



Lesson Plan

Ranch Orchard Foreman

Created: 02/2019 by the National FFA Organization

SAE Video Summary: Follow Jared as he walks through his supervised agricultural experience (SAE) program as a ranch foreman for an orchard. Jared has a passion for the orchard business, specifically caring for trees. Jared is responsible for everything from planting to irrigation to pest management.

STUDENT LEARNING OBJECTIVES:

After completing these activities, students will ...

1. Describe how an orchard is managed.
2. Explain the impact of an SAE.
3. Illustrate how to properly plant a tree.

TIME REQUIRED: 30 minutes

RESOURCES:

1. "Jared Mudd – SAE – Ranch Foreman – Orchard," <https://vimeo.com/278943654>
2. Arbor Day Foundation, <https://www.youtube.com/watch?v=W2xjDqbr1U4>
3. The Arbor Day Foundation, <https://www.arborday.org/trees/treefacts/>

EQUIPMENT AND SUPPLIES NEEDED:

1. A copy of the "Trees Everywhere" worksheet for each student
2. Internet access to play the video in real time or embed it in a PowerPoint ahead of time

THIS QUICK LESSON PLAN WOULD WORK WELL AS:

1. An Arbor Day lesson.
2. An SAE lesson.
3. A tree production lesson.

STUDENT ACTIVITY SHEETS:

Direct access to student activity sheets without lesson plan or answer key for easy upload to learning management systems or printing for classwork.

<https://ffa.box.com/s/k1ra2p021bumwqlgtm30jbbn8dw74v6a> (Word)

<https://ffa.box.com/s/4oufjmosifrttjz0nb1sk3mra5lixki7> (PDF)

THESE ACTIVITIES ARE ALIGNED TO THE FOLLOWING STANDARDS:

FFA Precept

- FFA.PL-A.Action: Assume responsibility and take the necessary steps to achieve the desired results, no matter what the goal or task at hand.
- FFA.PL-E.Awareness: Understand personal vision, mission and goals.
- FFA.PL-F.Continuous Improvement: Accept responsibility for learning and personal growth.
- FFA.PG-I.Professional Growth: Assume responsibility for attaining and improving upon the skills needed for career success.
- FFA.PG-J.Mental Growth: Embrace cognitive and intellectual development relative to reasoning, thinking and coping.
- FFA.CS-M.Communication: Effectively interact with others in personal and professional settings.
- FFA.CS-N.Decision Making: Analyze a situation and execute an appropriate course of action.

Common Core – Speaking and Listening

- CCSS.ELA-Literacy.SL.9-10.2: Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.

Common Core – Math Practices

- CCSS.MP1: Make sense of problems and persevere in solving them.

- CCSS.MP5: Use appropriate tools strategically.
- CCSS.MP6: Attend to precision.

AFNR Career Ready Practices

- CRP.02. Apply appropriate academic and technical skills. Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive.
- CRP.04. Communicate clearly, effectively, and with reason. Career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/or visual methods.

Partnership for 21st Century Skills

- Flexibility and Adaptability
- Initiative and Self-Direction
- Leadership and Responsibility

LESSON PLAN:

1. *Bell Ringer:* What tasks might you be required to complete daily if you worked at an orchard? (Examples: planting trees, checking for pests, etc.)
2. *Introduction:* Orchard management is important to ensure a healthy produce crop for the United States. Jared Mudd takes us behind the scenes to see what he has learned and what his daily tasks are.
3. *Activity:*
 - a. Part 1: Each student needs a copy of the worksheet "Trees Everywhere." Students will begin by watching the video "Jared Mudd – SAE – Ranch Foreman – Orchard." The video URL is <https://vimeo.com/278943654>. During the video, students will complete the questions about Jared's SAE.
 - b. Part 2: After the video, have students answer, to the best of their ability, the five true/false and multiple choice questions. Students should complete this task without assistance. Once all students have finished, have them tally how many questions they got right. Recognize the student with the most correct. Discuss the answers with students. (All questions and information are from the Arbor Day Foundation, <https://www.arborday.org/trees/treefacts/>.)
 - c. Part 3: Now that students understand why trees are important, students will learn how to plant a tree by watching a video about planting containerized trees (<https://www.youtube.com/watch?v=W2xjDqbr1U4>). Afterward, students will draw and label a flow chart that shows the process of properly planting a containerized tree.
4. *Follow-up:* Have students determine three places they could plant new trees at home or at school. Students should explain why they selected the locations they did.
5. *Leveling Up:* Host an agricultural literacy event on Arbor Day, the last Friday in April, and teach younger students about trees and tree management. Send students home with tree sprouts to plant and grow at their own homes.
6. *Exit Ticket:* Why is proper tree management important in an orchard setting? Why are trees beneficial?

NAME: _____

Aligned to the following standards:

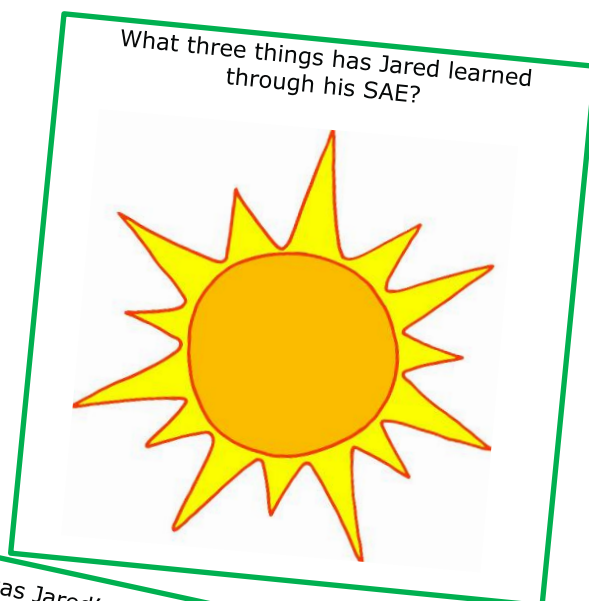
FFA.PL-A; FF.PL-E; FFA.PL-F; FFA.PG-I; FFA.PG-J; FFA.CS-M; FFA.CS-N;
CCSS.ELA.SL.9-10.2; MP1; MP5; MP6; CRP.02; CRP.04

Trees Everywhere

Part 1

DIRECTIONS:

Read over and answer the questions below while you watch the video "Jared Mudd – SAE – Ranch Foreman – Orchard," available at <https://vimeo.com/278943654>.



This SAE has been very beneficial to Jared. How could an SAE benefit you and your future?



Part 2

DIRECTIONS:

Answer the following questions to the best of your ability without help. Let's see who can get the most right!

1. Global forests removed _____ of fossil fuel emissions annually from 1990 to 2007.
- a. $\frac{1}{4}$
 - b. $\frac{1}{3}$
 - c. $\frac{1}{6}$
 - d. $\frac{1}{2}$

2. True or False

Office workers who can see trees from their windows report having significantly less stress and more satisfaction.

3. One large tree can provide enough oxygen for how many people?

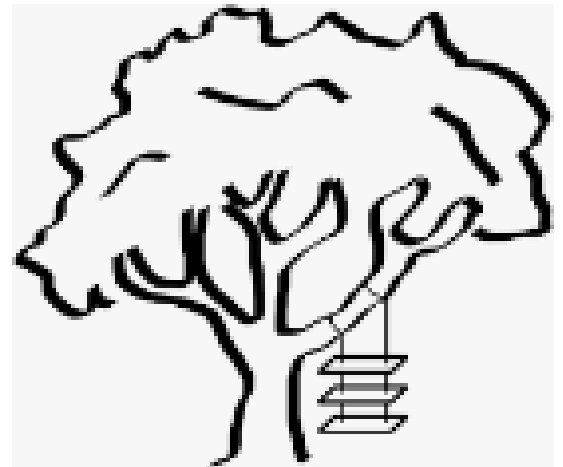
- a. 1
- b. 2
- c. 3
- d. 4

4. True or False

Trees can help reduce crime.

5. True or False

Trees reduce the property value of homes because they require more maintenance and care.



Part 3

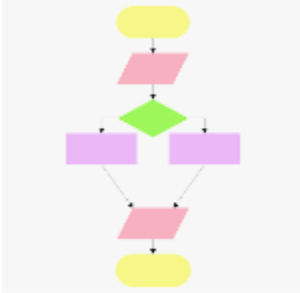
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DIRECTIONS:

Now that you have learned about the importance of trees and how Jared Mudd has used his SAE to develop his skills in orchard management, let's learn about how to plant our own trees. Watch this video, <https://www.youtube.com/watch?v=W2xjDqbr1U4>, to learn how to plant containerized trees and then complete the activities below.

Draw and label a flow chart to depict each step in the process of planting a containerized tree. Include a picture and label for each major step that a person would need to know and follow to properly plant the tree without causing damage.

Example of what a flow chart can look like:



Identify three types of trees you can plant at your school.

What is Arbor Day?

When is Arbor Day?

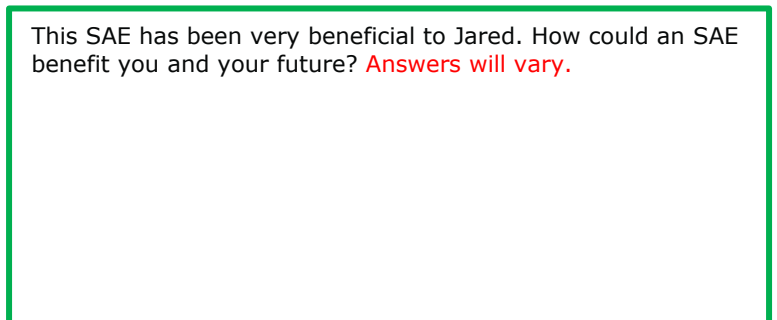
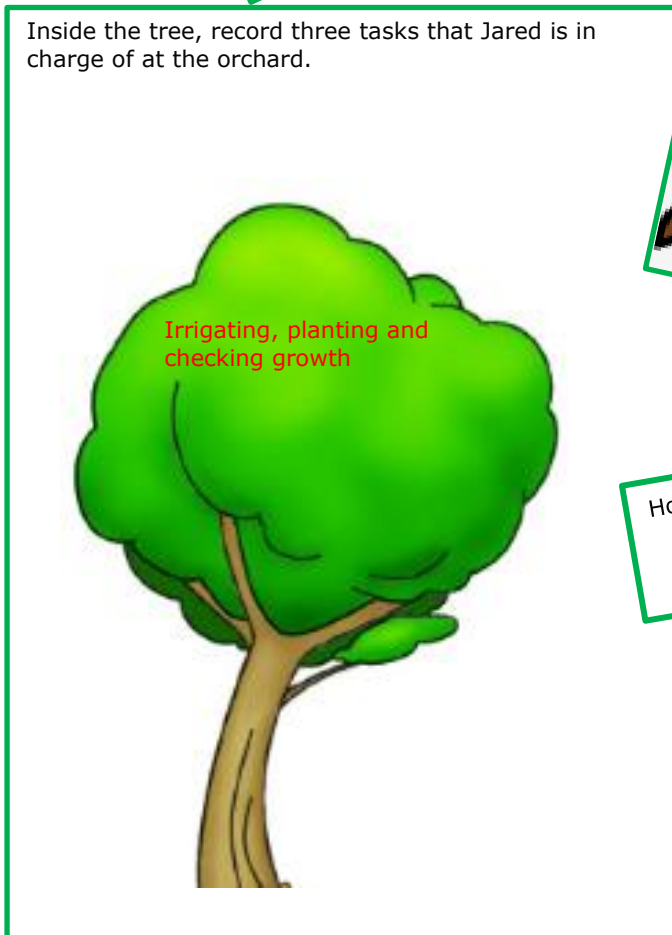
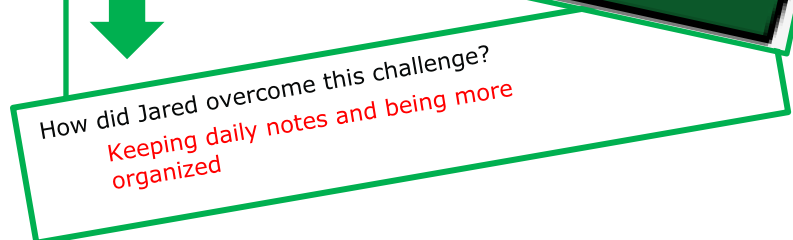
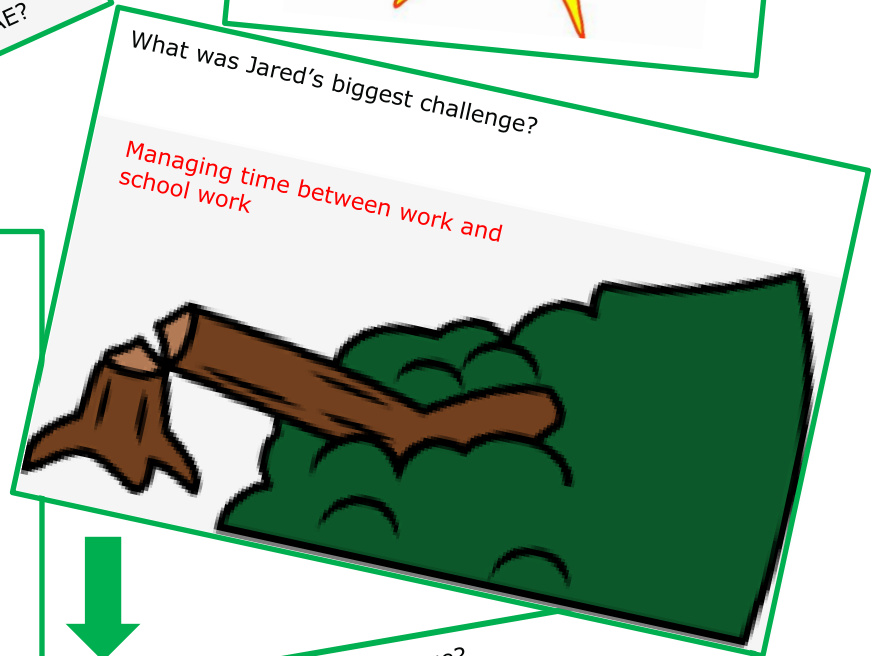


KEY: Trees Everywhere

Part 1

DIRECTIONS:

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Part 2

DIRECTIONS:

Answer the following questions to the best of your ability without help. Let's see you can get the most right!

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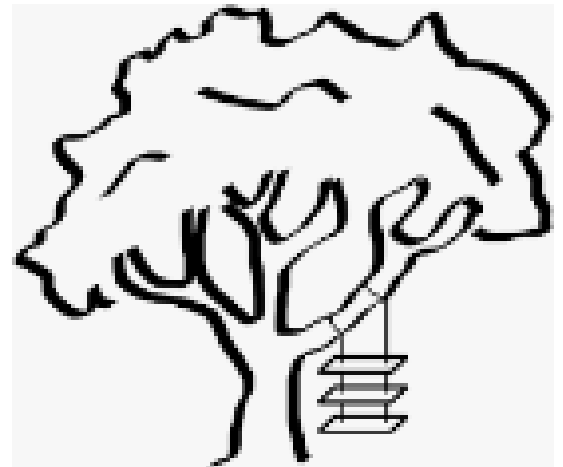
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Draw and label a flow chart to depict each step in the process of planting a containerized tree. Include a picture and label for each major step that a person would need to know and follow to properly plant the tree without causing damage.

Drawings may vary. Major steps are listed below:

Remove the tree and keep the soil intact by tapping and massaging the side of the container →
slide the tree from the container, do not pull the tree by the trunk →
if root bound, cut an x on the bottom and four vertical slices on the root ball sides →
set tree in middle of the hole, not too deep →
support tree in a straight position and pack soil around the roots without air pockets →
fill until level with the root collar →
create a water holding basin around the tree →
water the tree →
add mulch in a 3 foot circle around the tree about 2 inches deep and 4 inches away from the trunk →
remove all labels, wiring and rope, which can impact growth) →
prune broken, dead, and competing or rubbing branches →
water once per week at a slow trickle for one hour

Identify three types of trees you can plant at your school. **Answers will vary.**

What is Arbor Day? **Arbor day is a recognition and celebration of trees and their benefits.**

When is Arbor Day? **The last Friday in April**

