



NEW HORIZONS

FALL 2018 TEACHING GUIDE



IN THIS GUIDE, YOU WILL FIND ACTIVITIES FOR SIX ARTICLES IN THE FALL 2018 ISSUE OF FFA NEW HORIZONS. WORKSHEET ANSWER KEYS CAN BE FOUND AT THE END OF THE ACTIVITY WORKSHEET. THE ACTIVITIES ARE ALIGNED TO EDUCATIONAL STANDARDS. (SEE EACH ACTIVITY FOR THE SPECIFIC STANDARDS).

SCHOLARS SAY...

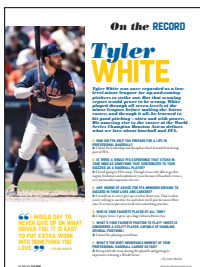
A compiled list of discipline-specific or academic vocabulary found throughout this issue of FFA New Horizons:

Discipline	Weather
Leadership	Crimson
Community service	Exotic
Natural disaster	Diversified
Program of Activities (POA)	Artificial insemination
Respiratory	Curriculum
Veterinarian	Dormant
Wildfire	Keynote
Climate change	Indiscriminately
Fossil fuels	Precaution
Global warming	Unpredictable
Greenhouse gases	Retrofitting
Precipitation	Comprehensive

VOCABULARY ACTIVITY

Have students select a word from the vocabulary list and write down four statements about the word. Encourage them to think about the word's part of speech, definition, related words, etc. One of the statements they write should be a lie. After students complete this task, collect the statements. Next, divide the students into small groups (groups of three if possible). Have them discuss the words and statements and try to identify, as a group, which statement is the lie.

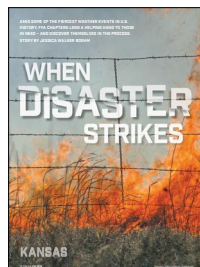
Source: www.readingandwritinghaven.com/5-brain-based-vocabulary-activities-for-the-secondary-classroom/



On the Record: Tyler White:

The article "On the Record: Tyler White" is a question and answer session with a former FFA member about the impact FFA has had on him.

[Appendix 1: What Happens After High School](#)



When Disaster Strikes:

Check this article out to learn how FFA members take action through community service when disaster strikes.

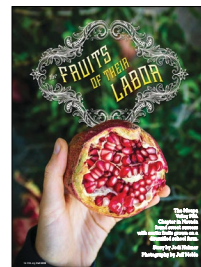
[Appendix 2: When Disaster Strikes](#)



Talking Points: Climate Change:

Climate change is at the forefront of conversations about the environment and the careers needed to address the growing issue. Read this article to learn more about this important issue.

[Appendix 3: Climate Change](#)



Fruits of Their Labor:

This article highlights an FFA chapter in Nevada and the school farm where the members grow pomegranates. Learn about this fruit and how the chapter promotes agriculture in the community.

[Appendix 4: The Fruits of Their Labor](#)



Transformative Training:

Learn how former FFA member Kate Lambert was positively impacted by FFA, regardless of how proficient she was in FFA activities.

[Appendix 5: What's Your Brand?](#)

[Appendix 6: Career Success Reflection](#)



Ag 101 - Get Serious About Ag Safety:

This article highlights important safety tips for ATV use, tractors, grain bins and much more. Read this article to learn how to apply these tips during this busy season.

[Appendix 7: Get Serious About Ag Safety](#)



NEW HORIZONS

FALL 2018 TEACHING GUIDE



ARTICLE SUMMARY

On the Record: Tyler White

The article "On the Record: Tyler White" is a question and answer session with a former FFA member about the impact FFA has had on him. Tyler White is a professional baseball player. White discusses the activities that helped him in his career as well as some of the highlights of his time as an FFA member.

BELL RINGER:

What impact will FFA have on your future?

DISCUSSION QUESTIONS

1. What role does FFA play in preparing you for your future goals?
2. What opportunities does FFA afford you?
3. What surprises you the most about the individuals on the notable alumni list?

ACTIVITY

Students should first complete the bell ringer activity. Have students answer the bell ringer question on their own paper. Once all students have written an answer, have them discuss and explain their answers with their neighbor. After five minutes, call on a few groups to share. Generate a list together.

Using the worksheet "What Happens After High School?" (Appendix 1), have students identify what the people listed in Part 1 all have in common. After they are done, have students share their responses. Students will select a well-known FFA alumnus of their choice and create a profile for that person. Lastly, students will read the article "On the Record: Tyler White" and complete Part 3 of the worksheet. Internet access is not required for this activity.

Have students complete the exit ticket on their own paper. Have students share those experiences with the class if there is time.

FFA TIP

Find FFA activities in your local chapter that have a personal interest to you and your future. Interested in becoming a mechanic? Look into the career development event(s) related to agricultural mechanics in your state!

VOCABULARY

Discipline
Leadership

EXIT TICKET

How can FFA and being involved in high school activities prepare you for your goals beyond high school?

CAREER FOCUS AREA

Any

RELATABLE WEBSITE

National FFA Alumni:
<https://www.ffa.org/support/alumni>

RESOURCE HIGHLIGHT

Visit AgExplorer, AgExplorer.com, to learn about unique careers in agriculture!

APPENDICIES

Appendix 1: What Happens After High School

STANDARDS ALIGNMENT

• **FFA PRECEPT:** FFA.PL-A.Action, FFA.PL-C.Vision, FFA.PG-I.Professional Growth, FFA.PL-E.Awareness, FFA.CS-N.Decision Making • **Common Core-Literacy in Science & Technical Subjects: Writing:** CCSS.ELA-LITERACY.WHST.9.10.4
• **Common Core-Math Practices:** MP5, MP6 • **AFNR Career Ready Practices:** CRP.04

On the RECORD

Tyler WHITE

Tyler White was once regarded as a low-level minor leaguer for up-and-coming pitchers to strike out. But that scouting report would prove to be wrong. White played through all seven levels of the minor leagues before making the Astros roster, and through it all, he learned to hit good pitching – often and with power. His amazing rise to the roster of the World Series Champion Houston Astros defines what we love about baseball and FFA.

Q: HOW DID FFA HELP YOU PREPARE FOR A LIFE IN PROFESSIONAL BASEBALL?

A: I liked the leadership and discipline that I learned from being part of FFA.

Q: IS THERE A SINGLE FFA EXPERIENCE THAT STICKS IN YOUR MIND AS SOMETHING THAT CONTRIBUTED TO YOUR SUCCESS AS A BASEBALL PLAYER?

A: I loved going to FFA camp. Though I was only able to go during my freshman and sophomore years because of baseball, it was a very memorable experience for me.

Q: ANY WORDS OF ADVICE FOR FFA MEMBERS SEEKING TO SUCCEED IN THEIR LIVES AND CAREERS?

A: I would say to never give up on what drives you. That is what you're willing to sacrifice for and what you'll put the most effort into. It is easy to put extra work into something you love.

Q: WHO IS YOUR FAVORITE PLAYER OF ALL TIME?

A: Chipper Jones. I grew up a huge Atlanta Braves fan.

Q: WHAT'S YOUR FAVORITE POSITION TO PLAY? (WHITE IS CONSIDERED A UTILITY PLAYER, CAPABLE OF HANDLING SEVERAL POSITIONS.)

A: I most like playing second base.

Q: WHAT'S THE MOST MEMORABLE MOMENT OF YOUR PROFESSIONAL BASEBALL CAREER SO FAR?

A: Being with the team during the playoffs and getting to experience winning a World Series.

– By John Walter

“I WOULD SAY TO NEVER GIVE UP ON WHAT DRIVES YOU. IT IS EASY TO PUT EXTRA WORK INTO SOMETHING YOU LOVE.”

– TYLER WHITE

NAME: _____

Aligned to the following standards:
FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PG-I; FFA.CS-N; CCSS.WHST.9.10.4;
MP5; MP6; CRP.04

Appendix 1: What Happens After High School?

Created: Fall 2018 by the National FFA Organization

Part 1

DIRECTIONS:

What do all of the following people have in common? Place your answer in the thought bubble.

Sterling Marlin (Former NASCAR driver; two-time Daytona 500 winner)	James E. Oesterreicher (Former CEO and chairman of the board, J.C. Penney Company Inc.)	Willie Nelson (Country music entertainer/recording artist)
Tim McGraw (Country music entertainer/recording artist)	Taylor Swift (Singer/recording artist)	Jim Davis (Creator of Garfield comic strip)
Jimmy Carter (Former U.S. President/Nobel Prize Winner)	Tyler White (Professional baseball player)	Jordan Gross (Professional football player, Carolina Panthers)



What do all of the people above have in common, besides being well known?

Part 2

DIRECTIONS:

FFA members can develop into successful individuals in any industry of interest. Research a well-known FFA alumnus of your choice and complete the profile below. A list of well-known FFA alumni can be found at <https://ffa.app.box.com/s/e4f8jyi3l6oibv2un22gr0s5sxoggota>.

Name: _____

Date of Birth/Age: _____

From: _____

Known for/Accomplishment:

Famous quote:

Why did you choose this person?

(Draw a profile picture that represents this individual.)

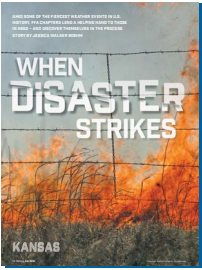
Aligned to the following standards:
FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PG-I; FFA.CS-N; CCSS.WHST.9.10.4;
MP5; MP6; CRP.04

Describe how these activities will help you to accomplish your future goals.



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FALL 2018 TEACHING GUIDE



ARTICLE SUMMARY

When Disaster Strikes

Throughout 2017, the United States experienced some of the worst natural disasters it has ever encountered. These setbacks ranged from tropical cyclones and inland flooding to drought and wildfires. However, even in times of struggle, FFA members take action through community service whenever they can. This article walks through two such instances in which FFA members stepped up in times of need.

BELL RINGER:

What is a natural disaster? Why are natural disasters so tough for communities?

DISCUSSION QUESTIONS

1. What is a natural disaster?
2. How can you positively impact others during times of need?
3. How can students effectively plan to ensure a successful community service activity?

ACTIVITY

Students should first complete the bell ringer activity. Have students answer the bell ringer question on their own paper. Once all students have written an answer, have them discuss and explain their answers with their neighbors. After five minutes, call on a few groups to share. Generate a list together. Hand out the "When Disaster Strikes" worksheet (Appendix 2) and have students complete the natural disaster circling activity.

Next, have students read the article "When Disaster Strikes." This worksheet has two parts: (1) Learn about the community service efforts of two FFA chapters to help in relief efforts and (2) Brainstorm and create a Program of Activities (POA) for an activity that the students could implement in their own community if a disaster were to strike. Internet access is not required for this activity.

Have students complete the exit ticket on their own paper. Have students share those experiences with the class if there is time.

FFA TIP

Develop community service activities for your FFA chapter and a complete POA to be able to implement those activities throughout the year.

SAE TIP

Do you have students looking for SAEs? Encourage them to communicate with community groups or local, state and national government organizations to learn about service opportunities where they can gain and apply agricultural and leadership skills.

VOCABULARY

Community service
Natural disaster
Program of Activities (POA)
Respiratory
Veterinarian
Wildfire

EXIT TICKET

What role can students play in helping when disaster strikes?

CAREER FOCUS AREAS

Animal Systems
Environmental Service Systems
Natural Resources Systems
Plant Science Systems

RELATABLE WEBSITES

National FFA Living to Serve Grants:
<https://www.ffa.org/livingtoserve/grants>

National FFA Program of Activities (POA):
<https://www.ffa.org/poa>

RESOURCE HIGHLIGHT

Check out the Living to Serve Grants that are available, such as the Day-of-Service mini-grants. This grant can help your chapter make a difference in your community.
<https://www.ffa.org/livingtoserve/grants>

APPENDICIES

Appendix 2: When Disaster Strikes

STANDARDS ALIGNMENT

• AFNR Performance Element: CS.01 • FFA Precept: FFA.PL-A.ACTION, FFA.PL-C.VISION, FFA.PL-F.CONTINUOUS IMPROVEMENT, FFA.PG-J.MENTAL GROWTH, FFA.CS-N.DECISION MAKING • Common Career Technical Core: AG1
• Common Core-Reading: Informational Text: CCSS.ELA-LITERACY.RI.9-10.2 • Common Core-Literacy in Science & Technical Subjects: Writing: CCSS.ELA-LITERACY.WHST.9.10.4 • AFNR Career Ready Practices: CRP.02, CRP.04, CRP.05, CRP.06

AMID SOME OF THE FIERCEST WEATHER EVENTS IN U.S. HISTORY, FFA CHAPTERS LEND A HELPING HAND TO THOSE IN NEED – AND DISCOVER THEMSELVES IN THE PROCESS.

STORY BY JESSICA WALKER BOEHM

WHEN DISASTER STRIKES

KANSAS



It is said that the best predictor of the future is the past. Unfortunately, weather and climate disasters have occurred all along, and they show no signs of stopping. In fact, the U.S. experienced a historic year of such disasters in 2017. In total, the U.S. was impacted by 16 separate billion-dollar disaster events, according to Climate.

gov, including three tropical cyclones, eight severe storms, two inland floods, a crop freeze, drought and wildfire.

When disaster strikes, though, it's not uncommon to find FFA members across the country at the center of relief efforts in their local communities and beyond. They often take the skills and lessons they've learned through the organization and use these talents to serve those in need.

In addition to helping others, many FFA members change their lives and perspectives through these unforgettable experiences, as well.

They discover the value of community service and learn just how supportive the U.S. agriculture community is.

BEAUTY FROM ASHES

After devastating wildfires swept through states including Texas, Oklahoma, Kansas and Colorado the week of March 5, 2017, the Sanilac FFA from the Sanilac Career Center in Peck, Mich., sprang into action.

Members were inspired by an initial convoy that headed to farms on the High Plains with supplies on March 17, led by a group of volunteers now known as Ag Community Relief, a Michigan-based nonprofit organization that helps farmers and ranchers devastated by wildfires, drought and floods across the U.S. On April 7, during spring break, a team of Sanilac FFA and Sanilac County 4-H members followed suit, renting a bus and driving to Kansas to help ranchers tear down fences and posts that had been damaged or destroyed in the fires.

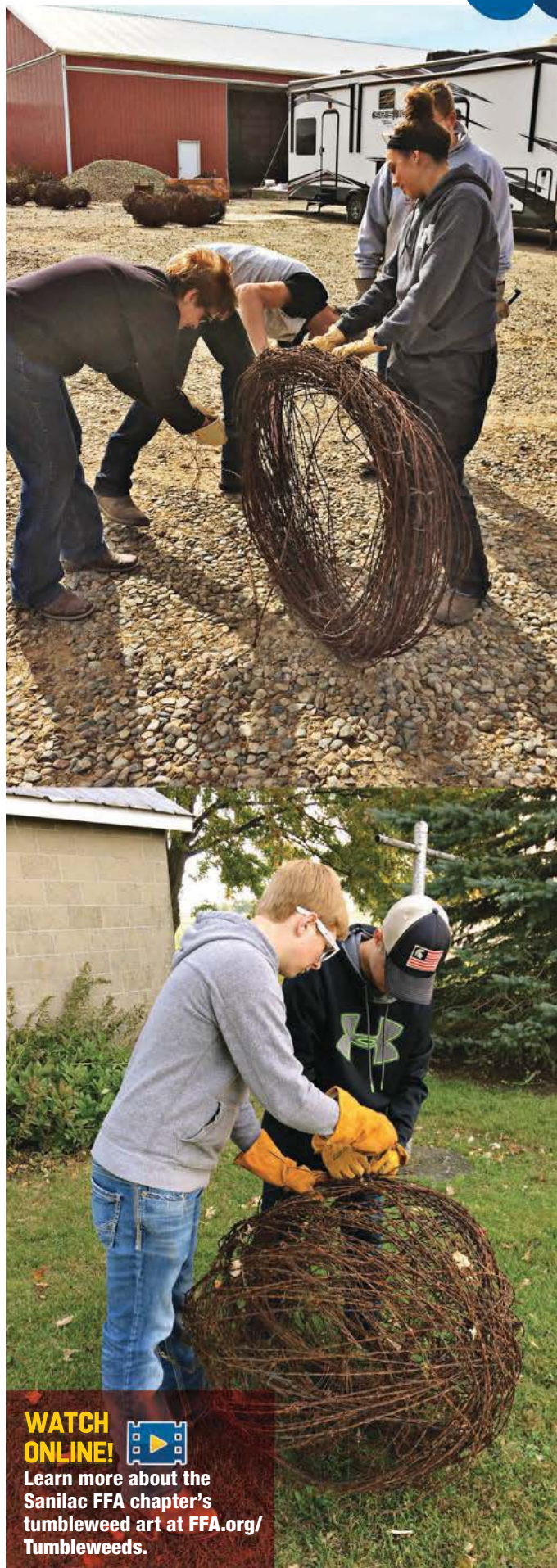
"The ranchers were so grateful for these kids, who volunteered their time, because it gave them hope and showed them that they were not forgotten," says Christy Gordon, who serves as secretary of the Ag Community Relief organization's board. "They were reminded that people truly care. There were some great relationships formed during this difficult time, and it was a life-changing experience for many of those young people."

After returning home on April 10, Sanilac FFA members rolled the burned barbed wire into balls to create decorative tumbleweeds and other crafts, which they sold to support Ag Community Relief's efforts and to purchase new rolls of barbed wire for the ranchers impacted by the fires. To date, hundreds of rolls have been donated, and more will be on the way soon.

"The students were excited about the tumbleweed project, and they made each creation very personal," says Robert Sollman, Sanilac FFA advisor. "Each tumbleweed included a tag that identified the fire and ranch the barbed wire came from, so the people buying them could feel a connection to those affected by the devastation. The project is ongoing; we still have barbed wire left over, and the students plan to create new tumbleweeds and decorations so they can continue raising funds for those in need."

As a way of thanking young volunteers for their selfless-

CALIFORNIA



**WATCH
ONLINE!**



Learn more about the Sanilac FFA chapter's tumbleweed art at FFA.org/Tumbleweeds.

These students could have sat at home and waited it out, but they chose to show up and help.”
Emmalee Casillas says.

ness, as well as encouraging them to continue donating their time and participating in community service, Ag Community Relief has established a scholarship fund for FFA and 4-H students, clubs and chapters in Michigan and other states.

“We want to keep this wonderful relationship going between FFA, 4-H and Ag Community Relief, and we want to support these kids as much as we can,” Gordon says.

ANIMAL INSTINCTS

When wildfires broke out in Napa County, Calif., on the night of Oct. 8, 2017, Napa FFA advisor Emmalee Casillas made the decision to open up Vintage Farm at Vintage High School (VHS), where her FFA members regularly took care of animals, to livestock and pets in the area that were in danger. She quickly posted on Facebook to let her followers know that their animals were welcome at the farm, and she almost immediately began getting text messages from FFA members asking if they could help.

“Seven kids came out that very first night,” Casillas says. “We scrambled to empty out all of our pens at the farm and filled as many buckets with water as we could. Then we got a call to go help someone, which was

never the plan. We thought people would bring their livestock to us. That’s when we started traveling around with our truck and trailer to rescue animals.”

For the next 70 hours, Casillas and that seven-member FFA crew worked around the clock. Stephen Cole, a 16-year-old sophomore at VHS and a member of the Napa FFA, was part of that group. His primary jobs were preparing the pens to accommodate the animals and treating them when they arrived.

“I stayed at the farm and handled the vet tech tasks,” Cole says. “I knew the animals were going to be coming in with respiratory issues from smoke inhalation, and I was prepared with medication. Thanks to my teachers, I knew what to do and what it would take to make sure every animal was taken care of.”

Vintage Farm housed more than 200 animals, including horses, cows, alpacas and llamas, and Cole continued to help care for them in the days following the fires. He remembers working alongside the head veterinarian from the University of California, Davis, which, he says, was an unforgettable experience that reinforced his dream of becoming a large animal veterinarian in the future.

“We took care of the

This page, top: Sanilac FFA members and volunteers prepare to turn charred barbed wire into “tumbleweed” lawn art. **Below:** Zac Molesworth and Logan Leen finish a tumbleweed masterpiece. **Opposite, top:** Napa FFA advisor Emmalee Casillas (left) pauses with member Jack Odell (center) and alumni and supporter Johnny Albers (right). **Opposite, middle and bottom:** Vintage Farm hosted more than 200 animals, including horses, cows, alpacas and llamas. **Here,** members provide care.

animals like they were our own,” Cole says. “It was challenging, but we all came together as a chapter and a community and got the job done. It was definitely a life-changing experience, and it’s something that will stick with me forever.”

The experience changed Casillas’ life, too, and she says she was impressed with how her students rose to the occasion and worked together as a team. She says more than 40 Napa FFA members helped care for animals during a

two-week period, even developing a system to ensure each animal was fed, hydrated and accounted for.

“These students could have sat at home and waited it out, but they chose to show up and help,” Casillas says. “Napa FFA is part of a four-year animal science pathway at VHS, and I’m proud to say that our members took what they learned in the classroom and applied it beautifully. Their leadership skills were put to the test, as well. They truly amazed me.” •

A WAY OF LIFE

Service to others is fundamental for FFA members nationwide. From wildfire recovery to hurricane cleanup, several other chapters, including alumni and supporters, have taken part in natural disaster relief efforts. Here’s a roundup of some of their stories.

Members of the **Stover FFA** in Stover, Mo., acquired supplies for those affected by the 2017 wildfires in Oklahoma, Texas and Kansas. According to Bryan Rumans, the chapter’s advisor, the effort was led by chapter President Caysi Knierim and Vice President Blayne Murry. Members collected 180 bales of hay, 13,000 pounds of feed, 30 pallets of bottled water, \$850 in fencing supplies and \$1,600 in cash donations, which were used to purchase milk replacer and fencing supplies and to cover transportation costs.

Following the devastation caused by Hurricane Harvey in August 2017, the Illinois-based **Mount Vernon FFA** and **Mount Vernon FFA Alumni and Supporters** raised and donated \$2,212 to the Texas Agricultural Education Disaster Relief Fund, which helps FFA

chapters and agricultural education programs rebuild after natural disasters.

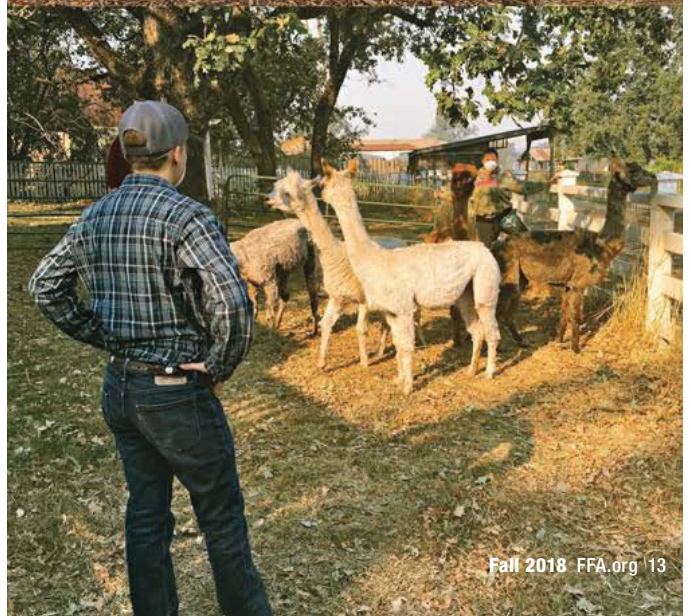
Culver’s of Kingwood, Culver’s of Atascocita and another Culver’s restaurant in Texas donated \$1,000 to help the **Kingwood FFA** renovate an agricultural education barn and replace tools and equipment damaged during Hurricane Harvey.

After wildfires swept through Lipscomb County, Texas, and burned more than 300,000 acres of ranchland in 2017, a group of **Raymond Central Alumni and Supporters** from Nebraska collected donations from other alumni and supporters, local businesses and chapters, and drove more than 1,000 miles to deliver the supplies to the community’s ranchers. **Raymond Central FFA** President Miranda Hornung also helped by creating and distributing fliers about the donations and collecting donations from area FFA chapters.

Following the 2017 Kansas wildfires, 15 students and advisors from the **Chaparral FFA** helped an Ashland rancher pick up the remains of a destroyed barn and helped tear down and repair burned fence lines.

PARTNER PROJECT

In 2016, Red Brand created an FFA service project challenge called “The Red Brand Wildfire Relief Program.” The project helps with wildfire recovery efforts by leveraging the support of FFA chapters from around the country. Groups are encouraged to seek out neighbors who need help with fence tear-out or rebuilding. In return, Red Brand will donate up to \$500 to the FFA chapters that coordinate the efforts. To learn more, visit redbrand.com/wildfire.aspx.



NAME: _____

Appendix 2: When Disaster Strikes

Created: Fall 2018 by the National FFA Organization

DIRECTIONS:

Circle all the events that would be considered a *natural disaster*.

Inland Flooding

Tropical Cyclone

Hoover Dam Collapsing

9/11 Bombing

Uncontrolled Wildfires

Major Crop Freeze

Tsunami

Tacoma Narrows Bridge Collapse

Panama Canal Falling

DIRECTIONS:

Begin reading the article "When Disaster Strikes" in the fall 2018 issue of *FFA New Horizons* and complete the following activities.

1. Identify 4 natural disasters that impacted the U.S. in 2017:

- (1) _____
(2) _____
(3) _____
(4) _____



2. During the summer of 2017, the Napa County, California area was struck with raging wildfires that caused destruction of agricultural resources. Describe what the students at Vintage High School did to help out during the wildfires.

3. What skills have you learned during your school career (agriculture courses, school activities, community events/activities, etc.) that would help to make a similar program run as effectively and efficiently as this one did? (Examples: hard word, dedication, etc.)



- (1) _____
(2) _____
(3) _____
(4) _____
(5) _____

Use the space below to capture additional thoughts for question 3:

NAME: _____

Aligned to the following standards:
CS.01; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PG-J; FFA.CS-N; AG1; CSS.RI.9-10.2; CCSS.WHST.9.10.4; CRP.02; CRP.04; CRP.05; CRP.06;

4. When disaster strikes, helpful neighbors can be the difference between recovering and struggling to survive. Local FFA programs and schools can serve as wonderful resources in such times, just like Vintage High School did during the 2017 wildfires. Unfortunately, disaster can strike at any time and without warning.

(1) Identify a natural disaster that could impact your home town and school.

- (2) The ultimate question: How can I help? Develop an activity that could help alleviate some of the stress if the above identified disaster were to occur. To outline your activity, complete the following chart that could then be added to your chapter or school's Program of Activities (POA) in case an emergency were to strike.



NATIONAL
FFA ORGANIZATION



Program of Activities: Form 2

DIVISION: Building Communities

QUALITY STANDARD: Environmental or Safety

COMMITTEE: Community Service

ACTIVITY: _____

COMMITTEE MEMBERS RESPONSIBLE: (Fill in when put into action)

Goals	Steps	Target Date	Estimated Financial Impact		Results/Notes
			Expenses	Income	

For more information on Program of Activities development, review the POA Resource Guide.

****For funding of community service activities look into the National FFA Living to Serve Grants offered throughout the year! Be sure to double check the quality standard you select to ensure it aligns with the grant quality standard.****



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ARTICLE SUMMARY

Talking Points: Climate Change

Climate change is at the forefront of conversations about the environment and the careers needed to address the growing issue. Take the opportunity to look at what climate change means and if it is normal or not. Apply this terminology to determine the impact that climate change has and will have on agriculture and the ability to feed the growing population.

BELL RINGER:

What is climate change?

DISCUSSION QUESTIONS

1. What is climate change?
2. What is global warming?
3. How are the terms climate change and global warming related?
4. How does climate change impact agriculture?
5. What career opportunities exist for those interested in trying to address the issues associated with climate change?

ACTIVITY

Students should first complete the bell ringer activity. Have students answer the bell ringer question on their own paper. Once all students have written an answer, have them discuss and explain their answers with their neighbors. After five minutes, call on a few groups to share. Generate a list together.

Have students read the article "Talking Points: Climate Change" (Appendix 3). Each student needs a copy of the "Climate Change" worksheet (Appendix 3). The worksheet has three parts: (1) Learn about the terms climate change and global warming, (2) examine the question "how have global temperatures changed over time?" and (3) consider how climate change has and will impact agriculture and brainstorm ways to take action. Internet access is required for this activity.

Have students complete the exit ticket on their own paper. Have students share those experiences with the class if there is time.

FFA TIP

Visit AgExplorer, AgExplorer.com, and research careers within the Environmental Service Systems and the Natural Resources Systems career focus areas.

Create a team for the environmental and natural resources career development event. Visit the environmental and natural resources career development event page on FFA.org to learn more about the CDE.

SAE TIP

Require your students to prepare a short report about the potential impacts of climate change on their supervised agricultural experiences (SAEs).

- What are the theorized climate changes in your area?
- What risks could climate change pose to your SAE?
- What opportunities could climate change provide to your SAE?
- What adaptations to your SAE could be made to respond to the risks and opportunities listed?

VOCABULARY

Climate change
Fossil fuels
Global warming
Greenhouse gases
Precipitation
Weather

EXIT TICKET

What impact does climate change have on agriculture?

CAREER FOCUS AREAS

Biotechnology Systems
Natural Resources Systems
Plant Systems

RESOURCE HIGHLIGHT

Visit FFA.org to create your own SAE Idea Card for an SAE related to Environmental Service Systems or the Natural Resources Systems career focus areas.

APPENDICIES

Appendix 3: Climate Change

REFERENCES

Climate change vs. Global Warming (NASA): <https://climate.nasa.gov/resources/global-warming/>

"Science for a Hungry World: Agriculture and Climate Change (NASA): <https://pmm.nasa.gov/education/videos/science-hungry-world-agriculture-and-climate-change>

STANDARDS ALIGNMENT

• **AFNR Performance Element:** CS.01, CS.02, CS.04, CS.06 • **FFA Precept:** FFA.PL-A.ACTION, FFA.PL-E.AWARENESS, FFA.PG-J.MENTAL GROWTH, FFA.CS-N.DECISION MAKING, FFA.PL-C.VISION, FFA.PL-F.CONTINUOUS IMPROVEMENT • **Common Career Technical Core:** AG1, AG2, AG4, AG6 • **NASDCTE-State Directors (Career Clusters):** AGC02.02, AGC10.03, AGC10.04 • **Common Core-Reading: Informational Text:** CCSS.ELA-LITERACY.RI.9-10.1 • **Common Core-Writing:** CCSS.W.9-10.2 • **Common Core-Literacy in Science & Technical Subjects: Writing:** CCSS.ELA-LITERACY.WHST.9.10.6 • **Common Core-Speaking and Listening:** CCSS.SL.9-10.1, CCSS.SL.9-10.2 • **Common Core-Math Practices:** MP1, MP2, MP5, MP6 • **AFNR Career Ready Practices:** CRP02, CRP04, CRP05, CRP06

THE feed



TRACTOR *Training*

THIS INDIANA HIGH SCHOOL ACQUIRED A HIGH-TECH TRACTOR FOR \$1. YES, \$1!

Have you ever wanted to sit in the driver's seat of a shiny new tractor? Agriculture students at Seymour High School in Indiana get to do just that.

In June 2018, the school had the opportunity to lease a brand-new Case IH Magnum 220 tractor fully equipped with the latest technology for only \$1. The tractor retails for just under \$300,000 and gives students a hands-on education about operating farm machinery.

The deal was made possible by the tractor's manufacturer and Jacobi Sales Inc., a local Case IH distributor dedicated to supporting the future of agriculture and youth who will one day work in the industry.

"We will be able to train our students to operate the tractor and to utilize the latest auto-steer and GPS technology," says Jeanna Eppley, Seymour High School FFA advisor.

Seymour High School is

also completing a \$2 million ag science and research facility on the school farm, which has 137 tillable acres. With the addition of the tractor, students will have the opportunity to plant in the field and not only gain basic tractor operation skills but also learn the basics of setting up and utilizing the high-tech computer systems.

"Our hope is to ignite an interest in students to pursue further training or education in agriculture," Eppley says. "From engineering and technology to being a skilled employee for local farmers, the opportunities are there. We just need to introduce students to these opportunities and motivate them to pursue education and careers in these areas."

Seymour High School will use the tractor for 150 hours, and then it will be sold. The school will be able to order a new tractor for as long as Case IH continues to offer the program to secondary schools.

Talking Points: **CLIMATE CHANGE**

THE WORLD IS FULL OF CONTROVERSIAL TOPICS. IN FACT, SOMETIMES THE ONLY THING PEOPLE CAN AGREE ON IS THAT THEY DISAGREE. CLIMATE CHANGE FALLS SOLIDLY INTO THIS CATEGORY. WHILE THE REALITIES AND EFFECTS ARE HEAVILY DEBATED, THOSE WHO AGREE SAY IT LEADS TO A NUMBER OF EFFECTS ON THE AGRICULTURE INDUSTRY. BE PREPARED FOR A FEW COMMON QUESTIONS YOU MAY ENCOUNTER ABOUT CLIMATE CHANGE AND HOW IT IMPACTS AGRICULTURE.

Q: ARE CLIMATE CHANGE AND GLOBAL WARMING THE SAME THING?

A: Most people don't realize there is a big difference between these two buzz phrases. *Global warming* is the current and predicted increase in the Earth's air temperature, which is thought to be caused by greenhouse gases. *Climate change* describes the shift in long-term weather patterns, such as precipitation. Climate change is the more appropriate term for describing climate trends.

Q: IS CLIMATE CHANGE NORMAL?

A: Yes and no. Climate change is shaped by humans and by nature. People impact the climate through the use of fossil fuels and by converting ecosystems for human use. Occurrences such as continental drift and changes in the Earth's position relative to the sun are natural factors that impact climate change.

Q: HOW DOES CLIMATE CHANGE IMPACT AGRICULTURE?

A: Droughts and floods have changed in frequency and severity, which can pose challenges for farmers and ranchers. It may become more difficult to grow crops, raise livestock, and catch fish in the same places by using the same methods that have been relied upon in the past.

NAME: _____

Aligned to the following standards:
CS.01; CS.02; CS.04; CS.06; FFA.PL-A; FFA.PL-C; FFA.PG-J; FFA.CS-N; AG1;
AG2; AG4; AG6; AGC02.02; AGC10.03; AGC10.04; CCSS.RI.9-10.1;
CCSS.W.9-10.2; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.WHST.9.10.6;
MP1; MP2; MP5; MP6; CRP.02; CRP.04; CRP.05; CRP.06

Appendix 3: Climate Change

Created: Fall 2018 by the National FFA Organization

DIRECTIONS:

Read the article "Talking Points: Climate Change" in the fall 2018 issue of *FFA New Horizons*.

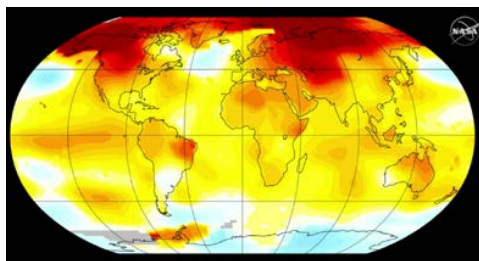
- (1) Based on the reading, complete the Venn diagram to compare and contrast the terms "climate change" and "global warming." (If you need further assistance, visit the following site: <https://climate.nasa.gov/resources/global-warming/>.)

Climate Change

Global Warming

Similarities

Which term above is
the more appropriate
term to describe
climate trends?



NAME: _____

Aligned to the following standards:
CS.01; CS.02; CS.04; CS.06; FFA.PL-A; FFA.PL-C; FFA.PG-J; FFA.CS-N; AG1;
AG2; AG4; AG6; AGC02.02; AGC10.03; AGC10.04; CCSS.RI.9-10.1;
CCSS.W.9-10.2; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.WHST.9.10.6;
MP1; MP2; MP5; MP6; CRP.02; CRP.04; CRP.05; CRP.06

DIRECTIONS:

- (1) Select 10 dates between 1884 and 2017 and record them in the box.

- (2) Select a major city of your choice on the map below by drawing a ★ and labeling the name of the city.



- (3) Visit the NASA website at <https://climate.nasa.gov/interactives/climate-time-machine>.
(4) In the box below, create a graph that depicts the temperature change for the city that you selected above. Be sure to include axis labels and a title.

Title: _____

Aligned to the following standards:
CS.01; CS.02; CS.04; CS.06; FFA.PL-A; FFA.PL-C; FFA.PG-J; FFA.CS-N; AG1;
AG2; AG4; AG6; AGC02.02; AGC10.03; AGC10.04; CCSS.RI.9-10.1;
CCSS.W.9-10.2; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.WHST.9.10.6;
MP1; MP2; MP5; MP6; CRP.02; CRP.04; CRP.05; CRP.06

NAME: _____

- (5) Find a classmate that selected a city different from your own.
(6) Complete the T-chart comparing and contrasting the temperature change within your two cities.

Your city:	Similarities	Classmate's city:



(7) Why do think your two cities were so similar or different in terms of temperature change?

NAME: _____

Aligned to the following standards:
CS.01; CS.02; CS.04; CS.06; FFA.PL-A; FFA.PL-C; FFA.PG-J; FFA.CS-N; AG1;
AG2; AG4; AG6; AGC02.02; AGC10.03; AGC10.04; CCSS.RI.9-10.1;
CCSS.W.9-10.2; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.WHST.9.10.6;
MP1; MP2; MP5; MP6; CRP.02; CRP.04; CRP.05; CRP.06

DIRECTIONS:

Watch the video "Science for a Hungry World: Agriculture and Climate Change" by NASA. The URL is <https://pmm.nasa.gov/education/videos/science-hungry-world-agriculture-and-climate-change>. While watching the video, answer the following questions.

What are scientists predicting will happen?

1. _____

2. _____

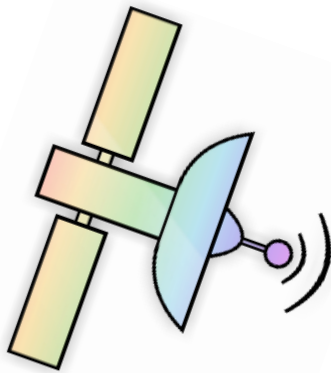
3. _____

OR

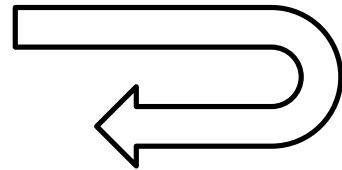
1. _____

2. _____

3. _____



What is NASA doing to understand climate change?



Why is this type of technology implementation helpful?



As of now, how is climate change impacting agriculture?

NAME: _____

Aligned to the following standards:

CS.01; CS.02; CS.04; CS.06; FFA.PL-A; FFA.PL-C; FFA.PG-J; FFA.CS-N; AG1;
AG2; AG4; AG6; AGC02.02; AGC10.03; AGC10.04; CCSS.RI.9-10.1;
CCSS.W.9-10.2; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.WHST.9.10.6;
MP1; MP2; MP5; MP6; CRP.02; CRP.04; CRP.05; CRP.06



What can you do to help with climate change?

What can you do to help with climate change?	
1	2
3	4

Now that you have an understanding of climate change in agriculture, you know that many jobs will focus on trying to solve this global problem.

Go to AgExplorer.com and identify 3 careers that would work directly with this important issue.

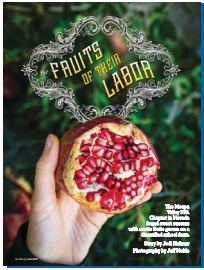
1. _____
2. _____
3. _____





NEW HORIZONS

FALL 2018 TEACHING GUIDE



ARTICLE SUMMARY

Fruits of Their Labor

The Moapa Valley FFA Chapter in Nevada has learned about a fruit that most would not expect to grow well in the Nevada desert climate — pomegranates. This fruit grows well on the chapter's diverse farm. Check out this article to learn how the chapter grows the fruit, promotes FFA and teaches the community about pomegranates at a local festival.

BELL RINGER:

What is a product (item/crop/fruit) that is native or known in our area/region of the country?

DISCUSSION QUESTIONS

- 1) Based on the bell ringer discussion, how do you think those items affect the local and state economy?
- 2) Why do you think those items are known for the area/region?
- 3) What is one fact that stood out about pomegranates?

ACTIVITY

Students should first complete the bell ringer activity. Have students answer the bell ringer question on their own paper. Once all students have written an answer, have them discuss and explain their answers with their neighbors. After five minutes, call on a few students to share their answers.

Next, have students read the article "The Fruits of Their Labor." The worksheet (Appendix 4) has three parts: (1) Learn about the pomegranate fruit, (2) compare and contrast the pomegranate fruit with a fruit in your region/area and (3) reflection. Internet access is required for this activity.

Have students complete the exit ticket on their own paper and share those experiences with the class if there is time.

FFA TIP

Tip 1: Have students visit and volunteer at the local farmers market and report on what fruits/products were sold during the market and which items seemed to be the most popular. Additionally, invite a representative of the farmers market (for example, someone from the local extension office) to come and speak during an FFA chapter meeting about the importance, history, etc. of the local farmers market.

Tip 2: Have students visit a local grocery store and find unique fruits that are sold and then have them report back on their findings.

SAE TIP

School farms, shops and greenhouses can provide great student supervised agricultural experience (SAE) opportunities for both individuals and groups. Remember, to qualify as an SAE the project must be student lead and the work must be done outside of teacher-led class time.

VOCABULARY

Crimson
Exotic
Diversified
Artificial insemination
Curriculum
Dormant

EXIT TICKET

1. What are three things you learned from this lesson?
2. Pretend your friend was absent from class today and you have been asked to explain the lesson. What would you tell him or her about the lesson?

CAREER FOCUS AREA

Plant Systems

RELATABLE ARTICLE

Ask Well: Are Pomegranates Good For You?

<https://well.blogs.nytimes.com/2016/02/12/ask-well-pomegranate/>

RESOURCE HIGHLIGHT

Check out the CDE Classroom Resource for the nursery/landscape CDE.
<https://www.ffa.org/cde-ide-classroom-resources>

APPENDICIES

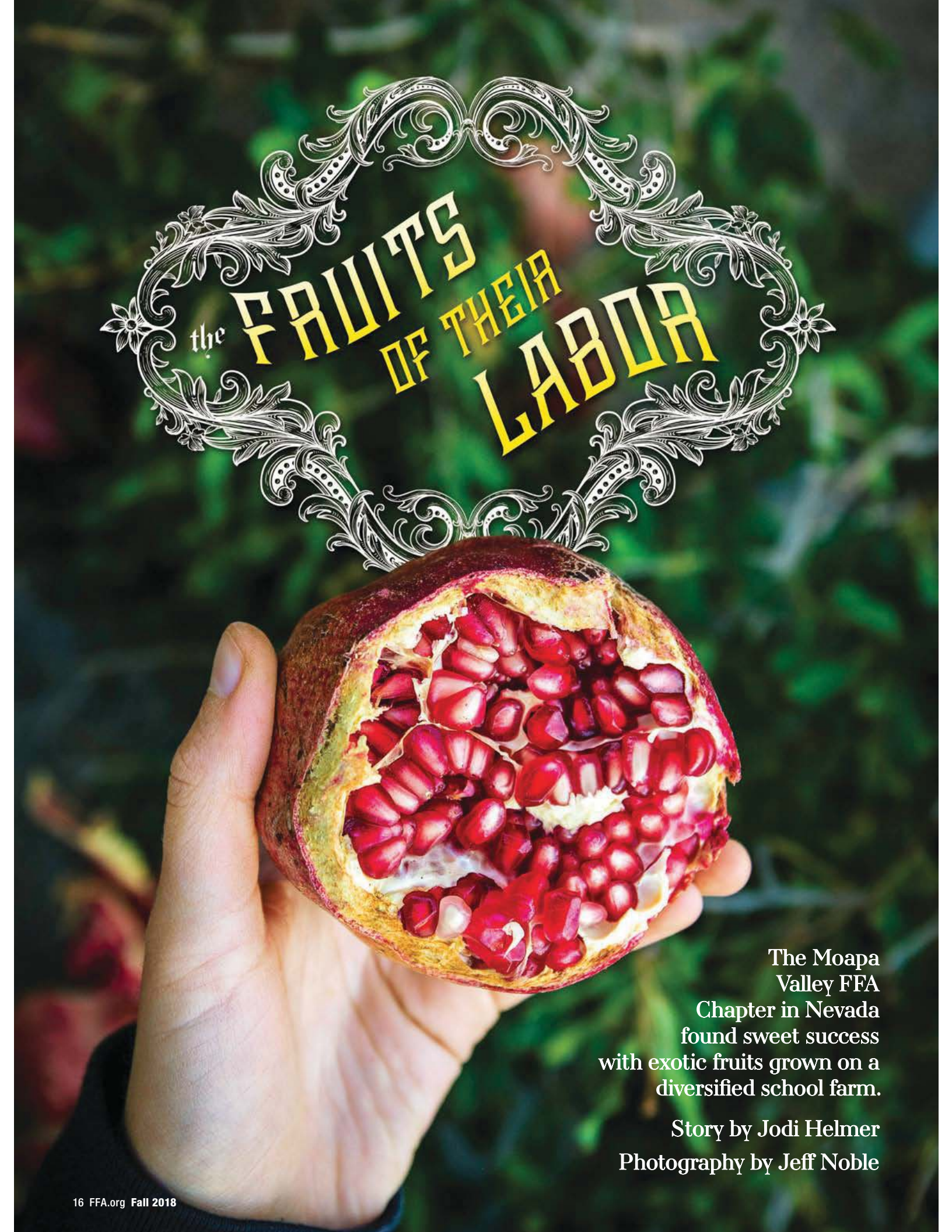
Appendix 4: The Fruits of Their Labor

REFERENCES

<https://www.hort.purdue.edu/newcrop/morton/pomegranate.html>
<https://www.medicaldaily.com/pomegranate-health-benefits-fruit-helps-protect-against-plaque-hunger-and-certain-340020>

STANDARDS ALIGNMENT

• **FFA Precept:** FFA.PL-C.Vision, FFA.PL-D.Character, FFA.PL-F.Continuous Improvement, FFA.PG-J.Mental Growth, FFA.CS-M.Communication, FFA.CS-N.Decision Making, FFA.CS-O.Flexibility/Adaptability • **Common Core - Reading: Informational Text:** CCSS.ELA-LITERACY.RI.9-10.4 • **Common Core - Writing:** CCSS.ELA-LITERACY.W.9-10.2, CCSS.ELA-LITERACY.W.9-10.4 • **Common Core - Speaking and Listening:** CCSS.ELA-LITERACY.SL.9-10.4 • **AFNR Career Ready Practices:** CRP.04 • **P21 Skills:** Communication, Critical Thinking and Problem Solving, Initiative and Self-direction, Leadership and Responsibility

A hand is holding a halved pomegranate, revealing its bright red seeds. The background is a soft-focus green, suggesting foliage. Above the pomegranate is a decorative, ornate frame containing the title text.

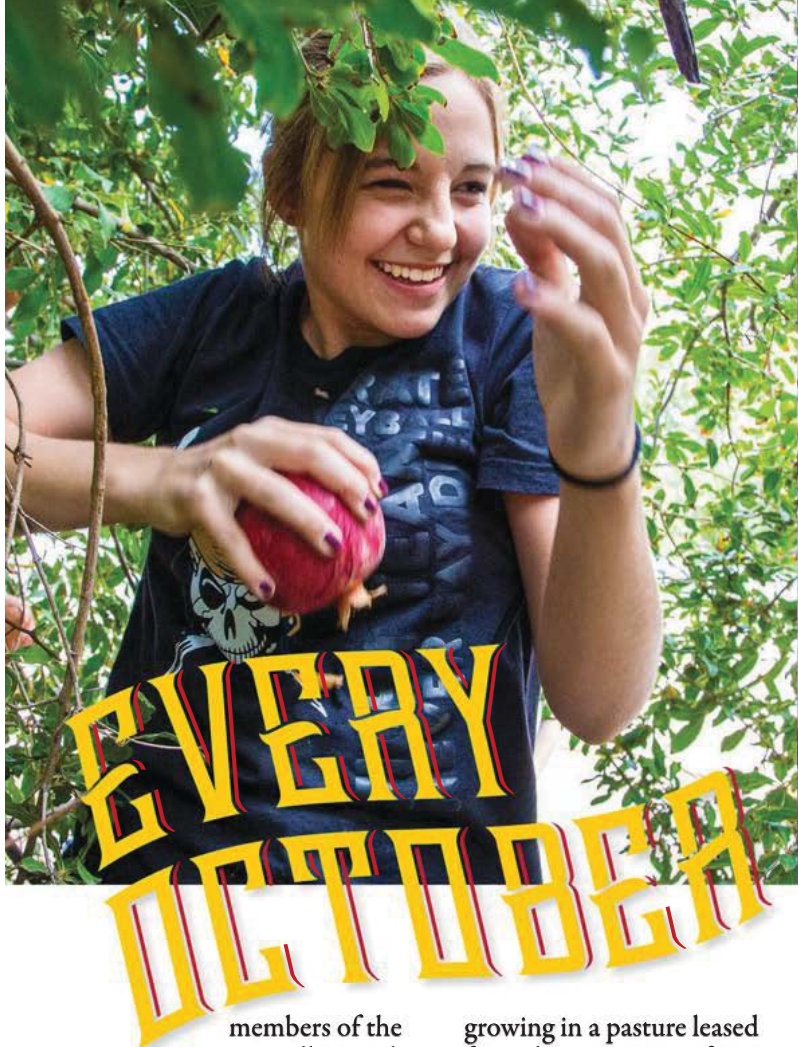
the FRUITS OF THEIR LABOR

The Moapa
Valley FFA
Chapter in Nevada
found sweet success
with exotic fruits grown on a
diversified school farm.

Story by Jodi Helmer
Photography by Jeff Noble



Advisor Denise O'Toole
with members of the
Moapa Valley FFA Chapter
in Overton, Nev.



Left: Kayla Walters picks hidden pomegranates. Right: Chapter treasurer Logan O'Toole empties washed pomegranates into a juicer.

members of the Moapa Valley High School FFA Chapter in Nevada spend a few weeks picking pomegranates. The crimson fruit, native to the Mediterranean basin and the Middle East, also thrives in the desert Southwest.

"This is one of the best places in the world for pomegranates to grow," notes Denise O'Toole, Moapa Valley High School agricultural education teacher and FFA advisor. "We have to work pretty hard to grow other things in this climate, but we don't have to give the pomegranates much care, and we get a great crop."

The ease of cultivating the exotic fruits led Moapa Valley High School in Overton, Nev., to plant a small – but growing – pomegranate orchard. In addition to 1.5 acres of trees planted on campus, students also harvest fruit

growing in a pasture leased from the University of Nevada Cooperative Extension. O'Toole believes her FFA chapter is the only one in the nation with a pomegranate orchard.

The local community clamors for the tangy fruits, purchasing bags of fresh pomegranates from the FFA-run Moapa Valley High School farm market (operated on an honor system) and a booth set up at the annual Pomegranate Art and Craft Festival held in Overton each November.

"People travel from all over the state and all across the western United States to come to the festival," says O'Toole. "We sell fresh fruit, and the kids wear their FFA jackets and talk about FFA and sell pomegranates."

Last year, students sold out of pomegranates on the first day of the Pomegranate Art and Craft Festival. The funds raised through

festival and farmers market sales help purchase seed, feed and supplies for the Moapa Valley High School farm and support FFA programming.

Although the pomegranate orchard is unique, it's just one element of a standout school farm.

FAR MORE THAN FRUIT

The Clark County School District purchased the 40-acre farm in 1958 to complement the classroom experience. With the support of a farm manager, agriculture educators and students, the farm at Moapa Valley High School rivals some of the most successful small-scale diversified farms in the nation. The operation includes 20 Angus-cross cattle, laying hens, alfalfa hay, vegetable gardens and, of course, the pomegranate orchard.

O'Toole oversees the agricultural education program while her husband,

Kevin O'Toole, works as a full-time farm manager, supervising FFA students on the farm.

FFA members are engaged in all aspects of running the operation – from planting and harvesting to assisting with artificial insemination of the heifers and selling crops. The sheer size of the farm and the opportunities for hands-on learning that it provides set the agricultural curriculum apart from other FFA chapters, according to O'Toole.

"Our farm makes our program special," she says. "We might not spend as much time in the classroom as other chapters, and sometimes I might not cover as much curriculum, but the students learn a lot about plant science and gardening, and they get a lot of practical skills. So, we might not cover in detail a lot of

the bookwork that some programs are able to, but we provide a lot of hands-on, practical experience that others can't simulate."

REGIONAL REALITIES

The weather also makes the FFA chapter distinct. Thanks to the scorching desert temperatures, the farm at Moapa Valley High School is almost dormant during the summer months when other school farms experience their peak seasons.

The heat forces the school to close the greenhouses from June to September, but a small group of students helps with tasks like growing alfalfa and managing the cow/calf operation.

In a region with a limited number of farms and few students growing up in farm families, the school farm provides opportunities to learn about agriculture.

"It's not much of an agricultural community like it was 50 years ago. A lot of our water has been sold to Las Vegas, which is about 60 miles away," O'Toole says. "There are still some fields around and people grow hay, but the school farm gives these kids the opportunity to be able to work on a farm in a town that's not agricultural anymore. The kids take the class because they know they get to spend half their time working on the farm."

SHARE THE STORY

O'Toole wants to do more than teach FFA members about agriculture; she also wants those students to share their knowledge – and the school farm is at the heart of that mission. Students have led tours for distinguished guests from the school district and local

and state governments, but school groups are their favorite visitors.

Thousands of students have toured the Moapa Valley High School farm. FFA members lead school children through the pumpkin patch, greenhouse and chicken coops. The school also partners with local organizations, such as Farm Bureau and Young Farmers and Ranchers, to teach children about dairy farming through activities like milking a demonstration cow and churning butter.

"One of their favorite things is to be able to show off the farm and what they do and to teach kids about agriculture," says O'Toole. "There are a lot of opportunities for leadership."

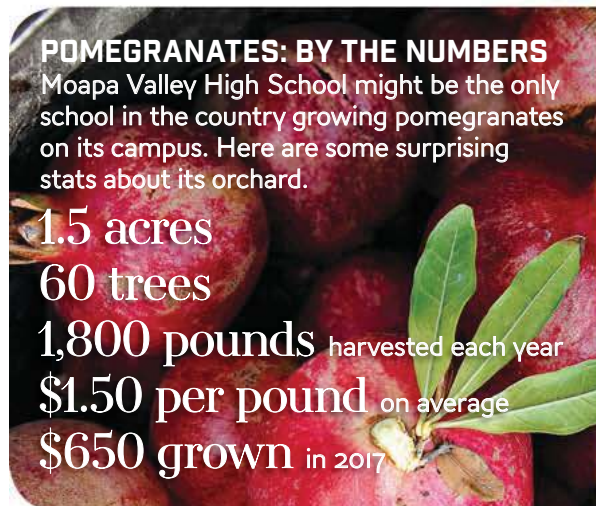
Since taking over as ag educator at Moapa Valley High School in 2012, O'Toole has worked to take a thriving program and expand it to offer even more opportunities to students. The farm now has a hydroponic greenhouse and straw bale classroom as well as practical upgrades such as a new cattle chute and irrigation system.

"I want to keep expanding and bringing in more people to advocate for agriculture and do ag literacy projects," O'Toole says. "We have a lot of plans!"

One of the most exciting plans involves combining food science and agricultural education. In the past, FFA members have turned the fresh pomegranate harvest to make pomegranate juices and jellies. Students often feature the fruit in their supervised agricultural experiences, leading O'Toole to explore more opportunities to incorporate pomegranates into the curriculum.

Whether the FFA chapter focuses on cows, alfalfa, eggs or pomegranates, O'Toole believes that having a thriving school farm to complement classroom learning fulfills an important piece of the ag education puzzle, noting, "Even though our community is changing and growing and becoming less agricultural, we still, through the farm, can convey the message of the importance of agriculture to our students." •

1. Students show off their fall gardens. 2. Fruit is sold at the local farmers market. 3. Chapter vice president Makae Pulsipher enjoys a pomegranate. 4. Haley Bush (left) and chapter vice president Olivia Williams (right) transplant buttercrunch lettuce.



POMEGRANATES: BY THE NUMBERS

Moapa Valley High School might be the only school in the country growing pomegranates on its campus. Here are some surprising stats about its orchard.

1.5 acres

60 trees

1,800 pounds harvested each year

\$1.50 per pound on average

\$650 grown in 2017



NAME: _____

Appendix 4: The Fruits of Their Labor

Created: Fall 2018 by the National FFA Organization

DIRECTIONS:

Read the article "The Fruits of Their Labor" in the fall 2018 issue of *FFA New Horizons* and answer the questions below.

Part 1

Learn more about pomegranates by answering the following questions. Use these websites to aide in your research:

<https://www.hort.purdue.edu/newcrop/morton/pomegranate.html>

<https://www.medicaldaily.com/pomegranate-health-benefits-fruit-helps-protect-against-plaque-hunger-and-certain-340020>

1) Where did the pomegranate originate?

2) Provide a brief description of the pomegranate: (How does it grow? What does it look like?):



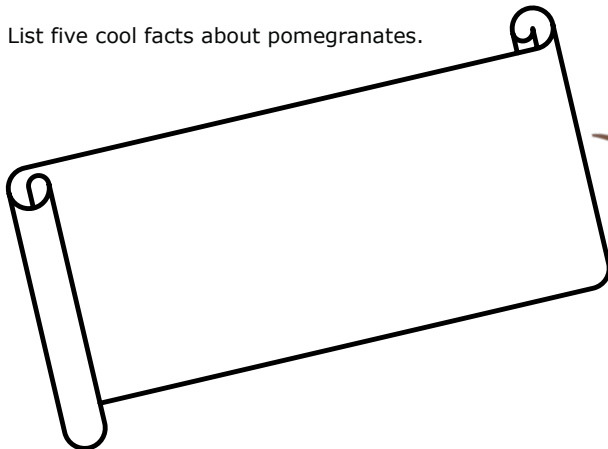
3) What pests and/or diseases may affect it? _____

4) What signs indicate when the pomegranate is ready for harvest? _____

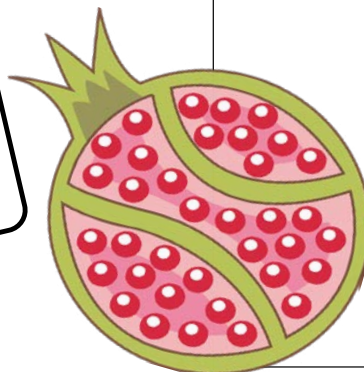
5) In what type of soil does the plant do the best? _____

6) What type of climate does this plant grow well in? _____

7) List five cool facts about pomegranates.



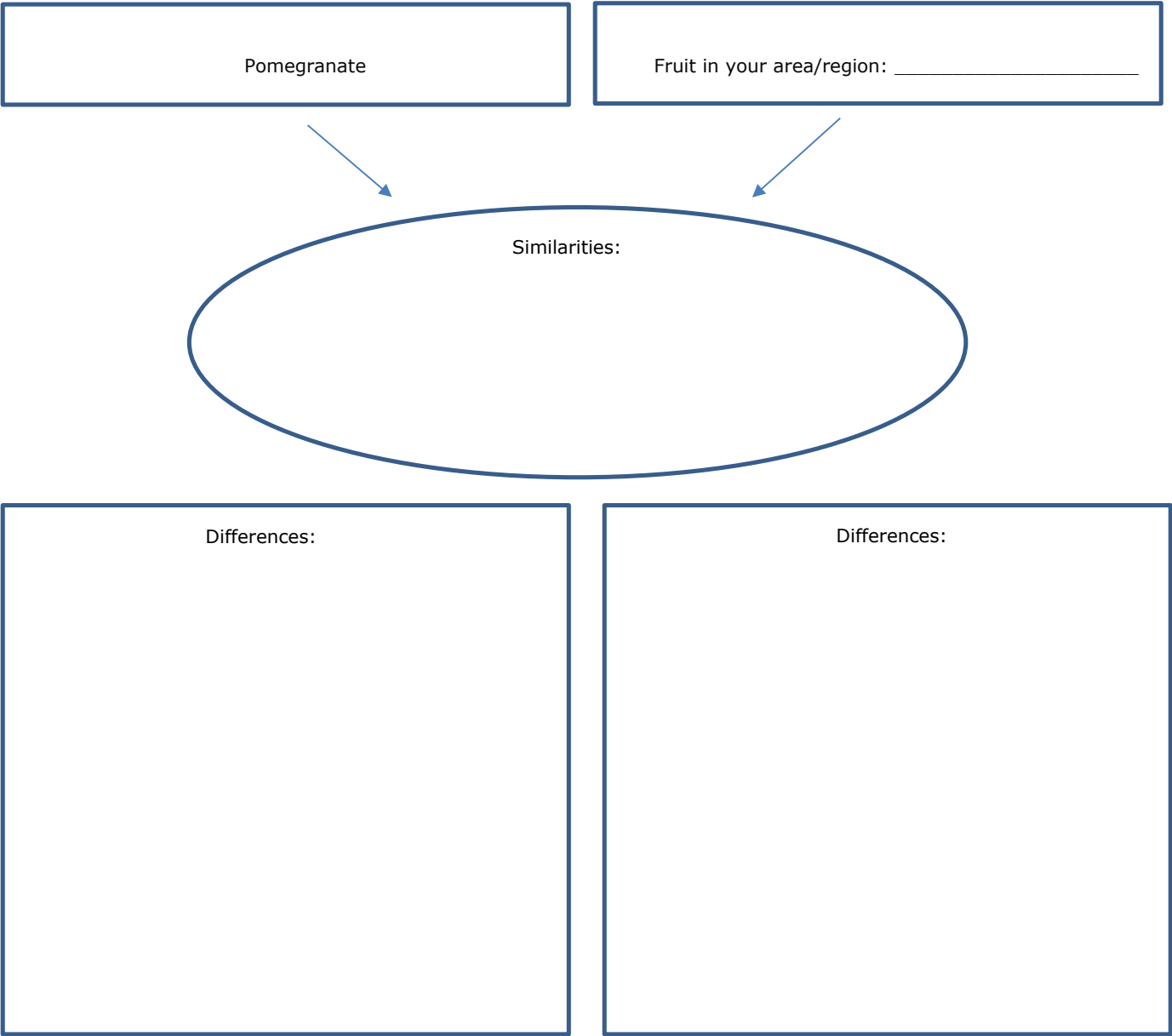
8) Five health benefits of pomegranates are ...



NAME: _____

Part 2

Compare and contrast pomegranates and a fruit from your area/region using the chart below.



Aligned to the following standards:
FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4;
CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;



NEW HORIZONS

FALL 2018 TEACHING GUIDE



ARTICLE SUMMARY

Transformative Training

Learn how former FFA member Kate Lambert was positively impacted by FFA, regardless of how proficient she was in FFA activities. Check this article out to learn how the FFA (or other organizations) can have a profound impact on your life.

BELL RINGER:

Write a four- to five-sentence (a 15-second) speech to persuade a new student to join FFA (or another organization/club or sports team you are involved with). What would you include in your speech to persuade them to join?

DISCUSSION QUESTIONS

1. Think of the clubs/organizations/teams of which you are a member. Why did you join each of those teams/clubs?
2. What are two skills you have learned from being a member of those clubs/organizations/teams?
3. How can you apply those skills later on in life (in school, career, etc.)?

ACTIVITY

Students should first complete the bell ringer activity. Once all students have written an answer, have them discuss and explain their answers with their neighbors. After five minutes, call on a few students to share their answers.

Next, have students read the article "Transformative Training." There are two worksheets with this article. First, have students complete the worksheet "What's Your Brand?" (Appendix 5). This worksheet has two parts: (1) Students will identify company/business logos and (2) students will create and design their own logo for their personal brand.

After students have finished the first worksheet, have students move on to "Career Success Reflection" (Appendix 6). This worksheet has two parts: (1) Students will reflect on their time as a member of a school organization, community organization and/or sports team and (2) students will complete a career development event scavenger hunt. Internet access is required for this activity.

Have students complete the exit ticket on their own paper. Have students share those experiences with the class if there is time.

FFA TIP

Host an activity/event fair at your school. Have different activities, organizations and sports teams set up booths in a common area and invite freshman to attend. Older students that are members of the organizations and teams can work the booths and work to persuade the freshman to join their clubs and teams.

SAE TIP

Teach your students that having an SAE is a goal in and of itself, not just a means for earning an FFA degree or award. An SAE allows the growth and development of real-world, hands-on skills whether it ever wins an award or not. An SAE develops confidence, work experience and connections even if it doesn't qualify a student for an FFA degree.

WE ARE FFA TIP

Have students interview past students of all levels from your program about how FFA has impacted them.

VOCABULARY

Keynote
Indiscriminately

EXIT TICKET

How can you and your classmates make new members to the agriculture class and/or FFA feel welcome?

CAREER FOCUS AREA

Any

RELATABLE WEBSITE

National FFA Alumni: <https://www.ffa.org/support/alumni>

RESOURCE HIGHLIGHT

Check out the FFA Resume Generator, located at [FFA.org](https://www.ffa.org), to start (or update) your resume!

APPENDICIES

Appendix 5: What's Your Brand?

Appendix 6: Career Success Reflection

STANDARDS ALIGNMENT

• **FFA Precept:** FFA.PL-C.Vision, FFA.PL-D.Character, FFA.PL-F.Continuous Improvement, FFA.PG-J.Mental Growth, FFA.CS-M.Communication, FFA.CS-N.Decision Making, FFA.CS-O.Flexibility/Adaptability • **Common Core - Reading: Informational Text:** CCSS.ELA-LITERACY.RI.9-10.4 • **Common Core - Writing:** CCSS.ELA-LITERACY.W.9-10.2, CCSS.ELA-LITERACY.W.9-10.4 • **Common Core - Speaking and Listening:** CCSS.ELA-LITERACY.SL.9-10.4 • **AFNR Career Ready Practices:** CRP.04 • **P21 Skills:** Communication, Critical Thinking and Problem Solving, Initiative and Self-direction, Leadership and Responsibility

TRANSFORMATIVE *Training*

**Former member
Kate Lambert,
director of
education at
FCS Financial
and a Missouri
farmer, on the
beauty of FFA:
It can change
the lives of
all members,
regardless
of status.**

I have a confession to make. I wasn't actually very good at FFA. I wasn't necessarily bad at FFA, but I wasn't particularly good, either.

A while back, as I was helping a student prepare for a speaking competition, she remarked about how easy it must have been for me, back in my day (which, I will add, was not THAT long ago). That's a fair comment given the fact that people actually pay me to talk now. But it wasn't true.

Public speaking was my passion in FFA, but I was never great at it. I never even made it to our state competition. Obviously, I never got to deliver that keynote on stage at convention like I dreamed about.

Another time, a student asked me about being an FFA officer. I surprised him when I said I was an officer, but only at the chapter level. "President then, I assume?" he responded.

Nope, not even president.

In all reality, my four years of FFA were rather unremarkable compared with many. And that is the single greatest secret of the organization that changed my life.

LIVES ARE CHANGED

Any organization has the power to change the lives of the top few. FFA is amazing at that, and I see it every time I have the privilege of working with its members. But FFA has something beyond that – something deeper.

For every one of those top kids you see delivering a keynote, walking across a stage or giving an interview, there are a dozen more back home who are quietly going about their FFA experience, most of which will be like mine – rather unremarkable. Still, their lives will be changed.

FFA supplies a skill set, a knowledge base and an experience to make students strong and world-ready, for the top, the middle and even the bottom.

FFA prepares kids for success, whether they travel the country in their corduroy jackets or never leave their high school shops. Along with the advisors who selflessly lead it, FFA has the ability to reach down to the bottom and indiscriminately pull kids up. It's an ability unmatched by any other organization.

FFA is life changing for the most successful. But FFA is life changing for the rest of us, too.

– By Kate Lambert



“FFA SUPPLIES A SKILL SET, A KNOWLEDGE BASE AND AN EXPERIENCE TO MAKE STUDENTS STRONG AND WORLD-READY, FOR THE TOP, THE MIDDLE AND EVEN THE BOTTOM.”

– KATE LAMBERT

NAME: _____

Appendix 5: What's Your Brand?

Created: Fall 2018 by the National FFA Organization

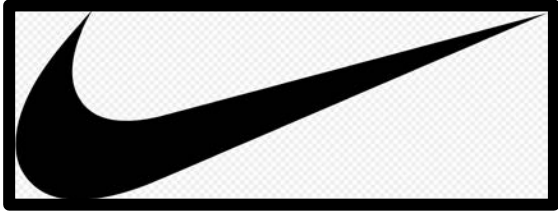
DIRECTIONS:

Read the article "Transformative Training" in the fall 2018 issue of *FFA New Horizons*. After reading the article, complete the activities below.

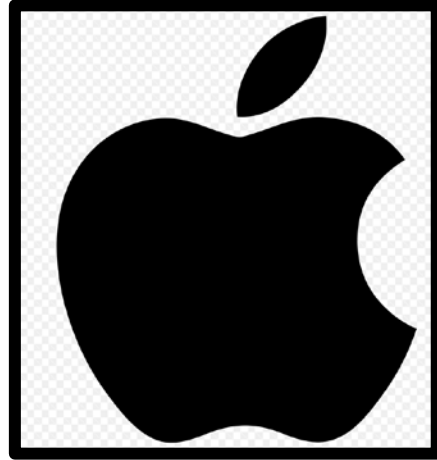
Part 1

Identify the company associated with each logo.

1. _____



2. _____



3. _____



4. The logos above represent companies. Why are these logos recognizable? _____

5. Why is it important to have a "brand" for yourself? _____

6. How can having a "brand" affect your future (school, career, etc.)? _____

Aligned to the following standards:

FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4;
CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;

NAME: _____

Part 2

Use the space below to create/design a “brand” (logo) for yourself and describe the logo.



7. Describe your logo: (How does it represent you? How does it represent your future?) _____

Aligned to the following standards:
FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4;
CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;

NAME: _____

Appendix 6: Career Success Reflection

Created: Fall 2018 by the National FFA Organization

DIRECTIONS:

Read the article "Transformative Training" in the fall 2018 issue of *FFA New Horizons*. After reading the article, complete the activities below.

Part 1

1. What sports teams, clubs, and community clubs and organizations are you a member of?



2. Reflect on your time thus far on the sports team and/or in the club(s)/organization(s). List the activities you have been involved in as a member of the club/sports team. How did those activities have an impact on you? (Identify 3 activities.)

3. How has being part of the sports team or club/organization made a positive impact on your life or prepared you for a career?

Part 2

DIRECTIONS

In the article, Kate references how she enjoyed public speaking in FFA. Use the space below to learn more about career development events (CDEs).

Watch the video "About FFA Career Development Events | National FFA Convention & Expo" to find the answers to questions 1 through 6. You can access the video by clicking on the following link, https://www.youtube.com/watch?time_continue=8&v=p8nXD21AdRg.

1. What is the primary objective of CDEs?

2. Complete this statement: CDEs help students develop the ability to _____, _____,

Aligned to the following standards:
FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4;
CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;

NAME: _____

_____ and perform _____ in a _____ job market.

3. True or False: A CDE never changes.

Explain your answer:

4. How does each of the CDEs ensure they reflect the industry?

5. List 5 CDEs or activities that are shown and/or discussed in the video.

On the CDE webpage of FFA.org, search for CDEs that are conducted at the national level. The CDEs and the webpages for each specific CDE will be needed to answer questions 7 through 10.

6. Some of the CDE webpages feature videos. List at least 10 CDEs that have their own video featured on their webpage.

7. Choose one of the CDEs from your list and watch the video. Describe what happens during that event.

8. Choose one of the CDEs that does not have a video and investigate its webpage to answer these questions:

a. What CDE did you choose? _____

b. What does someone competing in your chosen CDE do during the event?

c. List 3 SAEs related to this CDE.

d. What is the outline (format) of the CDE?

Aligned to the following standards:
FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4;
CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;

NAME: _____

10. Compare and contrast the two CDEs you chose to learn more about.

A Venn diagram consisting of two large overlapping circles. The left circle is labeled "Name of CDE" and contains ten horizontal lines for writing. The right circle is also labeled "Name of CDE" and contains ten horizontal lines for writing. The overlapping area in the center is labeled "Similar qualities are ..." and contains five horizontal lines for writing.

Aligned to the following standards:
FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4;
CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;



NEW HORIZONS

FALL 2018 TEACHING GUIDE



ARTICLE SUMMARY

Ag 101 – Get Serious About Ag Safety

Safety is no laughing matter. Read this article to learn practical safety tips for agricultural equipment use, such as tractors, ATVs and grain bins. These tips will help you be more aware of your surroundings and your actions.

BELL RINGER:

In your daily routine, what are three things you do to be safety aware? (Example: fastening your seat belt in the car).

DISCUSSION QUESTIONS

1. What are ways that you can improve your own safety in your daily routine?
2. If you saw someone not being safe in an agriculture situation and/or in his or her daily routine, how would you persuade that person to alter his or her plans to be safe?
3. What are ways you can help improve safety in your school and community?

ACTIVITY

Students should first complete the bell ringer activity. Once all students have written an answer, have them discuss and explain their answers with their neighbors. After five minutes, call on a few students to share their answers.

Have students read the article “Get Serious About Ag Safety.” The worksheet (Appendix 7) has three parts: (1) Read scenarios and respond, (2) identify the safety logo and what it represents and (3) choose one of the safety tips and create a tweet. Internet access is required for this activity.

Have students complete the exit ticket on their own paper. Have students share those experiences with the class if there is time.

FFA TIP

Work with your local extension office and/or conservation district office to create an agricultural safety day program for elementary aged youth to attend. Various safety demonstrations could be set up as part of the agricultural safety day, such as weather emergency preparedness, fire safety drills and electricity safety.

SAE TIP

Require your students to complete a safety evaluation of their SAE.

- What are the most likely hazards?
- What steps can you take to prevent or avoid the hazards?
- What is the recommended response to each hazard should it happen?
- What safety training is available to you and/or what have you completed?

VOCABULARY

Precaution
Unpredictable
Retrofitting
Comprehensive

EXIT TICKET

What is one way you can implement the information you learned from the activities and the article in your daily routine?

CAREER FOCUS AREA

Power, Structural and Technical Systems

RELATABLE ARTICLE

Summer Farm Safety Tips
<https://www.agriculture.com/family/health-safety/summer-farm-safety-tips>

RELATABLE WEBSITES

Progressive Agriculture Safety Day
<https://www.progressiveag.org/>

Safety in Agriculture for Youth
<http://articles.extension.org/pages/70004/safety-in-agriculture-for-youth>

RESOURCE HIGHLIGHTS

Check out the SAE Idea cards for SAEs that involve safety.

Visit AgExplorer.com to learn about a variety of agriculture careers where safety is needed on a daily basis.

APPENDICIES

Appendix 7: Get Serious About Ag Safety

REFERENCES

Centers for Disease Control and Prevention

The National Institute for Occupational Safety and Health

<https://www.cdc.gov/niosh/face/state-face/ia/99ia003.html>

STANDARDS ALIGNMENT

• **FFA Precept:** FFA.PL-C.Vision, FFA.PL-D.Character, FFA.PL-F.Continuous Improvement, FFA.PG-J.Mental Growth, FFA.CS-M.Communication, FFA.CS-N.Decision Making, FFA.CS-O.Flexibility/Adaptability • **Common Core - Reading: Informational Text:** CCSS.ELA-LITERACY.RI.9-10.4 • **Common Core - Writing:** CCSS.ELA-LITERACY.W.9-10.2, CCSS.ELA-LITERACY.W.9-10.4 • **Common Core - Speaking and Listening:** CCSS.ELA-LITERACY.SL.9-10.4 • **AFNR Career Ready Practices:** CRP.04. • **P21 Skills:** Communication, Critical Thinking and Problem Solving, Initiative and Self-direction, Leadership and Responsibility

Safety

While farming and ranching are noble and important professions, the reality is that some tools common to the industry have potential to cause harm. Farming is one of the most dangerous occupations in the nation, and young people are not immune to harm. According to the National Farm Medicine Center (NFMC), one youth dies in an agriculture-related incident every three days, and incidents among youth ages 10 to 19 are on the rise.

“Because farming is a dangerous environment, you need to take a few precautions,” says Marsha Salzwedel, youth agricultural safety specialist for the NFMC and the National Children’s Center for Rural and Agricultural Health and Safety (NCCRAHS).

Salzwedel shares the top five causes of farm injuries and tips for staying safe. - By Jodi Helmer

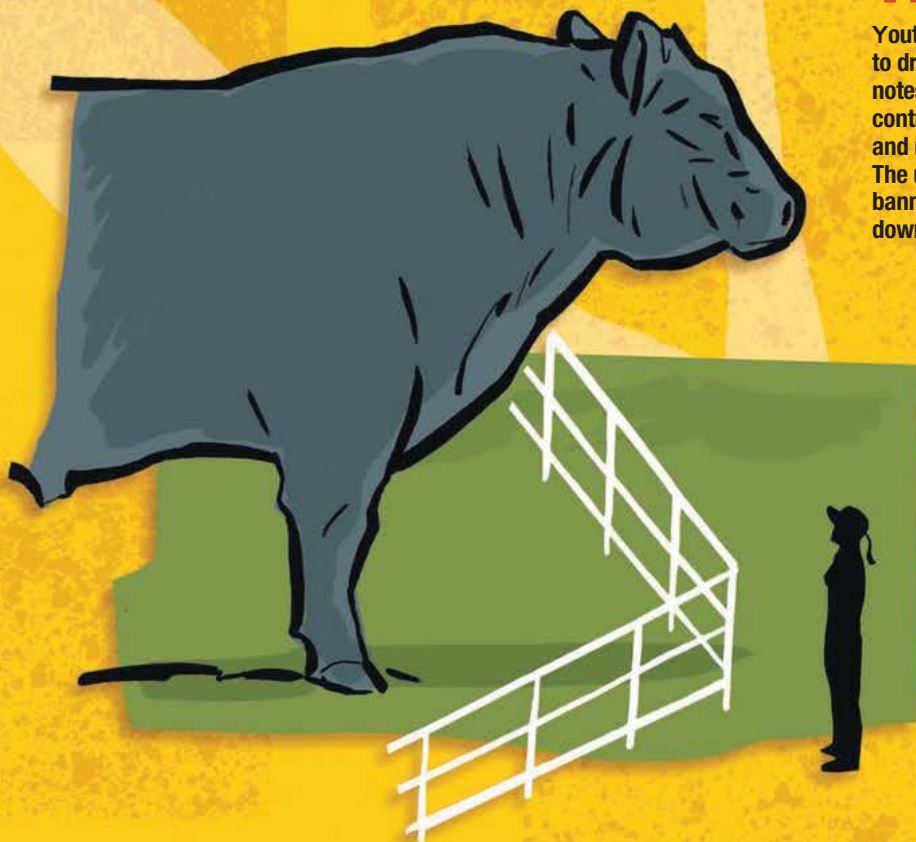


TRACTORS:

Youths should be at least 14 years old to drive a tractor. Even then, Salzwedel notes that teens should never take the controls after dark or in bad weather, and no passengers should be allowed. The use of cell phones should be banned, and equipment should be shut down before calling for help.

LIVESTOCK:

“Farm animals can be unpredictable,” says Salzwedel. In addition to wearing proper attire (including steel-toe boots with gripping soles) when working with livestock, plan an escape route before getting into a pasture or pen – and be prepared to use it if an animal charges.



ATVs:

Riders under 16 years of age are often too small to manage corners and turns on full-size ATVs. All riders should wear helmets, long pants and closed-toe shoes, and they need to maintain a safe speed. Salzwedel also suggests retrofitting machines with crush-protection devices.



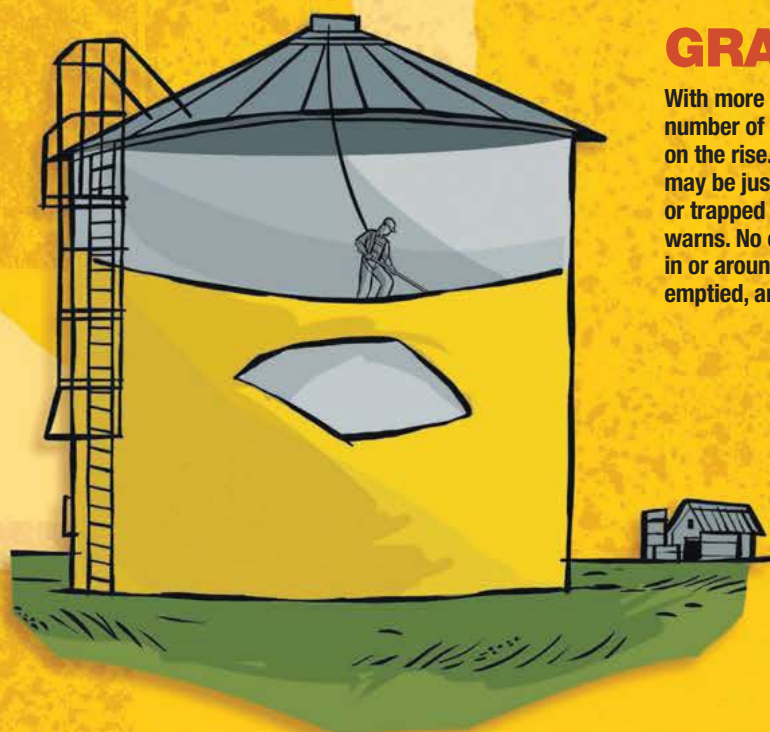
MANURE PITS:

Manure pits are drowning hazards. When working near pits, equipment can slide in and be swallowed up before operators can get free. Fencing a pit is the safest option, according to Salzwedel, and will help prevent younger siblings from accidentally drowning. She also suggests adding a cement bump that will stop equipment from sliding into a pit.



GRAIN BINS:

With more small farms adding grain bins, the number of reported injuries and fatalities is on the rise. Even when grain looks settled, it may be just a crust. "You can end up engulfed or trapped in a matter of seconds," Salzwedel warns. No one under the age of 18 should be in or around the bin when it's being filled or emptied, and lifelines should always be worn.



STAY SAFE!

Fortunately, many guidelines and programs help make agriculture safer so that those in the industry can continue working hard to help feed and clothe the world. For comprehensive ag safety checklists, visit [CultivateSafety.org/Resources](https://www.cultivate-safety.org/resources).

NAME: _____

Appendix 7: Get Serious About Ag Safety

Created: Fall 2018 by the National FFA Organization

DIRECTIONS:

Read the article "Get Serious About Ag Safety" in the fall 2018 issue of *FFA New Horizons*. After reading the article, complete the activities below.

Part 1

Read the scenarios and respond.

1. Two teenagers are driving down the road. The music is loud, neither have on their seat belts and the driver is texting. *What can be done differently in this situation to be safer?*



2. In January 1999, a 17-year-old high school student working part-time for a dairy farmer was killed when his clothing was caught by the unshielded power take-off (PTO) driveline of a grinder-mixer. He had been helping the farmer add sacks of feed supplement to ground corn in the mixer. The task was almost complete, and the farmer was closing the hammer mill cover while the youth stood near the PTO driveline in front of the flywheel. Although the flywheel was disengaged, the PTO driveline and unshielded flywheel clutch were rotating at about 200 revolutions per minute (RPM). The farmer heard a thump, then noticed that the boy had been caught and entangled around the driveline at the flywheel clutch. He died instantly from severe head injuries. (<https://www.cdc.gov/niosh/face/stateface/ia/99ia003.html>)

What could have been done differently to prevent this?

3. Look around the classroom and/or agricultural shop. Identify and explain the safety features you see. (Examples: exit sign, emergency eye wash station, etc.)



4. What are safety features that could be added to the classroom?

Aligned to the following standards:
FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4;
CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;

NAME: _____

Part 2

5.



What does this symbolize?

6.



What does this symbolize?

7.



What does this symbolize?

Aligned to the following standards:
FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4;
CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;

NAME: _____

Part 3

Choose one of the safety tips identified in the article and create a tweet (140 character limit) to promote awareness of the safety tip.

Create a hashtag to use in the social media post.



Aligned to the following standards:

FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4; CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;

NAME: _____

Aligned to the following standards:
CS.01; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PG-J; FFA.CS-N; AG1; CSS.RI.9-10.2; CCSS.WHST.9.10.4; CRP.02; CRP.04; CRP.05; CRP.06;

KEY — Appendix 2: When Disaster Strikes

Created: Fall 2018 by the National FFA Organization

DIRECTIONS:

Circle all the events that would be considered a *natural disaster*.

Inland Flooding

9/11 Bombing

Tsunami

Tropical Cyclone

Uncontrolled Wildfires

Tacoma Narrows Bridge Collapse

Hoover Dam Collapsing

Major Crop Freeze

Panama Canal Falling



DIRECTIONS:

Begin reading the article "When Disaster Strikes" in the fall 2018 issue of *FFA New Horizons* and complete the following activities.

1. Identify 4 natural disasters that impacted the U.S. in 2017:

- (1) 3 cyclones
- (2) 8 severe storms
- (3) 2 inland floods
- (4) Crop freeze
Drought
Wildfire

2. During the summer of 2017, the Napa County, California area was struck with raging wildfires that caused destruction of agricultural resources. Describe what the students at Vintage High School did to help out during the wildfires. *Students, with the help of their advisor and local vets, helped to house misplaced animals and provide medical treatment and basic needs until the animals could return home. Some animals even had to be picked up to ensure they made it to the safety of the school farm.*
3. What skills have you learned during your school career (agriculture courses, school activities, community events/activities, etc.) that would help to make a similar program run as effectively and efficiently as this one did? (Examples: hard work, dedication, etc.)
Answers will vary.



- (1) _____
- (2) _____
- (3) _____
- (4) _____
- (5) _____

4. When disaster strikes, helpful neighbors can be the difference between recovering and struggling to survive. Local FFA programs and schools can serve as wonderful resources in such times, just like Vintage High School did during the 2017 wildfires. Unfortunately, disaster can strike at any time and without warning.



NAME: _____

Aligned to the following standards:
CS.01; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PG-J; FFA.CS-N; AG1; CSS.RI.9-10.2; CCSS.WHST.9.10.4; CRP.02; CRP.04; CRP.05; CRP.06;

- (1) Identify a natural disaster that could impact your home town and school. **Answers will vary.**

- (2) The ultimate question: How can I help? Develop an activity that could help alleviate some of the stress if the above identified disaster were to occur. To outline your activity, complete the following chart that could then be added to your chapter or school's Program of Activities (POA) in case an emergency were to strike.
Answers will vary.



NATIONAL
FFA ORGANIZATION



Program of Activities: Form 2

DIVISION: Building Communities

QUALITY STANDARD: Environmental or Safety

COMMITTEE: Community Service

ACTIVITY: _____

COMMITTEE MEMBERS RESPONSIBLE: (Fill in when put into action)

Goals	Steps	Target Date	Estimated Financial Impact		Results/Notes
			Expenses	Income	

For more information on Program of Activities development, review the POA Resource Guide.

****For funding of community service activities look into the National FFA Living to Serve Grants offered throughout the year! Be sure to double check the quality standard you select to ensure it aligns with the grant quality standard.****



NAME: _____

Aligned to the following standards:
CS.01; CS.02; CS.04; CS.06; FFA.PL-A; FFA.PL-C; FFA.PG-J; FFA.CS-N; AG1;
AG2; AG4; AG6; AGC02.02; AGC10.03; AGC10.04; CCSS.RI.9-10.1;
CCSS.W.9-10.2; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.WHST.9.10.6;
MP1; MP2; MP5; MP6; CRP.02; CRP.04; CRP.05; CRP.06

KEY — Appendix 3: Climate Change

Created: Fall 2018 by the National FFA Organization

DIRECTIONS:

Read the article "Talking Points: Climate Change" in the fall issue of *FFA New Horizons*.

- (1) Based on the reading, complete the Venn diagram to compare and contrast the terms "climate change" and "global warming." (If you need further assistance, visit the following site: <https://climate.nasa.gov/resources/global-warming/>.)

Climate Change

Global Warming

Climate change is change in the traditional weather that occurs in an area. These changes can be brought about by man-made causes such as fossil fuel usage.

Similarities

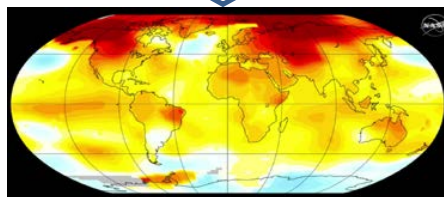
Greenhouse gasses are involved.

Global warming is thought to be caused by greenhouse gasses and results in the current and anticipated change in air temperature.



Which term above is the more appropriate term to describe climate trends?

Climate change



NAME: _____

Aligned to the following standards:
CS.01; CS.02; CS.04; CS.06; FFA.PL-A; FFA.PL-C; FFA.PG-J; FFA.CS-N; AG1;
AG2; AG4; AG6; AGC02.02; AGC10.03; AGC10.04; CCSS.RI.9-10.1;
CCSS.W.9-10.2; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.WHST.9.10.6;
MP1; MP2; MP5; MP6; CRP.02; CRP.04; CRP.05; CRP.06

DIRECTIONS:

- (1) Select 10 dates between 1884 and 2017 and record them in the box.

Answers will vary.

- (2) Select a major city of your choice on the map below by drawing a ★ and labeling the name of the city.
Answers will vary.



- (3) Visit the NASA website at <https://climate.nasa.gov/interactives/climate-time-machine>.
(4) In the box below, create a graph that depicts the temperature change for the city that you selected above. Be sure to include axis labels and a title.

Title: _____

Answers will vary.

NAME: _____

Aligned to the following standards:

CS.01; CS.02; CS.04; CS.06; FFA.PL-A; FFA.PL-C; FFA.PG-J; FFA.CS-N; AG1; AG2; AG4;
AG6; AGC02.02; AGC10.03; AGC10.04; CCSS.RI.9-10.1; CCSS.W.9-10.2; CCSS.SL.9-
10.1; CCSS.SL.9-10.2; CCSS.WHST.9.10.6; MP1; MP2; MP5; MP6; CRP.02; CRP.04;
CRP.05; CRP.06

(5) Find a classmate that selected a city different from your own.

(6) Complete the T-chart comparing and contrasting the temperature change within your two cities.

Your city:	Similarities	Classmate's city:



(7) Why do think your two cities were so similar or different in terms of temperature change? **Answers will vary.**

NAME: _____

Aligned to the following standards:

CS.01; CS.02; CS.04; CS.06; FFA.PL-A; FFA.PL-C; FFA.PG-J; FFA.CS-N; AG1; AG2; AG4; AG6; AGC02.02; AGC10.03; AGC10.04; CCSS.RI.9-10.1; CCSS.W.9-10.2; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.WHST.9.10.6; MP1; MP2; MP5; MP6; CRP.02; CRP.04; CRP.05; CRP.06

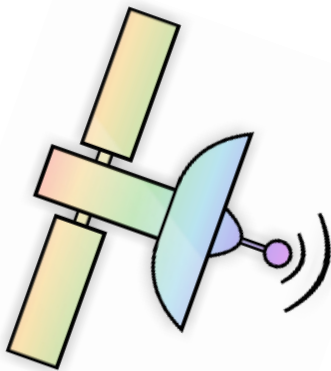
DIRECTIONS:

Watch the video "Science for a Hungry World: Agriculture and Climate Change" by NASA. The URL is <https://pmm.nasa.gov/education/videos/science-hungry-world-agriculture-and-climate-change>.

While watching the video, answer the following questions.

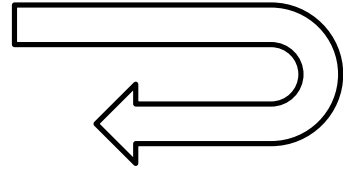
What are scientists predicting will happen?

- | | | |
|-------------------------------|----|--|
| 1. <u>Drought</u> | OR | 1. <u>Cooler temperatures</u> |
| 2. <u>Fire</u> | | 2. <u>Increased flooding intensity</u> |
| 3. <u>Warmer temperatures</u> | | 3. <u>More rainfall</u> |



What is NASA doing to understand climate change?

Using satellites



Why is this type of technology implementation helpful?

Satellites give us a view of the changing climates and then also help give understanding of agricultural production. This data will give us necessary data to determine how to face the growing problem of climate change.

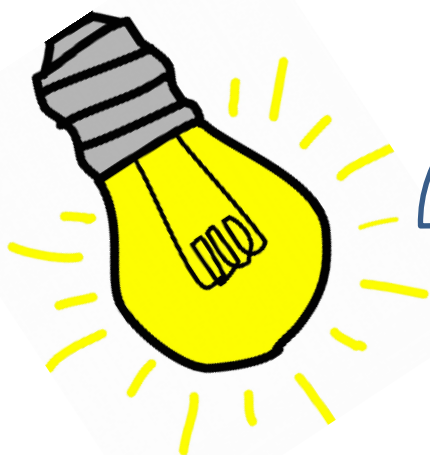


As of now, how is climate change impacting agriculture?

There has been a steady increase in droughts and floods occurring across the country, which has a negative impact on the ability to grow crops and raise livestock effectively. Methods for food production will need to shift from traditional processes to meet the growing demands of a changing population.

NAME: _____

Aligned to the following standards:
CS.01; CS.02; CS.04; CS.06; FFA.PL-A; FFA.PL-C; FFA.PG-J; FFA.CS-N; AG1;
AG2; AG4; AG6; AGC02.02; AGC10.03; AGC10.04; CCSS.RI.9-10.1;
CCSS.W.9-10.2; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.WHST.9.10.6;
MP1; MP2; MP5; MP6; CRP.02; CRP.04; CRP.05; CRP.06



What can you do to help with climate change?

Answers will vary.		Answers will vary.	
1	2	3	4
Answers will vary.		Answers will vary.	

Now that you have an understanding of climate change in agriculture, you know that many jobs will focus on trying to solve this global problem.

Go to AgExplorer.com and identify 3 careers that would work directly with this important issue. **Answers will vary.**

1. _____
2. _____
3. _____



NAME: _____

KEY — Appendix 4: The Fruits of Their Labor

Created: Fall 2018 by the National FFA Organization

DIRECTIONS:

Read the article "The Fruits of Their Labor" in the fall 2018 issue of *FFA New Horizons* and answer the questions below.

Part 1

Learn more about pomegranates by answering the following questions. Use these websites to aide in your research:

<https://www.hort.purdue.edu/newcrop/morton/pomegranate.html>

<https://www.medicaldaily.com/pomegranate-health-benefits-fruit-helps-protect-against-plaque-hunger-and-certain-340020>



1) Where did the pomegranate originate?

The pomegranate tree is native in the region from Iran to the Himalayas. It was introduced in California by Spanish settlers in 1769. It is grown in California and Arizona.

2) Provide a brief description of the pomegranate: (How does it grow? What does it look like?):



It grows as a shrub or small tree to 20 or 30 feet high with deciduous leaves. The plant contains showy flowers on the branch tips with one or as many as five in a cluster. The seeds represent 52 percent of the weight of the entire fruit.

3) What pests and/or diseases may affect it?

The pomegranate butterfly is one pest known to cause problems for this plant. It lays eggs on the flower buds and the calyx of developing fruits. It can cause the loss of an entire crop unless sprayed two times 30 days apart. Other pests/diseases could include the stem borer, Aspergillus castaneus, Sphaceloma punicae and dry rot.

4) What are the signs of when the pomegranate is ready for harvest?

The fruit ripens six to seven months after flowering. You can tell it is ready for harvest when the fruit makes a metallic sound when tapped. The fruit should not be pulled off but instead clipped close to the base to not leave a stem that causes

damage in shipping.

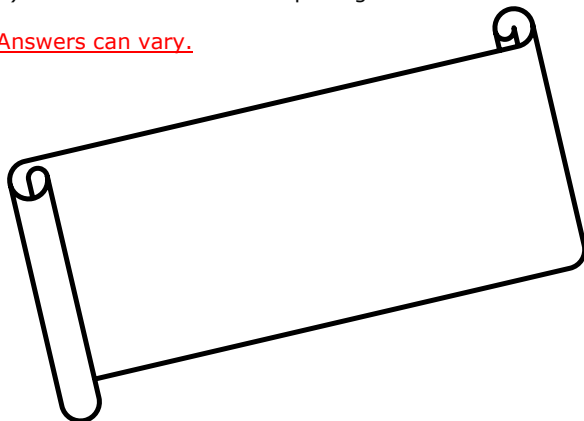
5) In what type of soil does the plant do the best?

This type of plant prefers calcareous, alkaline soil and acidic loam soil.

6) What type of climate does this plant grow well in? This plant grows well in primarily mild-temperate to subtropical climates. It is also naturally adapted to areas with cool winters and hot summers.

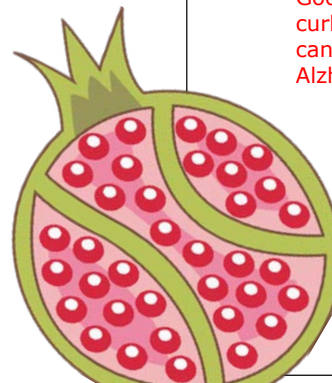
7) List five cool facts about pomegranates.

Answers can vary.



8) Five health benefits of pomegranates are ...

Good source of potassium, helps to curb your hunger, plaque protection, cancer protection and reduced risk of Alzheimer's disease



NAME: _____

KEY — Appendix 5: What's Your Brand?

Created: Fall 2018 by the National FFA Organization

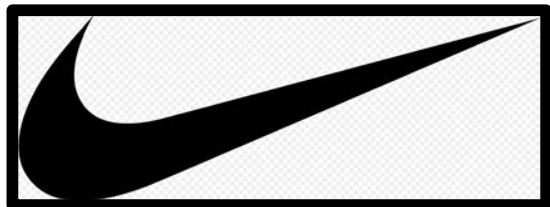
DIRECTIONS:

Read the article "Transformative Training" in the fall 2018 issue of *FFA New Horizons*. After reading the article, complete the activities below.

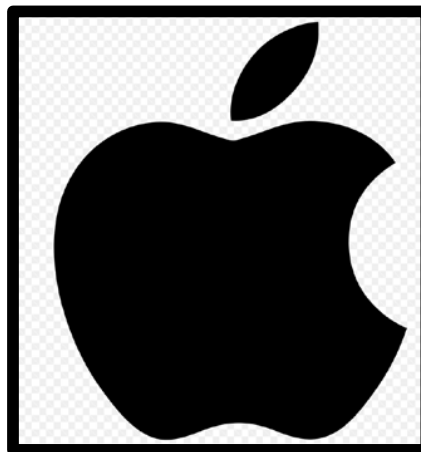
Part 1

Identify the company associated with each logo.

1. Nike



2. Apple



3. NBC



4. The logos above represent companies. Why are these logos recognizable? Answers will vary.

5. Why is it important to have a "brand" for yourself? Answers will vary.

6. How can having a "brand" affect your future (school, career, etc.)? Answers will vary.

Aligned to the following standards:
FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4;
CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;

NAME: _____

KEY — Appendix 6: Career Success Reflection

Part 2

DIRECTIONS:

In the article, Kate references how she enjoyed public speaking in FFA. Use the space below to learn more about career development events (CDEs).

Watch the video "About FFA Career Development Events | National FFA Convention & Expo" to find the answers to questions 1 through 6. You can access the video by clicking on the following link, https://www.youtube.com/watch?time_continue=8&v=p8nXD21AdRg.

1. What is the primary objective of CDEs? **To help students become stronger individuals, function as a team and experience healthy competition.**
2. Complete this statement: CDEs help students develop the ability to **think critically, communicate clearly** and perform **effectively** in a **competitive** job market.
3. How does each of the CDEs ensure they reflect the industry? **An industry representative is on the committee that conducts the CDE.**
4. True or **False**: A CDE never changes.
5. List 5 CDEs or activities that are shown and discussed in the video. **Welding/agricultural technology and mechanical systems, floriculture/flower arranging, livestock evaluation, dairy evaluation, parliamentary procedure, veterinary science.**

On the CDE webpage of FFA.org, search for CDEs that are conducted at the national level. The CDEs and the webpages for each specific CDE will be needed to answer questions 7 through 10.

6. Some of the CDE webpages feature videos. List at least 10 CDEs that have their own video featured on their webpage. **Agricultural technology and mechanical systems, agronomy, dairy cattle evaluation and management, environmental and natural resources, farm business management, floriculture, food science and technology, forestry, horse evaluation, livestock evaluation, milk quality and products, nursery/landscape, poultry evaluation and veterinary science.**
7. Choose one of the CDEs from your list and watch the video. Describe what happens during that event. **Answers will vary.**
8. Choose one of the CDEs that does not have a video and investigate its webpage to answer these questions:
 - a. What CDE did you choose? _____ **Answers will vary.**
 - b. What does someone competing in your chosen CDE do during the event? **Answers will vary.**
 - c. List 3 SAEs related to this CDE. **Answers will vary.**
 - d. What is the outline (format) of the CDE? **Answers will vary.**
9. Compare and contrast the two CDEs you chose to learn more about. **Answers will vary.**

Aligned to the following standards:

FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4; CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04

NAME: _____

KEY — Appendix 7: Get Serious About Ag Safety

Created: Fall 2018 by the National FFA Organization

DIRECTIONS:

Read the article "Get Serious About Ag Safety" in the fall 2018 issue of *FFA New Horizons*. After reading the article, complete the activities below.

Part 1

Read the scenarios and respond.

1. Two teenagers are driving down the road. The music is loud, neither have on their seat belts and the driver is texting. *What can be done differently in this situation to be safer?*



Turn down music, wear seat belts and the driver should focus on the road and not text and drive

2. In January 1999, a 17-year-old high school student working part-time for a dairy farmer was killed when his clothing was caught by the unshielded power take-off (PTO) driveline of a grinder-mixer. He had been helping the farmer add sacks of feed supplement to ground corn in the mixer. The task was almost complete, and the farmer was closing the hammer mill cover while the youth stood near the PTO driveline in front of the flywheel. Although the flywheel was disengaged, the PTO driveline and unshielded flywheel clutch were rotating at about 200 revolutions per minute (RPM). The farmer heard a thump, then noticed that the boy had been caught and entangled around the driveline at the flywheel clutch. He died instantly from severe head injuries. (<https://www.cdc.gov/niosh/face/stateface/ia/99ia003.html>)
What could have been done differently to prevent this?

Ensure that PTO drivelines and other driveline components are completely shielded to prevent worker contact with rotating machine parts

Ensure that workers are trained to recognize the hazards of working near exposed rotating machine parts

Ensure that damaged machine components and systems are repaired and maintained in proper working order
(<https://www.cdc.gov/niosh/face/stateface/ia/99ia003.html>)

3. Look around the classroom and/or agricultural shop. Identify and explain the safety features you see. (Examples: exit sign, emergency eye wash station, etc.)

Answers will vary.



4. What are safety features that could be added to the classroom?

Answers will vary.

Aligned to the following standards:

FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4; CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;

NAME: _____

Part 2

3.



What does this symbolize?

Slow moving vehicle

4.



What does this symbolize?

Yield

5.



What does this symbolize?

Tractor on road and/or
crossing area.

Aligned to the following standards:
FFA.PL-C.; FFA.PL-D.; FFA.PL-F.; FFA.PG-J.; FFA.CS-M.; FFA.CS-N.; FFA.CS-O.; CCSS.RI.9-10.4;
CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.SL.9-10.4; CRP.04;