companies or organizations employ persons in the particular career.
 - Other pertinent information about this career.