

# EDUCATOR TOOLKIT

for Careers in the Fertilizer and  
Agriculture Industry



# Using This Toolkit

This toolkit offers a grab-and-go approach for lesson construction. These frameworks can be used with a variety of subjects, but are best suited for teaching about careers in the soil and fertilizer industry. These activities are age appropriate for high-school students to teach career planning and readiness.

These lesson activities are designed to suit a 50-minute class period. This guide is divided into interest approaches, application activities, and hands-on review activities. Simply select one of each to create a unique lesson for your classroom. The lesson can supplement your own or school-based curriculum, or can be used as a standalone lesson. Each can be applied to state standards, career technical education standards, or national education standards that are listed below.



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## Guiding Standards

The activity frameworks available in this guide are aligned with National Career Development Association (NCDA) Standards. This includes the following:

### **GOAL PS3** *Integrate growth and change into your career development*

**PS1.R2** Assess the impact of your abilities, strengths, skills, and talents on your career development.

**PS1.K4** Identify your work values/needs.

**PS1.R4** Assess how your work values/needs are reflected in your career goals.

**PS3.K5** Identify situations (e.g., problems at school or work) in which you might need assistance from people or other resources.

### **GOAL CM1** *Create and manage a career plan that meets your career goals*

### **GOAL CM2** *Use a process of decision-making as one component of career development*

### **GOAL CM3** *Use accurate, current, and unbiased career information during career planning and management*

**CM1.K1** Recognize that career planning to attain your career goals is a lifelong process.

**CM1.A2** Develop a career plan to meet your career goals.

# Interest Approaches

This section offers six different activity frameworks that will take about five minutes to complete. The purpose of these activities is to engage the students and provide a gateway introduction to the content of the lesson.

## Hieroglyphic Matching

### Description

Use images that represent particular keywords students will learn through the course of a lesson. Ask students to attempt to match them using their current knowledge and context clues.

### Preparation

Create your own images for particular keywords or buzzwords using the Career Explorer Career List. You can also print images from the NFLF Career Explorer Site to use with the Career Planner.

### Process

- **Provide Directions.** Share the images and the keywords with the students at the beginning of the lesson. Have students try to match these. There are no wrong answers. Have students defend their choices.

### Optional Enhancements

This activity can pair alongside the Hieroglyphic E-Moment in the Application Section.

## Fact or Fiction

### Description

Present two truths and one lie related to the content and ask students to decide which statements are which.

### Preparation

Identify the statements and how you will present them to the class.

### Process

- **Prepare the Statements.** Come up with three statements pertaining to the lesson at hand; two should be true and one should be a lie. You can read these aloud or write them on the board for the class.
- **Ask the Students.** Allow ample time for the students to think. Then ask the students to hold up the number corresponding to the statement they think is false.
- **Discuss.** Discuss each statement and connect the statements to the lesson topics.

### Example:

- Fertilizer Sales Representatives can make more than some healthcare professionals.
- You do not need to go to college to have a quality career.
- You must have a four-year degree to get a job in the fertilizer industry.

ANSWER: The first two bullets are true and the bottom one is false.

# Interest Approaches

## Word Scramble

### Description

Choose a word related to the content of the lesson and challenge students to unscramble the word. The first to solve the word scramble wins.

### Preparation

Identify the words you plan to scramble and write them on the board before class.

### Process

- **Provide Directions.** Write a scrambled version of a word (or multiple words) on the board and challenge students to determine the word(s).

### Optional Enhancements

A few examples to consider: careers in the fertilizer industry, Pest Control Advisor, Engineer, Social Media Strategist, etc.

## Me, Pair, Share

### Description

In various reflection activities, guide your students to reflect to themselves, share with a partner, and then share with the group as a whole.

### Preparation

**Option 1:** Create one or two questions relating to the topic of the day. Pose these questions individually by asking them to the class or writing them on the board.

**Option 2:** Show students one of the Career Explorer Videos. Then ask students what two things stood out to them most from the video. *Check out the videos on the Career Explorer Page at [nutrientsforlife.org!](https://nutrientsforlife.org/)*

### Process

- **Provide Directions.** Give students 30 seconds to think about their response to the question and to write it down on a piece of scratch paper or Post-it note (Me). Then, ask students to share their ideas with a partner (Pair). Lastly, ask for volunteers to share their response or their partner's response (Share).

### Example Questions:

- "What is a career?"
- "What do I need to have to get a career/job?"
- "What do you want most out of a career?"
- "What does an Agronomist do?"

# Interest Approaches

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## Word Buffet

### Description

Using buzzwords related to the lesson, the class divides into small groups and captures their understanding of the buzzword as they rotate around the classroom.

### Preparation

Identify buzzwords related to the lesson and set up posters around the classroom with a word written on each.

### Process

- **Provide Directions.** Divide the class into groups. They will start out at one poster and write, draw, or sketch what comes to mind. Then they will rotate to the next poster. This continues until all groups have visited each poster.
  - **Direct Students.** Give students one minute at each poster. After all rotations are complete, ask one volunteer from each poster to share what has been captured.
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## Interest Stations with Notes

### Description

With posted Career Profiles around the room, have students read each profile and capture their notes and highlights about each.

### Preparation

Print out a selection of the Career Profiles (at least 10) and post them around the room.

### Process

- **Direct Students.** Direct students to travel around the room and jot down three interesting facts about three careers that interest them the most. They should capture some notes at each station about the careers.
- **Wrap It Up.** After they are done, have them share with a partner what they thought was the most interesting.

# Content and Instruction

This section offers three different activities that will take about 15 minutes to complete. The purpose of these activities is to engage the students and provide a gateway introduction to the content of the lesson.

## Go Get It Jigsaw

### Description

Read an article about careers and work together as a class to teach the material.

### Preparation

Identify a career article from the list of careers in the Nutrients for Life Career Section. Print out the worksheet on the following page.

### Process

- **Pass Out Materials.** Provide students or a group of students with an article or a section of the Nutrients for Life Career Section.
- **Instruct Students.** Break the article or section into shorter pieces. Assign each piece to a student or a group of students, provide them time to read over their section, and take notes using their worksheet. Let them know they are tasked with teaching the other students or group about that section.
- **Wrap It Up.** As each student or group teaches or shares with the rest of the class, instruct students to capture notes about each section.

### Note:

- This activity enables students to break up longer text into smaller sections.
- This process allows for greater comprehension of longer articles or text.
- Each student receives one copy of the handout found on the next page. Print these before class.

# Reading Jigsaw

NAME: \_\_\_\_\_

Worksheet Supplement for "Go Get It Jigsaw"

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Take your assigned section and jot down three main ideas about the text. Be ready to collect information on the other reading sections.

Section 1

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Section 2

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Section 3

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Section 4

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Section 5

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Section 6

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Section 7

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# Content and Instruction

## Team Poster Activity

### Description

Have your students, using posters and physical creativity, work together to summarize a section of the content and then share that with the class at large. This activity may take more than one class period. You can break this into two days, if needed.

### Preparation

Assemble the posters, markers, crayons, etc. and identify the content that each group will cover.

### Process

- **Create Groups.** Break students into groups, as many groups — as you need to cover content.
- **Optional:** Assign roles to individuals in each group:
  - **Facilitator:** Responsible for getting the team off to a quick start. They make sure everyone in their team understands the task before beginning. They should organize their team so they can complete the task together.
  - **Resource Monitor:** Responsible for collecting supplies for their team. They should call the teacher over if their team has a group question. They care for and return their team's supplies and organize their team's clean-up efforts.
  - **Reporter:** Responsible for giving updates about their team's progress, making sure each of their team members records their own work or data. They should also organize and introduce their team's group report.
  - **Team Captain:** Responsible for encouraging each of their teammates to participate, making sure their team is following the group norms, and helping the team find compromises.
- **Assign Research Topics.** Each group is assigned a career or a section of the content they would like to present using a number of classroom resources (technology, books, etc.). This portion of the activity will require 20-45 minutes depending on how in depth you ask them to be in their research.
- **Develop Presentation.** Direct students to create their posters using the research they have completed. They will have 10-20 minutes to create a poster of their assigned content. Groups get a sheet of poster paper, markers, crayons, etc., and have access to their research notes and a number of classroom resources (technology, books, etc.).
- **Review Together.** Students will present these to the class, and the class will jot down notes on each presentation.

### Quick Tip:

Use the Career Explorer Gallery to make this a career exploration project!  
Check out the gallery on the Career Explorer Page at [nutrientsforlife.org!](http://nutrientsforlife.org)



# Content and Instruction

## Career Self Assessment and Career Planning Guide

### Description

In this activity, have your students work through their career assessment and compare their results to the Career Planning Guide. The results can be shared with a partner.

### Preparation

Use the NFLF Career Self Assessment and Career Planning Guide with classroom technology, computer lab, or smartphones. Provide each student with a copy of the Career Planning Guide. A printed version or an editable digital PDF will suffice. You can choose either of the career guides (Plant Quest or Road Map) for your students, or allow them to choose.

### Process

- **Complete Assessment.** Provide students 10-15 minutes to complete the assessment and discover their three top career matches.
- **Use Guides.** Have students use their results to complete the Career Planning Guide.
- **Review Together.** When they are done have them share their guide with a partner.
- **Take Home Assignments.** Have the students share with a parent, counselor, or guardian and have that individual sign the bottom of it.

#### Quick Tip:

Have your students access the Career Self Assessment on the Career Explorer Page at [nutrientsforlife.org](https://nutrientsforlife.org)!

# Application Activities

## Cartographer E-Moment

### Description

Like any journey you take, it is more easily accomplished with a map in hand. Use this conversation starting activity to lead students to a deeper understanding of their own career journey. Lead students in a discussion and analogy breakdown to identify that maps visually represent information on a journey, and to understand we can do the same thing with career journeys.

### Preparation

Optional: Gather map resources to discuss as props.

### Process

- **Set Context.** Ask your students: "Imagine that we had the day off. If you could go anywhere within driving distance, where would it be?" Brainstorm ideas on the board as you take responses. "How would we get to these places?"
- **Explain the Illustration.** Discuss the characteristics of maps. Write the characteristics on the board or a flipchart. Lead them to understand that maps visually represent information and relationships among pieces of information. Just as we can plan out a super fun road trip, we can also map out our journey to a career!
- **Create Maps.** Have learners represent the information they just learned using a map style of their choice.
  - *Example:* Map the path to picking out a career

### Quick Tip:

Find the Career Planning Guide on the Career Explorer Page at [nutrientsforlife.org](https://www.nutrientsforlife.org)!

## Hieroglyphic E-Moment

### Description

Group think visual representations for ideas related to the content material.

### Process

- **Ask.** Ask learners: "What pictures or icons will help us remember the important content we learned today?"
- **Brainstorm.** Generate a bank of ideas on the board.
- **Capture Keywords.** Provide students with unlined paper. Direct students to divide paper into four to six boxes. Have learners write the four to six keywords they learned today.
  - *Examples:* Career, Agronomist, Fertilizer Sales Representative, Human Resources, Chef, etc.
- **Get Creative.** Have students generate an image for each word or description they captured on their paper.

# Application Activities

## Go with the Flow E-Moment

### Description

Break down the meaning of a flowchart as a group and apply the format to the steps it takes to reach a career.

### Preparation

Gather a flowchart example for the discussion.

### Process

- **Show.** Show a sample flowchart.
- **Give Directions.** Ask students to explain the relationships signified by the lines and shapes. Explain the shapes' meanings, as needed.
- **Complete Activity.** Flowchart the content. Assign everyone to represent the same information using a flowchart format. They may insert as many shapes, as needed.
  - *Example:* Chart the steps to becoming an Agronomist.

### Quick Tip:

Use the handout on the next page!

ROOT  
Your Future

# Go with the Flow

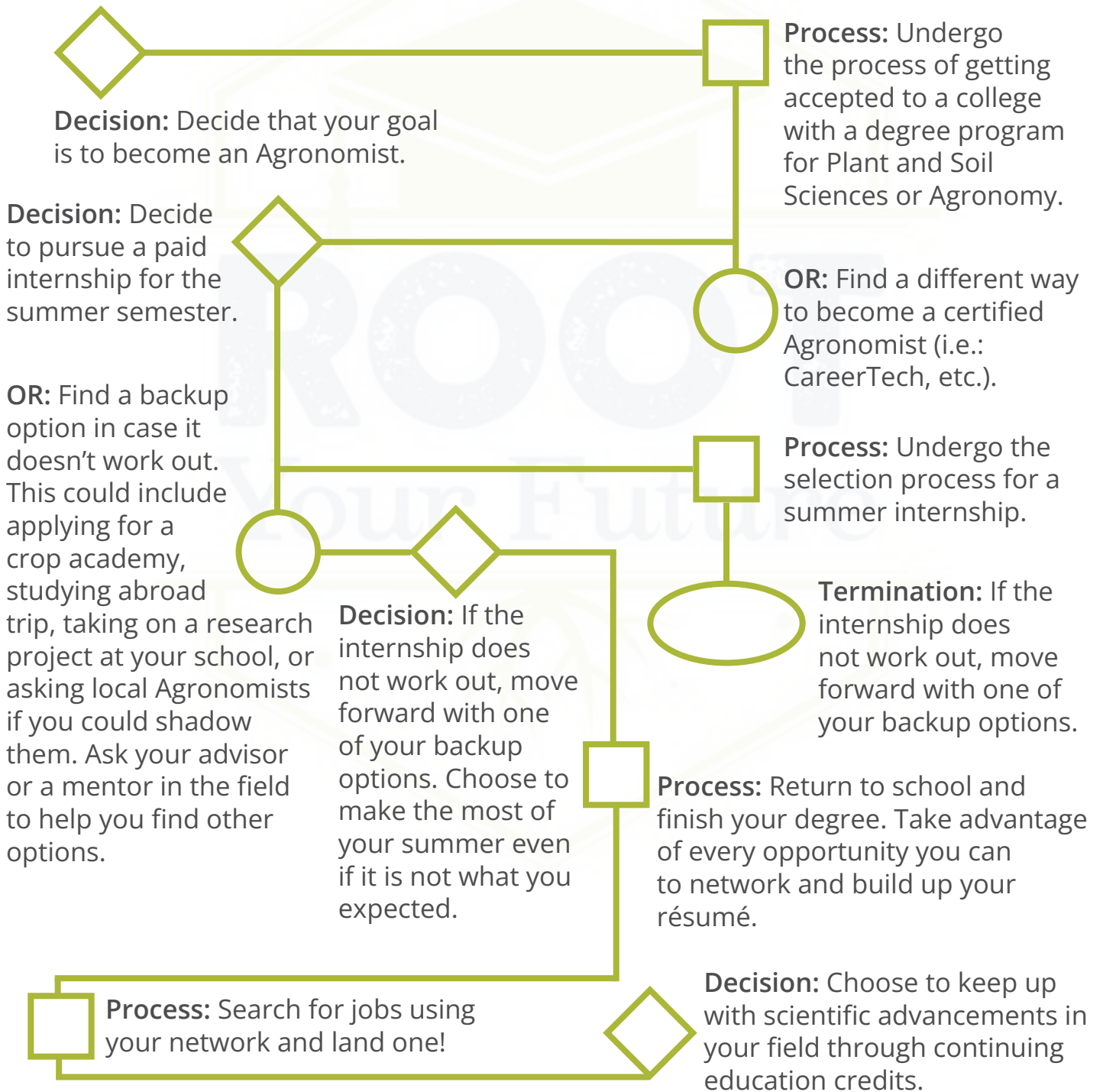
NAME: \_\_\_\_\_

## FLOWCHART ACTIVITY EXAMPLE

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Use the images to the left to create your own flowchart!



# Go with the Flow

NAME: \_\_\_\_\_

## FLOWCHART ACTIVITY

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Decision



Process



Or



Termination

Use the images to the left to create your own flowchart!



# Hands-On Review Activities

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## Team Challenge

### Description

Review the material in a team vs. team questioning at the front of the classroom.

### Preparation

Compile a list of questions from the lesson and the answers you will accept as correct.

### Process

- **Prepare for Activity.** Split students into two teams.
- **Get Started.** Have two members from each team stand at the front of the board.
- **Ask.** Ask the pair a question pertaining to the previous lesson.
- **Award Points.** The first one to write the correct response on the board gets a point! If it is a tie, award each team a point.
  - *Make it fun:* Have each team come up with team names! Even better, have the names be career or fertilizer focused!

## Password or Pictionary

### Description

Using key terms from the lesson, students should act out/use words related to the term to help their team identify the term.

### Preparation

Compile the list of terms from the lesson and the answers you will accept as correct.

### Process

- **Prepare for Activity.** Break students into two teams.
- **Get Started.** One student will stand at the front of the group, their back turned to the teacher. This is the “guesser”. Each team will pick one guesser per round. The rest of the students will be sitting facing the teacher. The teacher will hold up a term from the lesson. The sitting students will be responsible for providing the guesser one-word clues, so they can guess.
  - You can also give students flipcharts or small whiteboards and swap roles to turn this into pictionary!
- **Identify the Correct Answer.** If the guesser from that team does not guess correctly, then the other team gives a clue. Both teams will try to get their guesser to identify the same word.