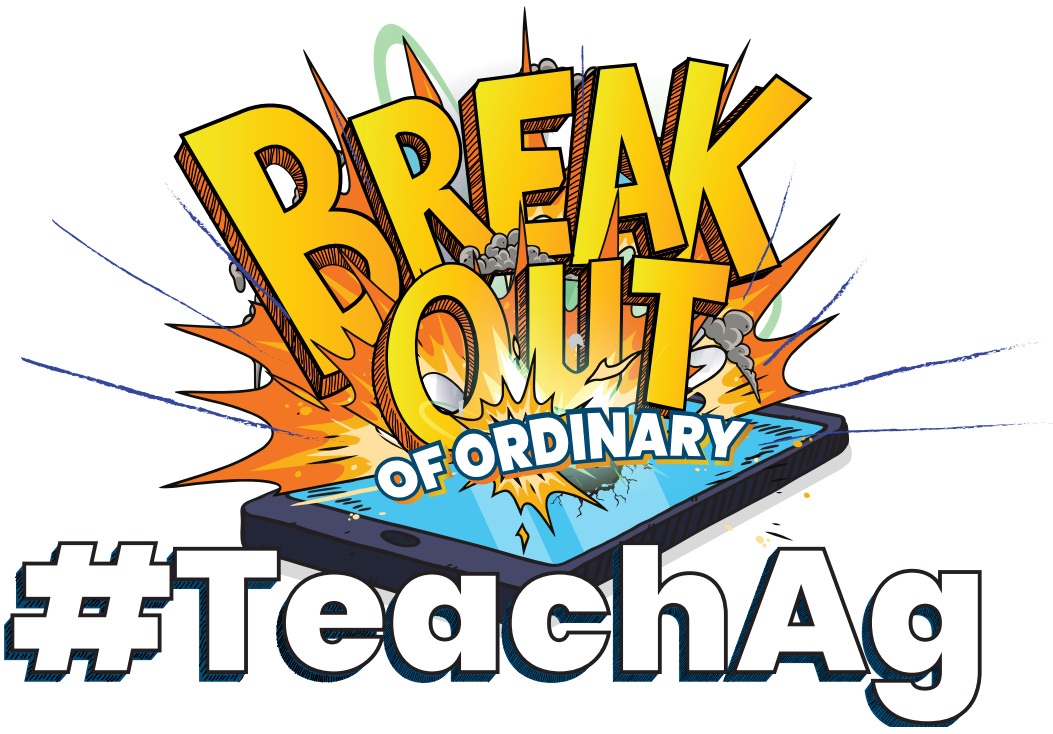
TEACHER GUIDE



NAAE #TeachAg Breakout Challenge

Print-At-Home Version

Be sure you have the most up-to-date version of this guide!
Visit https://www.naae.org/teach-ag/promote-teach-ag/lesson-plan-in-a-box or scan the QR code. Look for NAAE #TeachAg Day Breakout Challenge Teacher Guide - Print At Home Version.

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TEACH AG DAY 2025
BREAK OUT OF ORDINARY - #TEACHAG!
LESSON PLAN TEACHER GUIDANCE

Get ready for a challenge for your students that will connect them across the country from your classroom, while using their own talents and strengths as a team and prove themselves far from ordinary! They will be charged with diving into the values of agricultural education and being an agricultural educator!

To have the most enjoyable experience, review these set up and implementation notes. For a video walk through of the activity, please see https://www.naae.org/teach-ag/promote-teach-ag/lesson-plan-in-a-box/ or scan the QR code.

LOGISTICS

What Do I Need?
In this #TeachAg Day Breakout Challenge, you'll find the following documents you'll need to print, and your students will need access to the teachagbreakout.org website. This is all written assuming you'll have six groups in the room; group size is ideally 4-6 so adjust as you need to! There are a couple other items that will make the activity even more fun listed below:

To Print (the files are organized into 4 PDFs for easy printing):

- **File 1 – Student Recording Page – print double sided**
  30 copies of the student recording page (adaptable to your number of students; this assumes 30)
- **File 2 – Briefing Packets – print one sided**
  6 Briefing Packets (each has 4 worksheets and a cover)
  6 Breakout Time Signs (for when they finish)
- **File 3 – Posters and Visuals (best in color) – print one sided**
  1 Set of Posters (5 Posters) best printed in color
  1 Set of We Broke In winning signs with final password
- **File 4 – The Break Out Box Labels – print one sided**
  1 BreakOut Challenge Box Label with custom rulers
  1 Set of Envelope Labels
  6 Wheel Decoder pages (to cut out and assemble)

To Source (items you'll need to provide – more on this later in the teacher guide!)

- 6 envelopes
- 1 large box or manila envelope that can hold the 6 envelopes listed above
- 6 clear pieces of plastic (transparency pages, ziploc bags, etc)
- 1 red dry erase marker
- 6 paper brads
- 1 Four-Digit Lock – not *required* but see notes below
- One internet-enabled device that can play sound for each group of students
- Writing utensil for each student

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Pacing/Time
This lesson takes around 75 minutes to complete with reflection. The breakout activity itself will take 40-60 minutes depending on the ability of the students. The Facilitator Cheat Sheet (later in this Teacher Guide) will help in keeping students on track. Schools with 45-60 minute class periods can find a natural break at the end of the Breakout Challenge, and conclude the lesson reflection and connection the following period.

PREPARING FOR THIS BREAKOUT ACTIVITY

For your students (and you!) to have a great experience, there are some steps to help you prepare. Think about this like a lab activity; the teacher will prep some materials, give a little guidance, and your students will take it from there! For you, the steps are **1)** registering your teams on the #TeachAg Breakout website, and **2)** setting up your classroom for the activity! We suggest you set up two days prior to National #TeachAg Day.

Registering on the #TeachAg Breakout Website
Time Required: 10-15 minutes, depending on the number of teams/classes doing the activity.

This task is best completed several days ahead of the day of the activity to ensure adequate time to prepare your teams' logins. This step is simple but critical.

1. Go to www.teachagbreakout.org
2. For the first time visiting, click 'Teacher Registration' in the middle of the page.
3. Complete the user details and click Register.
4. You are now into the website and can create logins for your students. The activity is designed for groups to be 4-6 students (max of six per class period), but it is of course variable to your situation.
5. Every team of students will need to be added ahead of time. This is a very easy process: Click **Add New Team** to start.
6. Enter the team name. Each team will need a unique name. As students will need to type this name in when they start the activity themselves, keeping names simple but still representative of your school/students is a good strategy.
7. When done, hit Submit. You can now see teams you have added. A five-digit password was automatically created for this new team, and can be seen in the second column of the Team Table.
8. Once all teams are created, the website is ready! You can create as many teams as you wish. To facilitate students accessing the site quickly, we suggest you do one (or all) of these things:

   a) Record the names and respective passwords onto cards/notes to hand to each group.

   b) Print a Team List using the button on the bottom left. Display this list where students can easily see it and copy their team name and password.
9. With teams created and team names/passwords ready, the next step is to prepare the classroom and hard copy materials!

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Setting Up the Classroom

Time Required: 10-15 minutes

1. Step One – print!
   - For File 1, print 30 copies per class doing this (or however many students you have per class).
   - For File 2, print 6 copies per class doing this activity.
   - For Files 3 & 4, print one copy for the entire day.

2. Hang the posters around the room at eye level in places that students can access. Students will need to be able to look closely at several posters.
   - Posters can be printed to whatever size you need. They can easily be done on two sheets of 8.5 x 11 and taped together if you cannot print them onto 11x17. In a pinch, they can be printed onto 8.5 x 11 and it will still work!
   - It is really fun to have the posters up for several days – if possible – before the day of the event! That makes the ah-ha of discovery and their hidden clues that much more fun! This is not required but recommended.

3. Cut out the wheels for the Wheel Decoder. Poke a hole in the middle of the two circles and connect them with a paper brad or another method so that they can spin. Each group will need one, and it is reusable.

4. One of the clues requires a red filter. You may have seen these in other activities and can be found very inexpensively online. If needed, you can make one using a red dry-erase marker and cut a section of a transparency sheet or a clear sandwich bag. It is a bit rough but it works! Some good squinting at the poster this will be used on can also reveal the answer, and the filter may not be needed.

5. Gather the Envelope Labels, the six envelopes, and the We Broke In signs (printed one sided).
   - Fold the We Broke In signs in half so they become double sided. Tape or glue closed if needed.
   - Cut apart the six labels and affix to the six envelopes. Ideal envelopes would fit the folded signs, but if they have to be folded again to fit, it can be done.
   - Insert the corresponding We Broke In signs to the correctly labeled envelope (1st in 1st, etc). After 3rd place, the signs just say We Broke In without placing.
   - These are reusable from class to class as well!

6. Gather the Breakout Challenge Box label with rulers.
   - Cut apart the custom rulers. They are critical for one of the clues and you will find they do not match regular units. That is ok, along as they were printed with the box label.
   - Affix the Challenge Box label to the box or large manilla envelope you are going to lock.
   - There are many options for this. The basic is to punch a hole in a manila envelope and lock it up. You can do this with a tool box, a cardboard box, etc. Just something you can lock up!
   - Students will need to be able to access this to help solve the challenges!

7. Stack the envelopes in the "break out box" you've just labeled with 1st place on top and 6th on the bottom.

8. Lock the "box" with a four-digit lock that has been set to open for the code 4-5-9-0
   - There are two options here. You can easily purchase a four digit lock (typically used for luggage) from stores such as Wal-Mart (in-store) or Amazon for under $10 if you don't already have one. It will come with directions on how to set it to this custom code; it is usually very easy to do.
   - If purchasing a lock is not an option for you, then you could be the holder of the "box" and students must tell you the four digit password they will figure out in order to get inside.

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9. Sort the Briefing Packets so that each team will have one packet consisting of four pages after the cover page:
   - One page will be a word search
   - One page will be Morse code
   - One page will have a 4 x 4 grid of pictures
   - One page will have a person with a speaking bubble diagram
10. Have copies of the Student Recording page ready.
11. Have student electronic devices with internet access ready to use.
12. Set up the room where groups can work in a space where everyone on their team can see and contribute, but ideally not too close to each other so that they can hear everything the other group(s) are saying.
13. You are ready to go!

WARM-UP ACTIVITY

To build excitement and prepare your students for the 2025 NAAE #TeachAg Breakout Challenge, we have prepared a "warm-up" challenge for you to use the day PRIOR to NAAE National #TeachAg Day.

It is essential that you facilitate this warm-up challenge to show your students how important it will be to listen, move swiftly, and work as a team during the 2025 NAAE #TeachAg Breakout Challenge on NAAE National #TeachAg Day.

To complete the warm-up challenge, at minimum, the two posters pictured here must be displayed in an accessible part of your classroom and the Student Recording page must be ready to hand out to your students.

When you are ready to do the warm-up activity:

1. Give each of your students a Student Recording page. They will need to keep this page for the activity tomorrow.
2. Read the Challenge Reminders to your students. (See the next page of this guide, item #6).
3. Go to **https://www.naae.org/teach-ag/promote-teach-ag/lesson-plan-in-a-box/** or scan the QR code.
4. Play the Warm-Up Challenge video. Students will follow the instructions in the video to complete the indicated portion of the Student Recording page and figure out the puzzle.

Here are some hints and tips to help you facilitate this warm-up challenge.

To solve this, they must find the full equation on the Travel Stamp Poster, then fill in the symbols with numbers that will be found from the green bordered poster.

Remind them that Y=total number of items they brainstormed (there is no 'right' number here; no matter what number they use, it will work.

ANSWER: 1717 (if they follow order of operation). 1683 is an alternate answer.

HINTS (in order of procedure, and starting vague and getting more specific so only use if groups are stuck):

- Point out what posters are behind Chase in the video.

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- Remind them/ask them what their Y equaled after they counted up. Tell them that number will work (they don't need to know that any number will work).
- They can open a new tab and use an online calculator if they don't have one.
- Make sure they have the equation correctly translated:
- (Y/2+850)x (16/8)-Y+17= ????
- Check order of operation and help them simplify.

GAME TIME! - NATIONAL #TEACHAG DAY

When it is time to begin, introduce that it is National Teach Ag Day! Let them know that today will take both their individual talents and their ability to work as a team.

1. Set context and introduce today's challenge and activity around Breaking out of Ordinary and Agricultural Education. Explain this will involve a challenge that requires their teamwork and own abilities to complete it, and that they are competing not only to just beat the challenge but are also competing with classrooms across the country!
    - Note: the first video they watch will explain and set context in more detail, so while this step is important, it doesn't have to be long and shouldn't be!
2. Divide your students into teams of 4-5 individuals.
3. Provide each student with the Student Recording Page
4. Hand out the briefing packets (packet of 4 pages from Step 3 in Setting Up the Classroom section of this guide).
5. Give each team of students their username and password.
6. **Challenge Reminders**
   Read this list out loud to your students.
    - Today's challenges happen one after another. You cannot move ahead to save time. Your team must focus on the challenge presented in the current video until the next page is unlocked.
    - In the first challenge, you will be tasked with two different worksheets. You need to divide and conquer in your group, but if the students get the correct passcode from one worksheet, in the interest of time, they do not necessarily need to complete the other. Both worksheets will provide you with the same answer that will unlock the next challenge.
    - Once you put in the last code, there is one final video you need to watch on the "Success" page. You also have the option to sign up for the NAAE #TeachAg Campaign on that same page.
    - Everyone on a team should be contributing to the team effort at all times.
    - There are resources in this room that will help you with some challenges. You MUST listen intently in order to know what those resources are.
    - Everyone has been given a reflection sheet where you will record your answers. Videos will provide you time to record, but you have to act swiftly and be prepared to listen once time has elapsed.
    - If you are pressed for time, it may be beneficial for one team member in each group to use their mobile device to take a photo of the Morse code section of the box label and/or any posters when needed to prevent any delays.

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7. After you have read the Challenge Reminders, have student teams go to www.teachagbreakout.org, click Student Team Login and enter their username and password. Once they have successfully logged in they can click the "Start Challenge" button to start the challenge!

8. There will be several videos playing at once in the room, as each team has their own device (and they will be on their own pace after the beginning). Have teams huddle together and stay separate from other teams in order to increase focus.

    - Have short class periods? Have teams log in the day before, but don't hand out the briefing packets yet. That way the technology is squared away, passwords work, sound is checked, and you are ready to start with the handouts the next day! Just don't let them watch the first video until the day of!

9. Time to float! Use the Facilitator Cheat Sheet (later in this guide) to quickly and easily reference where students are in their challenge, and to help prompt those who are stuck or proceeding more slowly.

    - The Facilitator Cheat Sheet has a synopsis of the clue, the answer, and some suggested hints. Hints are great; just spoon-feeding the answer is no fun at all. Use facilitation to help guide and keep everyone on pace!
    - Pay attention to groups that are slower than others. Groups that are ahead but get stuck can struggle a bit before you start giving hints and that is okay. This naturally paces the entire room.
    - Be sure to encourage and hold accountable every student to be recording onto their recording page; this will be key during the reflection.

10. As teams finish, they will get into the locked "box!" However, we want EVERYONE to have the joy of solving all the challenges. This means they are expected to take their envelope and then re-lock the container. Be sure to watch and help students as needed.

11. Celebrate with group photos/cheers/etc every time a group finishes! Student teams can upload photos of their group using the device they are on.

12. Direct students to check out the map showing results after the final video! Encourage some time to see who else across the country has completed the challenge and how long it took them!

REFLECTION AND REALIZATION

Depending on pacing and the amount of available time, this may be completed the following day. Set context to connect yesterday's activity to the next piece of learning and reflection.

1. Bring class together when all done.

2. Have students review and recap what the four Extraordinary Impacts were.

3. Have groups reflect and brainstorm what strengths, skills, abilities, talents, tasks, actions/etc. they personally had to use to solve the different challenges today. Was it figuring out how a decoder worked? Was it being supportive and positive to keep the team going? Was it being an excellent listener to a clue? Find at least 5-10 specific ways, moments, skills or talents that you brought to the table! These get listed on the backside of the recording page in the center box.

4. When finished, have groups share examples.

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5. Next, have students fold the left and right edges of the page into the bold line. Now they can see the four Extraordinary Impacts on the outside edges, and they can see their personal assets in the middle. There is white space in between.
6. Provide prompt: Think about what unique things you brought to today. No one did it the same way, and no one did it alone. And yet we were still able to be successful! Look at those Extraordinary Impacts a person makes by Teaching Ag. You weren't meant to be ordinary, and Ag Education is no ordinary profession. Think about how you could potentially use YOUR personal strengths and abilities to make those impacts happen in a career Teaching Ag! Choose 2 or 3 of your ideas from the center of the page and put down some thoughts in the blank space of how you could be a successful ag teacher using that strength!
7. Give time to record, and have students share.
8. End with challenge: While today was a great challenge, and we Broke out of Ordinary and made sure the important messages about Ag Ed got across, we have an even bigger opportunity in front of us: how will we break out of ordinary for ourselves, for others, and for our community? Think about how your career could make that happen, and how that would feel for you!

ACTIVITY CLUES AND SOLUTION OUTLINE

These pages walk through the steps your students will go through to Break Out of Ordinary! The website will facilitate their work – your job is to float, enjoy, prompt, and nudge!

There is a handout at the end of this guide that is convenient to carry around and use as you facilitate.

FIRST CLUE – From the Introductory Video
To solve this, they must translate the Morse Code and solve the Word Search Puzzle.

Word Search: They will need to first find all the words and circle/highlight/draw a line through the words as they find them. As outlined at the bottom, whatever letters are left will spell out the clue when plugged into the spaces (starting at the top left and reading across to the right).

- TIP: be sure to check that they didn't accidentally circle wrong letters or miss any words.
- CLUE: A SIX LETTER WORD FOR BECOMING MORE

Morse Code: If they do not know how to translate it, they could be encouraged to pop open a new window and search for a translation key, OR they could be encouraged to see if any resources are on the box label (there is an interpretation key).

- CLUE WHEN TRANSLATED: "IT RHYMES WITH BOTH AND STARTS WITH G"

ANSWER: 'growth'

HINTS (you could give to a struggling team if needed):

- First Hint: Be sure to check spelling!
- Second Hint: Something plants and animals also do a lot of, especially when they are younger.
- Third Hint: Something we associate with 'personal' when we are talking about ourselves becoming more, such as confident or capable.
- To save time, if the students get the correct passcode from one worksheet, they do not necessarily need to complete the other. Both worksheets will provide you with the same answer that will unlock the next challenge.

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SECOND CLUE – Mr. Russo's Video
To solve this, they must catch the clue at the end that they need every 5th word when reading the page that has a picture of Jon.

Make sure they associate this clue with the correct page (the picture of the person in the video helps)

CLUE (when every fifth word is read): "AG TEACHERS ARE WISE BIRDS JUST LIKE AN"

ANSWER: 'owl'

HINTS:

- Re-watch the last part of the video
- Point out the 5th in the background
- Guide them to find the first 3-4 words
- Point out that the answer is what goes at the end
- Might point out the picture of the owl behind him…

THIRD CLUE – Ms. Planck's Video
To solve this, they will need to connect that they need the red viewer to find words hidden on one of the posters. Those words will be four items found on the box label, which will need to be measured with the included rulers to get the four digit code.

CLUE: provided in the video to go to some LENGTHS and SEE RED

ANSWER: 2341

HINTS:

- Point out where they might see red on the posters, and if they have anything in their resources that connects.
- Remind them she mentioned the breakout box. This is a reference to the breakout box label.
- Remind them she said something about lengths and ask if they have anything for that task that could help?
- Make sure they are finding the widest dimension of the object (this makes the most sense for the pen, but is true for all)
- If they have figured out that requires measuring the items, but not sure which order to do that in, point out how they are listed (left to right).

FOURTH CLUE – Mrs. Schweitzer's Video
To solve this, it has two steps: one, the video directs them to start with the letter of each item on the page with pictures (so zipper = Z). It then mentions going for a spin, referring to the decoder wheel to get the final answer.

The gibberish letters they get from the names will use the wheel to be decoded. Just writing down the first letter of each name of the item in the pictures will get you ZIOL, ZCPY, HCHY, TYLI.

She mentions that A->G. That means to start by lining up the wheel so the INSIDE A lines up with the OUTSIDE G.

From there, they find the letters from the picture page on the inside wheel, and then translate that into the letter it lines up with on the outside wheel.

FINAL ANSWER: FOUR FIVE NINE ZERO

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HINTS:

- Point out what she said about making sure they are writing down the first LETTER of each item in the boxes
- Remind them the result will NOT make sense and needs to be decoded. What did she mean by taking a spin?
- To use the wheel, you have to know a reference point. What did she line A up with? (Answer: G).
- Point out where it says INSIDE CODE/etc. on the wheel.
- Check to see they did the first letters correctly.

THEY ARE IN!

Be sure to have them grab their envelope and relock the "box" for the next team!

FINAL STEPS

Once students reach the Success page of the challenge, there are a few more steps for them to complete:

- Watch the Success video - this congratulates the students and caps off the activity.
- Use the "We Broke In" sign and a marker to write down the successful time for a group picture - just like an escape room often does!
- You can upload that group picture to the website - this is optional.
- Visit the map and recent completers page to see where other competing teams are located and their finish times.
- Students can also sign up for NAAE's National #TeachAg Campaign from a link on the success or map/recent completers page.

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FACILITATOR CHEAT SHEET!

Use this quick reference page to help guide and prompt your teams so they stay engaged but doesn't take away their fun and joy of discovery!

FIRST CLUE – From the Introductory Video

To solve this, they must translate the Morse Code and solve the Word Search Puzzle. Word Search • **CLUE:** A SIX LETTER WORD FOR BECOMING MORE Morse Code • **CLUE WHEN TRANSLATED:** "IT RHYMES WITH BOTH AND STARTS WITH G"	**ANSWER:** 'growth' **HINTS:** • Be sure to check spelling! • Something plants and animals also do a lot of, especially when they are younger. • Something we associate with 'personal' when we are talking about ourselves becoming more, such as confident or capable. • To save time, if the students get the correct passcode from one worksheet, they do not necessarily need to complete the other. Both worksheets will provide you with the same answer that will unlock the next challenge.

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To solve this, they must catch the clue at the end that they need every 5th word when reading the page that has a pic of Jon. • Make sure they associate this clue with the correct page (the pic of the person in the video helps) • **CLUE (when every fifth word is read):** "AG TEACHERS ARE WISE BIRDS JUST LIKE AN"	**ANSWER:** 'owl' **HINTS:** • Re-watch the last part of the video • Point out the 5th in the background • Guide them to find the first 3-4 words • Point out that the answer is what goes at the end of the clue • Might point out it says "an," hence singular (owl vs owls)

THIRD CLUE – Ms. Planck's Video

To solve this, they will need to connect that they need the red viewer to find words hidden on one of the posters. Those words will be four items found on box label, which will need to be measured with the included rulers in order to get the four-digit code. • **CLUE:** provided in the video to go to some LENGTHS and SEE RED	**ANSWER:** 2341 **HINTS:** • Point out where they might see red on the posters, and if they have anything in their resources that connects. • Remind them she mentioned the breakout box. This is a reference to the breakout box label. • Remind them she said something about lengths and ask if they have anything for that task that could help? • Make sure they are finding the widest dimension of the object (this makes the most sense for the pen, but is true for all) • If they have figured out that requires measuring the items, but not sure which order to do that in, point out how they are listed (left to right)

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FOURTH CLUE – Mrs. Schweitzer's Video

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