



Plant Systems Careers

Middle School Food and Agricultural Literacy Curriculum

Precepts

- I. Professional Growth
- I2. Make clear decisions in my professional life.

National Standards

CS.02.03.01.a. Explore various career interests/ options.

NL-ENG.K-12.4 – Communication Skills

NL-ENG.K-12.12 – Applying Language Skills

Student Learning Objectives

As a result of this **unit** the students will...

Explore the eight pathways of the Agriculture, Food and Natural Resources (AFNR) career clusters.

As a result of this **lesson** the students will...

Identify 10 career options in plant systems.

Content Outline

I. Identify 10 career options in **plant** systems.

- A. List careers in **plant** systems field.
- B. Observe images of **plant** system works and associate what they are doing with daily tasks and job opportunities.
 1. Gene splicing a corn **plant** for a desired trait
 2. Identifying soil horizons
 3. Teaching students about **plants**
 4. Feeding/caring for fish
 5. Farmer purchasing seed from a seed salesman
 6. Repairing an injured tree
 7. Teaching adults about agriculture
 8. Trading commodities/agriculture products
 9. Caring for a golf course
 10. Greenhouse manager showing **plants** to customers

Time

Instruction time for this lesson: 45 minutes.

Resources

National FFA Organization. (2009). LifeKnowledge Precepts and Signs of Success — States' Career Clusters Initiative. (2009). Agriculture, Food and Natural Resources — Model. Retrieved July 22, 2009, from States' Career Clusters Initiative Web site: <http://www.careerclusters.org/resources/ClusterDocuments/agdocuments/1AGModel.pdf>

Tools, Equipment, and Supplies

MS.CAS.1.7.AS.A – one per student
MS.CAS.1.7.ASSESS.A – one per student
MS.CAS.1.7.AS.B – AS.K – one copy each to hang around the room

Key Terms

The following terms are presented in this lesson and appear in **bold italics**:

Plants

Interest Approach

Tape the 10 posters (**MS.CAS.1.7.AS.B-AS.K**) up around the room.

Hand out a copy of **MS.CAS.1.7.AS.A** to each student as they enter the room. For this activity you will ask students to list careers related to **plants** systems that they already know of.

Welcome back! I am glad you are here. We have been discussing the different systems in agriculture and investigating career opportunities. Today we are going to focus in on one particular system and will have the opportunity to focus in on one career within this system, do a picture search, and create a cool foldable with the knowledge we have gained.

By giving 100% today we are going to take another step closer to making solid decisions in our professional lives. Our goal is to make our careers happen and not just let them happen to us. By taking the time to thoroughly study career options we can make sure we make good decisions that will affect us for the rest of our lives.

Let's get started! In front of us is a picture of a **plant**.



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You probably noticed that the leaves are blank and there is room for us to write on them. When I say **PLANTS**, take the next three minutes to fill in the leaves with one career per leaf that you know about in the **plant** systems area. Fill out as many as you can. What questions are there? **PLANTS!**

Monitor time and count down as time expires.

Great job! Just in case some of you have some blank leaves left, let's go around the room and say what you wrote down on your **plant**. If an idea is said that you didn't write down go ahead and fill in another leaf. Who will start?

If time allows, draw a large similar tree on the writing surface and fill in the leaves on it during the same activity or create one on butcher paper to keep in the room throughout the **plant** systems unit.

Thank you for your high level of participation. There really are a ton of careers in **plant** systems, aren't there? Let's deepen our knowledge about some of these careers with a scavenger hunt and create a foldable with the information that we find.

Summary of Content and Teaching Strategies

Objective 1. As a result of this unit the student will identify 10 career options in **plant** systems.

Tape the 10 posters (**MS.CAS.1.7.AS.B-AS.K**) around the room, if you haven't already.

Set up the Go-Get-It Moment® for this part of the lesson.

There are ten posters taped up around the classroom. Each of these posters represents a career in the **plant** systems field. When I say GO, we will take the next 10 minutes, or one minute per poster, to get out of our seats and take a notebook and a writing utensil to study the posters.

On your paper, write down the career title and what you think the person in the poster is doing for each career. Then think a little deeper and write down another task you think the person in the poster might also do. What questions are there? GO!

Say rotate every minute to keep the activity moving and to make sure each student gets to every poster.

Keep students on task and help those individuals who may be struggling. Count down time as needed when the activity ends.

Review/Summary

Great job today. We are going to finish up the day by sharing what we think each of the people in the posters are doing and then sharing another task they may also do on a daily basis.

Walk around to each poster as you ask the following debriefing questions.

What do you think the person is doing?

There really isn't an exact right answer; therefore, thank each student for sharing and guide them to a class accepted answer and make sure everyone gets the information in their foldable. Here is an acceptable answer for each of the poster:

MS.CAS.1.7.AS.B – gene splicing a corn **plant** for a desired trait

MS.CAS.1.7.AS.C – identifying soil horizons

MS.CAS.1.7.AS.D – teaching students about **plants**

MS.CAS.1.7.AS.E – feeding/caring for fish

MS.CAS.1.7.AS.F – farmer purchasing seed from a seed salesman

MS.CAS.1.7.AS.G – repairing an injured tree

MS.CAS.1.7.AS.H – teaching adults about agriculture

MS.CAS.1.7.AS.I – trading commodities/agriculture products

MS.CAS.1.7.AS.J – caring for a golf course

MS.CAS.1.7.AS.K – greenhouse manager showing **plants** to customers

Who had something different? As we go around the room share what you think they may also do as part of their career. The rest of us are going to record all of the ideas in our foldables.

Move around to each poster and adjust for time if necessary.



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Application

Extended classroom activity:

Have each student select a career in **plants** systems and do research on what type of classes one would take in college to prepare for such a career.

FFA activity:

Engage in the Agronomy or Floriculture CDE. If this isn't available in your state use the CDE materials to hold a local CDE.

SAE activity:

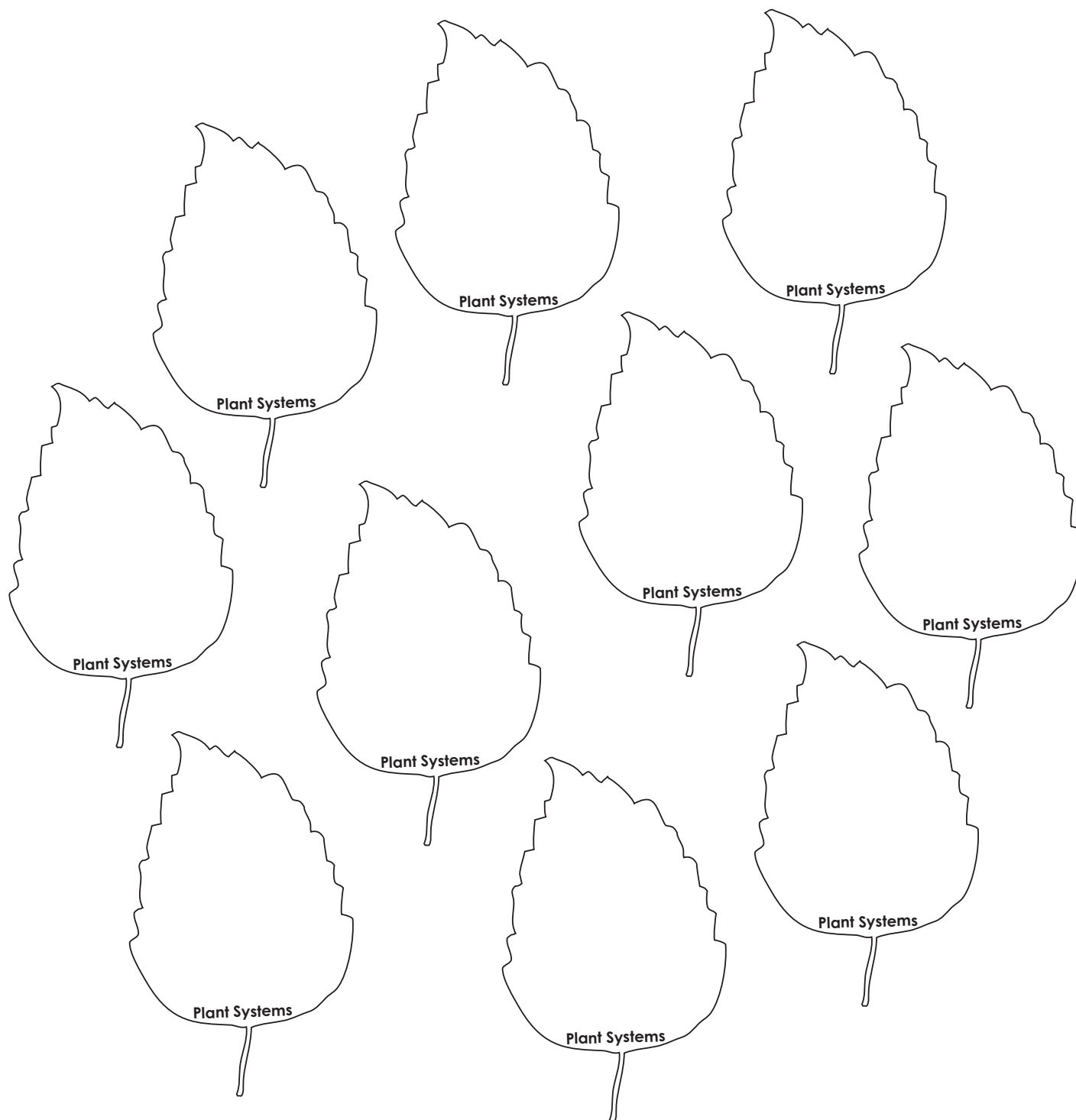
Start a gardening or florist entrepreneurship.

Evaluation

The evaluation for this activity is the notebook that was created.

Answers to Evaluation

MS.CAS.1.7.ASSESS.A.





Rubric for notebook

Please read carefully and make sure each of us gets full points

CATEGORY	4	3	2	1
Required Elements	The notebook includes all required elements as well as additional information. (10 career titles and classmates' other ideas)	All required elements are included on the notebook.	All but 1 of the required elements is included on the notebook.	Several required elements were missing.
Labels	All careers are on the visible part of the notebook and are clearly labeled.	Almost all items of importance on the notebook are clearly labeled.	Many items of importance on the notebook are clearly labeled.	Labels are too small, messy OR no important items were labeled.
Task performed by career	More than 10 tasks are labeled per career area.	At least 8 tasks are labeled per career area.	At least 6 tasks are labeled per career area.	4 or less tasks are labeled per career area.
Attractiveness	The notebook is exceptionally attractive in terms of design, layout, and neatness.	The notebook is attractive in terms of design, layout, and neatness.	The notebook is acceptably attractive though it may be a bit messy.	The notebook is distractingly messy or very poorly designed. It is not attractive.
Totals:				

Comments:

