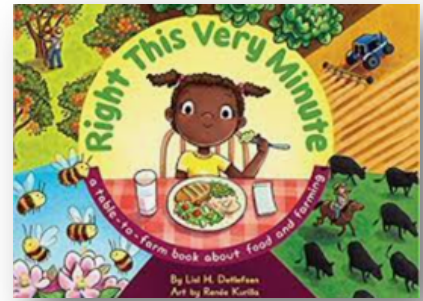




Right This Very Minute by Lisl Detlefsen

Ag Literacy Project with FFA, 4-H & Volunteers
Lesson Plan (k-5, variations are adjusted to fit k-2 & 3-5 grade bands throughout the lesson plan)



Introductory Concepts to NGSS: Earth's Systems

K-2nd **2-ESS2-3** and 3-5th **3-ESS2-2**

*Expand on and explore full standard after presentation

www.nextgenscience.org

Book

This is a table-to-farm book about food and farming. Each page offers insight into a variety of industries within agriculture (both farming and ranching). The storyline allows the reader to learn and grow in appreciation for the hard work and dedication that it takes for farmers and ranchers to produce and protect their livestock and crops from the elements of the weather throughout the year, and always look for new and innovative practices to implement for the betterment of their operation.

How the Project Works

FFA Members read to students in K-2 classrooms and completes a simple hands-on activity with the students. Suggested time approximately 1 hour (longer if students have questions or comments).

**Some activities have been modified to reflect COVID student safety procedures.*

Supplied Materials in Kit:

- Participation form/classroom evaluation sheets
- Printed handouts and thank you letters
- 4 Mason jars (regular size)
- 1 Bottle w/blue food coloring (4 drops dye/filled bottle)
- Baking Soda (2 cups = 4 "Snow in a Jar" activities)
- 1 Can of shaving cream (menthol or aloe)
- 4 Paper plates
- 2 sets of clear serving gloves
- 1 Clear pipette
- Science goggles (1)
- 1 T-Shirt (white XL)

Not supplied, but recommended

- Measuring cup (1/4 cup)
- Bring paper towels & any additional cleaning supplies (if bottle of blue food dye spills)
- 1-2 bottles of water - or make sure you have access to a water source in the classroom for activity.
- Plastic tablecloth (try to keep tables as clean as you can)
- Additional (OPTIONAL) Create "Scientist Lab Coats" out of white t-shirts for presenters and/or students for the Weather in a Jar experiment.

Common Core Standards – English

K.RI.1

2.RI.1

4.RI.1

1.RI.1

3.RI.1

5.RI.1

Checklist

- Make sure you have ALL your supplies you need to present.
(PPT, complete Materials Kit, handouts (k-2 or 3-5), & eval form for the teacher to fill out).
- Give Teacher Evaluation Form BEFORE you start.
- Ask the teacher to take photos (back of students only), and email those in to agclass1@nmflb.org.
- Wait for the teacher to complete the eval form and take with you OR remind them to email it (agclass1@nmflb.org) after completed.
- Clean up presentation area – things may get messy!
- Have a great time & remember to smile!
- Scan/Email (agclass1@nmflb.org) the Participation Form once you have completed all presentations.

Part 1: Intro/Recruit for Future Agriculturists & Community Leaders (Time: 3-5 minutes)

1. Briefly introduce yourself and talk about your program (FFA/4-H/volunteer group).
Suggestion: *Visuals help! If you live on a farm or ranch, bring props! Ex: crop samples or photos of the farm, equipment, buckles, ribbons, or plaques from FFA/4-H/volunteer activities*
2. Discuss your connection to agriculture. If you weren't involved in agriculture prior to FFA/4-H, explain what FFA/4-H has done for you or what you look forward to doing through related volunteer activities.
3. Encourage students to consider joining FFA/4-H/volunteer group when they can!
Remind them they don't have to live on a farm or ranch to be in FFA/4-H.
Enthusiastically High Five your presentation partners for joining such a great organization.

Part 2: Give a "High Five" to Agriculture! (Time: 5 minutes)

Suggestion: *Bring examples of everyday products that come from agriculture or show pictures on PowerPoint.*

**Pass around Handout #1 "High Five" for Ag (remember to print out the right one – k-2 or 3-5)*

They are welcome to fill this out if there's time, or their teacher can use this as a follow-up assignment.

1. Say, "Today we're going to be talking about a really awesome word "AGRICULTURE" and why it deserves a high five from us! Raise your hand if you've ever heard of that word before (me saying it right now doesn't count) and give me a "thumbs down" if you haven't. (...scan the room to see hands vs. thumbs...)
"Okay - Does anyone want to share what they think the word agriculture stands for?" ...pause for sharing... "That's okay if you don't know what it means because that's why we're doing today. We're going to learn about it, *right this very minute.*"
 2. Ask the students, "But, before we get to that, what is a high five? What are we trying to tell the other person who receives our high five when we give it to them?" ... *Share some answers...* Then respond with, "Okay, great – and why should we give a "high five" to agriculture?... Don't we save our high fives for people who do a really good job, and someone we consider to be our friends? Let's look at all the amazing things that agriculture provides for us and how agriculture gives us a "high five" right on back!"
 3. Say, "Agriculture is SO important that we cannot live without it and has to do with the things we use every single day! Agriculture is very easy to remember because it consists of two main groups. It is the growth and use of:
 1. **Plants** – (farmers call those crops): food and resources we use that start as seeds AND
 2. **Animals** – (farmers and ranchers call them livestock): think animals you see on a farm or ranch.
 4. "From there stems different categories (or groups) that we use agriculture for in our daily lives – like fingers on our hand." *Raise your hand and wiggle your fingers. "Follow along as we learn the 5 F's of agriculture."*
 - a. **HAND:** Hold up one hand – this represents AGRICULTURE! Repeat that with me on the count of 3. One, two, three: AGRICULTURE!! Your whole hand represents all of agriculture.
 - b. **PALM:** Now, open your hand really wide (fingers spread apart) and with your other hand point to the center of your palm which represents both crops & livestock (plants and animals) – this is our foundation.
"Now point to each finger."
 - c. **THUMB: Food** – it comes from both plants and animals (Choose 1 student to share their favorite food)
 - d. **INDEX: Fabric** – it comes from both plants and animals (Choose 1 student to share a type of animal or plant textile, like wool or cotton).
 - e. **TALLEST: Flowers** – they grow on plants, and they are VERY important for pollination & providing a beautiful smell and color to enjoy (Choose 1 student to share their favorite flower).
 - f. **RING: FORESTRY** – trees are big and strong plants that we can use for many things. Raise your hand once you find something in the room that's made of wood (Choose 1 student to share what they found).
 - g. **PINKY: FUEL** – some can be made from corn, known as a biofuel/biodiesel. Who rode to school in a vehicle or bus? (Choose 1 student to share what they came to school in)
- *Repeat the words and point to each finger, for a quick review (Food, Fabric, Flowers, Forestry, and Fuel).*
5. Great Job! You now have 5 facts (*hold up hand*) to share with your friends and family about agriculture, and they all fit within the palm of your hand. Let us save our "High Five" for agriculture for the end of the presentation, so we

can properly thank our local farmers and ranchers for all their hard work.” REMIND the students and teacher – there is a worksheet that they can fill in after you present as a good follow-up to this presentation.

6. IF TIME REMAINS – work through as much of the worksheet as you can, before moving on to Part 3, otherwise keep moving.

Part 3: Book Reading (Time: 10 minutes)

PRACTICE reading the book before your class visit. Make it exciting and remember time yourself to keep a good pace!

1. Introduce story. Ex: “Have you ever wondered where your food comes from? Not just the store, farther back than that... We’re talking about the fact that our food comes from farms and ranches all over the United States (and the rest of the world for items we can’t grow here). Or... maybe, have you ever thought about how much hard work it takes for a farmer or rancher to take care of their crops and livestock when it’s raining, snowing, or possibly hot and windy out? It doesn’t matter what day it is or what the weather has in store – agriculture happens every day, 24 hours a day, 7 days a week. Plants and animals continue to grow, and they need food and water every day. In this story, we’ll get to see how and where our food is grown, and learn about all the many ways, “We need farmers and ranchers, right this very minute.”

*Be sure and listen for important words such as:

Agriculture, Weather Forecast, Harvested, Seeds, Soil, Water, & Nutrients

(Have the slide up that shows these words & pictures – for recall after the book is read)

2. Show off the great images in the book!
3. Timekeeper – Keep track of time.
4. After the book read, **if there is time ask these questions**,
 - a. What are some things you noticed that farmers and ranchers do every day?
 - b. Ask them if they remember hearing any of the “important words”?

Part 4: BRAIN BREAK (Stand, Stretch & Dance) – 5 minutes

1. Peterson Farm Bros parody song (embedded in PPT): [Farmer Rock Anthem](#)
2. **CONTEST:** See which student can do the best Peterson Bro rendition of the “Running Man”. Encourage them to use their arms and legs to help get the wiggles out. ☺ Remember – elementary students learn well by example!
3. Give a round of High Fives (or “air” high-fives – COVID safe) for a job-well danced!

EXTRA SLIDE – “Help name the different types of weather”

As they are sitting back down, this next slide is intended to get them back and focused.

Part 5: Weather in a Jar: Let’s be a Farmer AND a Scientist! (Time: 20 minutes)

Water is a Natural Resource (5 minutes)

1. Tell students that they are now going to become FARMERS/RANCHERS and a SCIENTISTS by creating our own weather systems inside of jars. Regardless of what the weather looks like, the safety and protection of the livestock is important, and farmers and ranchers do what they can to make sure they are tended to and have a form of shelter to block them from the elements of extreme weather (when and where they can provide it).
2. *What 4 Natural Resources do plants and animals need to grow?” (WATER, AIR, SUN, AND SOIL)*
3. One of those resources can change its physical form (what it looks and feels like) and is on a constant cycle of “use and reuse” by people, animals, and plants (drinking, cleaning, cooking, playing) – which do you think it is? **(WATER)** “Great answer, it is **WATER!** We all use it, and we need to be careful with how much we use because we only have so much fresh water available. Before we create our weather in a jar system, we need to understand how the water cycle works!”

(Show slide with water cycle and point to each section)

(3-5 ONLY)

Water Cycle (5 minutes)

Have students volunteer to read what each section is doing.

COLLECTION: Water from across the ground (to the best of its' ability) will begin to find its' way together to form puddles, rivers, and lakes.

EVAPORATION: As the sun shines on these bodies of water the temperature rises, and the water evaporates and floats to the sky, called water vapor.

CONDENSATION: The water vapor travels up to eventually form clouds and the temperature starts to cool in temperature (opposite of evaporation).

PRECIPITATION: As more and more water vapors collect in the clouds, they become full and eventually become so heavy they release with either snow or rain, back to Earth. The rain and melted snow then run downhill into rivers and streams or will melt into the ground and become ground water.

START OVER & repeat, repeat, repeat!

(K-2 ONLY)

Water Cycle Dance – You are each your own water system!

**Play video when starting this section (after you demonstrate the actions)*

COLLECTION: Lay on the floor and wiggle body to signal you're in a river or are now ground water.

EVAPORATION: Lay down on floor spaced out. Feel the warm sunshine and spread arms and legs out and start to rise from the heat.

CONDENSATION: Slowly bounce around (in place) and bring arms in close and shiver.

PRECIPITATION: Shake your arms around as you start to get back on the ground (snow/rain).

REPEAT 2x

Weather in a Jar Activity Time (10 minutes)

Say, "Now that we're familiar with the water cycle, we are going to recreate the "RAIN in a Jar" & "SNOW in a Jar". There are other types of weather we can't focus on today, but we will provide you with the full handout so you can finish it either in class or at home.

**The presenter for this part will be stationed at the front of the room, and students will be spaced out on the floor sitting down, around the table (spaced around at 3ft distance from other students). The presenter will create 2 sets of the weather jars for both the RAIN and SNOW on the table to allow students to see (due to COVID restrictions we're limited on what students can share and touch).*

There is Handout #2 (k-2 & 3-5) "Weather in a Jar Journal" that you can pass out at this time. Students will guess and write in their predictions and findings on this page (they can draw in the picture portion later).

Everyone gathers as close as they can!

1. Start with the **RAIN in a Jar** activity (instructions are listed below in each activity description). Allow students to enjoy seeing the "rain fall" inside the jar. Squeeze enough food coloring into one concentrated area to allow it to push through the shaving cream that represents the cloud. You have 2 jars, so in the first jar squeeze light & scattered droplets with the pipette (to signify clouds don't always provide rain, or a lot of it) and then use the second jar to squeeze the pipette with heavier droplets to encourage a quicker release of the "rain".
 - a. Ask them, "What do you notice happening in the jar? Why do you think the rain/food color is doing that?... & Are there any other questions?"
 - b. Explain to them what's happening in the jar (explanation provided below in each activity description).
2. Then, continue with the **SNOW in a Jar** activity (instructions are listed below in each activity description). Dump the mixture onto the paper plate and spread it out for the students to see you touch and mold it. IF ALLOWED, students can pinch a small sample to feel the "snow" you created with the baking soda and shaving cream. Explain to them what's happening in the jar (explanation provided below in each activity description).
 - a. Have the trash bag ready to release the sample the picked up so it doesn't go back in the original pile.
 - b. Ask them, "What do you notice happening in the jar? Why do you think the snow sticks together like that?... & Are there any other questions?"
 - c. Explain to them what's happening in the jar (explanation provided below in each activity description).

WEATHER IN A JAR ACTIVITY

<https://leftbraincraftbrain.com/6-amazing-ways-to-make-weather-in-a-jar/>

RAIN in a Jar

Making rain in a jar is the classic weather science experiment, so let's kick things off with rain! For each project, we'll list the supplies needed and the quick and easy steps to do the experiment. Plus, as always, we include a helpful description of the why behind the what, the science happening inside the jar.

Rain in a Jar Supplies

- Jar & 3/4 full of water
- Shaving cream
- Food coloring

How to Make Rain in a Jar

1. Pour water into jar.
2. Top water with a cloud of shaving cream.
3. Drip a few drops of food coloring onto the top of the shaving cream. Do not mix.
4. Watch the colorful rain fall!



What's Happening in the Jar? The Science of Rain

This experiment works just the way that rain happens! Clouds are made of tiny water droplets. When the humidity gets high, these tiny water droplets group together and become too heavy to be suspended in the cloud. And then it starts raining! In this experiment, the shaving cream is a cloud, and the food coloring are like the water droplets. When you drip enough color onto the shaving cream, it gets too heavy and breaks through and starts "raining" into the water.

SNOW in a Jar

This weather in a jar activity is totally fun and even feels cold! Fake snow is perfect for hot summer days with no snow in sight.

Snow in a Jar Supplies

- Jar with lid
- 1/2 cup baking soda
- 1/2 cup menthol shaving cream

How to Make Snow in a Jar

1. Add baking soda and shaving cream to a jar.
2. Cover tightly and shake until combined. You will start to be able to see through the jar again (the shaving cream coated it before mixing) when it's combined.
3. Make a snowball! The snow will feel cold from the menthol shaving cream.



What's Happening in the Jar? The Science of Snow

Ever wonder why snowballs stick together? Snow is simply a bunch of ice crystals. A lot of them! When you make a snowball, you push together the crystals with enough pressure, that some of the crystals melt. When you pull your hands away and release the pressure, the water refreezes and holds the ball together. In this experiment, you're not making actual ice crystal snow, but the shaving cream holds the baking soda together. And the menthol in the shaving cream gives you a cold sensation.

Part 6: Wrap-Up “High Five for Agriculture” Thank You Letters (Time: 15 minutes)

1. Now that we know what the water cycle looks like, we can see that it takes a special kind of person to work long days outside in the rain, snow, wind, and hot/sunny days.
You see – regardless of what the weather looks like, farmers and ranchers work extremely hard to make sure that our food and other resources are kept strong and healthy (to the best of their ability) to make sure the rest of their family, friends and community have what they need.
2. We are now going to tell our local farmers and ranchers THANK YOU for everything they do – these will be collected at the end of the presentation so they can be given to local farmers and ranchers at the county farm and livestock bureau meetings. 😊

Break out your coloring tools (markers, crayons, or color pencils)!

Handout labeled “Thank You Letter - High5forAg (K-2)” & “Thank You Letter - High5forAg (3-5)” will be used at this time. Students will trace their own hand on the front of the Thank You card and can either color it in or fill it in with the 5 F’s of Ag.

KEEP IN MIND – Due to timing, you may be running close to the end of your presentation timeframe. They may need more time for this section – so offer to the teacher that they can complete this as either homework for an assignment later in the week and you can pick it up when they’re completed.

*****Please***** Remember to take photos of the thank you letters and any other completed handouts, so we have that for documentation on this project.

At the very end - Ask if students have questions.

1. Tell class that you will be leaving the “Right This Very Minute” book in their teacher for them to check out later.
2. Thank the teacher and students for allowing you to visit their classroom and that you hope to see them again soon, and if they took any pictures (having only the backs of the students heads – for privacy/security) they can email those in to agclass1@nmflb.org.

FOLLOW-UP Lesson Plan for this book is “Right This Very Minute”, on the NMAITC lesson matrix

<https://newmexico.agclassroom.org/matrix/lesson/702/>

Set for 3-5th grade classes (2 1-hour sessions) “Students will study a map to discover where different commodities are grown and write a thank-you letter to farmers in their local community.”

Resources & Other Helpful Links

- Feeding Minds Press – Author, Lisl Detlefsen, reads *Right This Very Minute* <https://www.feedingmindspress.com/latest-news/lisl-h-detlefsen-reads-right-this-very-minute>
- Weather in a Jar <https://leftbraincraftbrain.com/6-amazing-ways-to-make-weather-in-a-jar/>
- NMAITC RTVM Lesson Plan <https://newmexico.agclassroom.org/matrix/lesson/702/>
- Next Generation Science Standards <https://www.nextgenscience.org>
- Water Information <https://geoinfo.nmt.edu/fag/water/>
- Precipitation 2020: <https://www.statista.com/statistics/1101518/annual-precipitation-by-us-state/>
- How has this year’s monsoon helped central New Mexico’s Rio Grande? http://www.inkstain.net/fleck/?utm_source=New+Mexico+Farm+%26+Livestock+Bureau&utm_medium=Email&utm_campaign=website
- Talk on drought in NM for ranchers - https://www.santafenewmexican.com/news/legislature/new-mexico-cattle-ranchers-pummeled-by-ongoing-drought/article_901f1fae-0fe9-11ec-9d98-5ba996c9323a.html?utm_source=santafenewmexican.com&utm_campaign=%2Fnewsletters%2Fyour-morning-headlines%2F%3F123%26-dc%3D1631098821&utm_medium=email&utm_content=read%20more&utm_source=New+Mexico+Farm+%26+Livestock+Bureau&utm_medium=Email&utm_campaign=9%2F16%2F2021+-+6%3A00+AM
- Illinois Ag in the Classroom Ag Mag “Water” <http://www.agintheclassroom.org/TeacherResources/AgMags/Water%20Ag%20Mag.pdf>
- Feeding Minds Press “Our Purpose” - <https://www.feedingmindspress.com/our-purpose>
- YouTube – NMAg24seven video series <https://www.youtube.com/playlist?list=PLdLZoP2KPy1ogdVfh1jGQavvH2-i2eByN>
- Peterson Farm Bros Website <https://petersonfarmbrothers.com>

Helpful Hints Before Your Classroom Visit

- Wear official dress. It looks sharp and promotes FFA/4-H.
- Practice! Prepare by reading book and practicing activity. You want to fit your presentation and activity within the time scheduled. Teachers have very busy schedules so please try to stick to your allotted time.
- Check in with the teacher. If possible, before your presentation, briefly visit with the teacher. Share a copy of the activity and ask if there are students that need special accommodations.
- Can everyone see and hear? Before you start reading, make sure all the students can see and hear the book so they will be good listeners.
- Move the book close to the screen as you read. Either while you are reading, or after reading each page, move the book in close so each student can see the great images. This is especially important with younger grades.
- Pay close attention to the students’ mood. Move along fast enough to maintain student’s interest, but slow enough for all students to thoroughly enjoy the story.
- Most importantly, have fun! Enjoy this wonderful experience of reading aloud and teaching children about the importance of agriculture.

QUESTIONS:

Contact New Mexico Ag In the Classroom with any questions you may have on the Ag Literacy Project or to request a training session.

Britney Lardner, Program Coordinator agclass1@nmflb.org

Visit www.nmaic.org for free lessons and resources

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