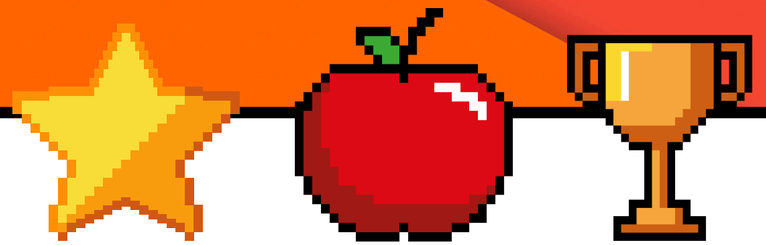


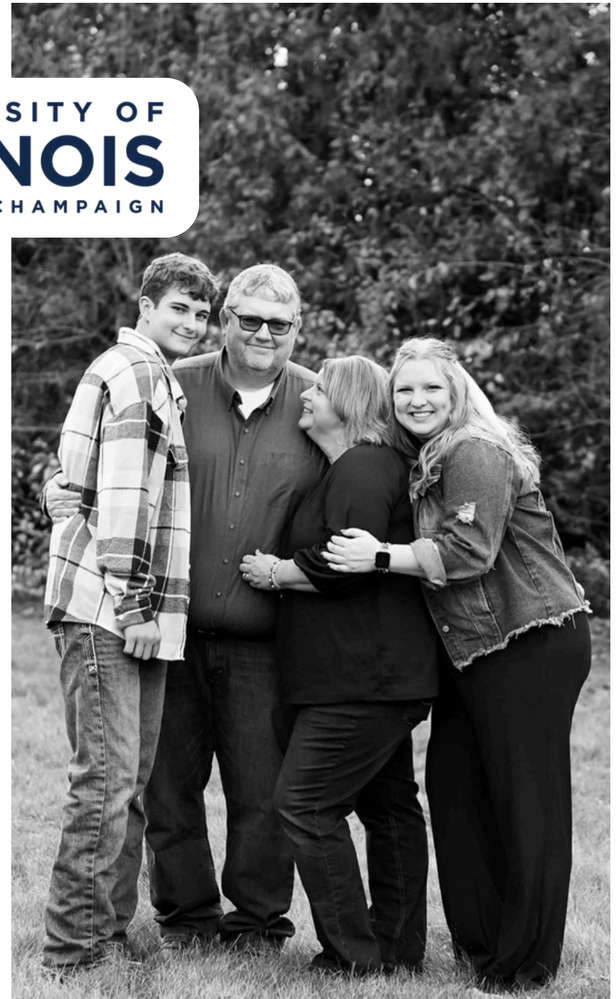
HARVEST A GOOD TIME: ENGAGING LESSONS THAT GET KIDS OUT OF THEIR SEATS

Taylor Talbert

Illinois AGRICULTURE in the Classroom℠

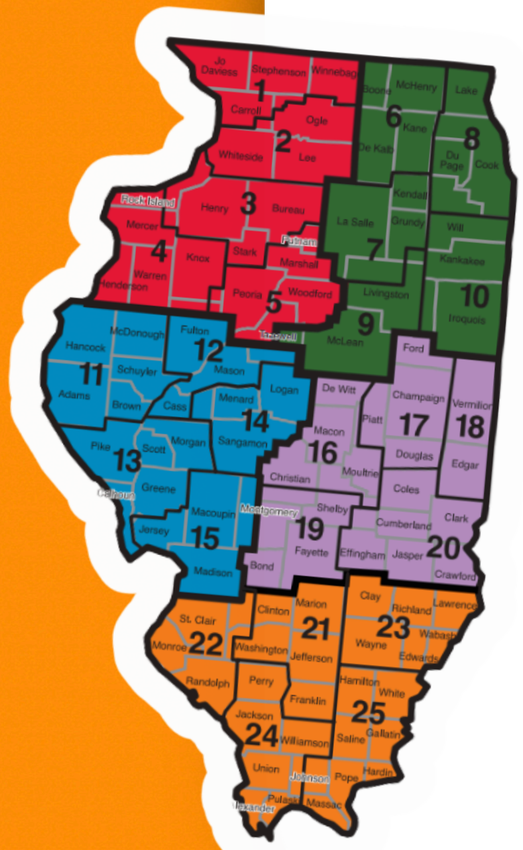
I'M TAYLOR!

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN



TALBERT Farms

ILLINOIS AITC



Lessons + Ag Mags + Presentations + Resources

↓

90+ County-Level Coordinators

↓

660,000+ Illinois Students

40,000+ classrooms = 65% of Illinois' schools

agintheclassroom.org

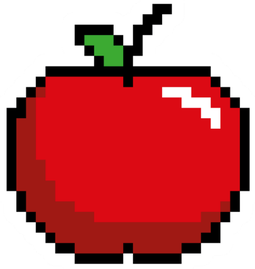
GAMEPLAY IN THE CLASSROOM

According to research, incorporating game play into the classroom can:

- Increase student participation
- Foster social and emotional learning
- Motivate students to take risks
- Improve student attitudes toward learning
- Boost academic scores

THE GAME PLAN FOR TODAY

LESSONS & ACTIVITIES



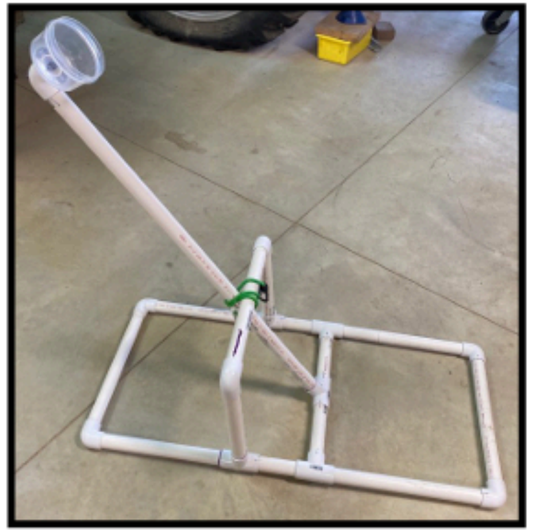
BOOK RECOMMENDATIONS

TAKE BACK TO THE CLASSROOM IDEAS!

PUMPKIN CATAPULT

Catapult made with instructions

Catapult designed by a 1st grader



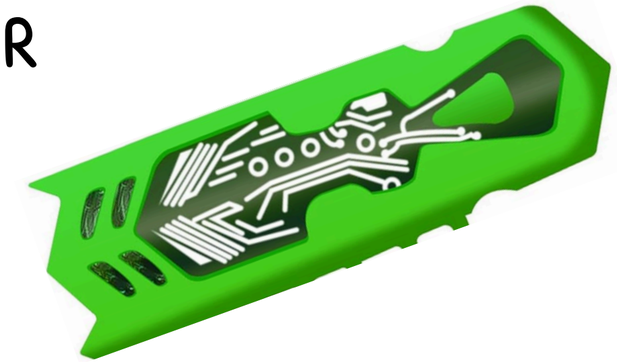
PVC Catapult

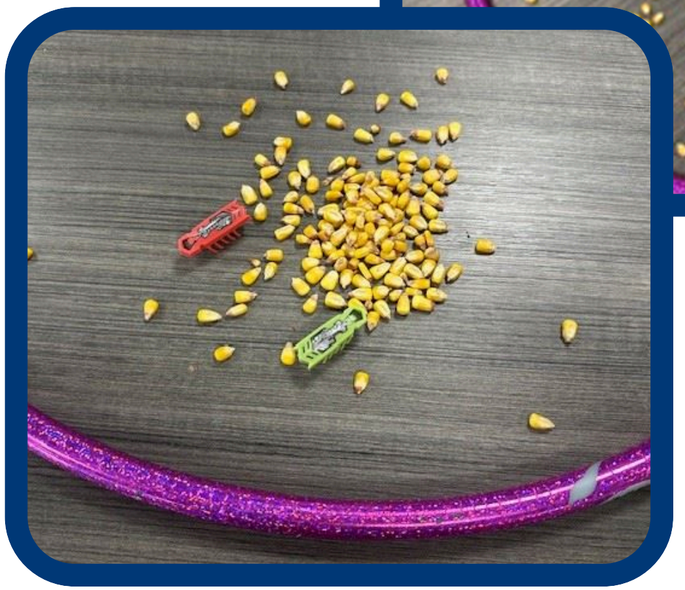
BUZZ BOT HARVESTER

WHO CAN CREATE THE BEST HARVESTER?

SUPPLIES:

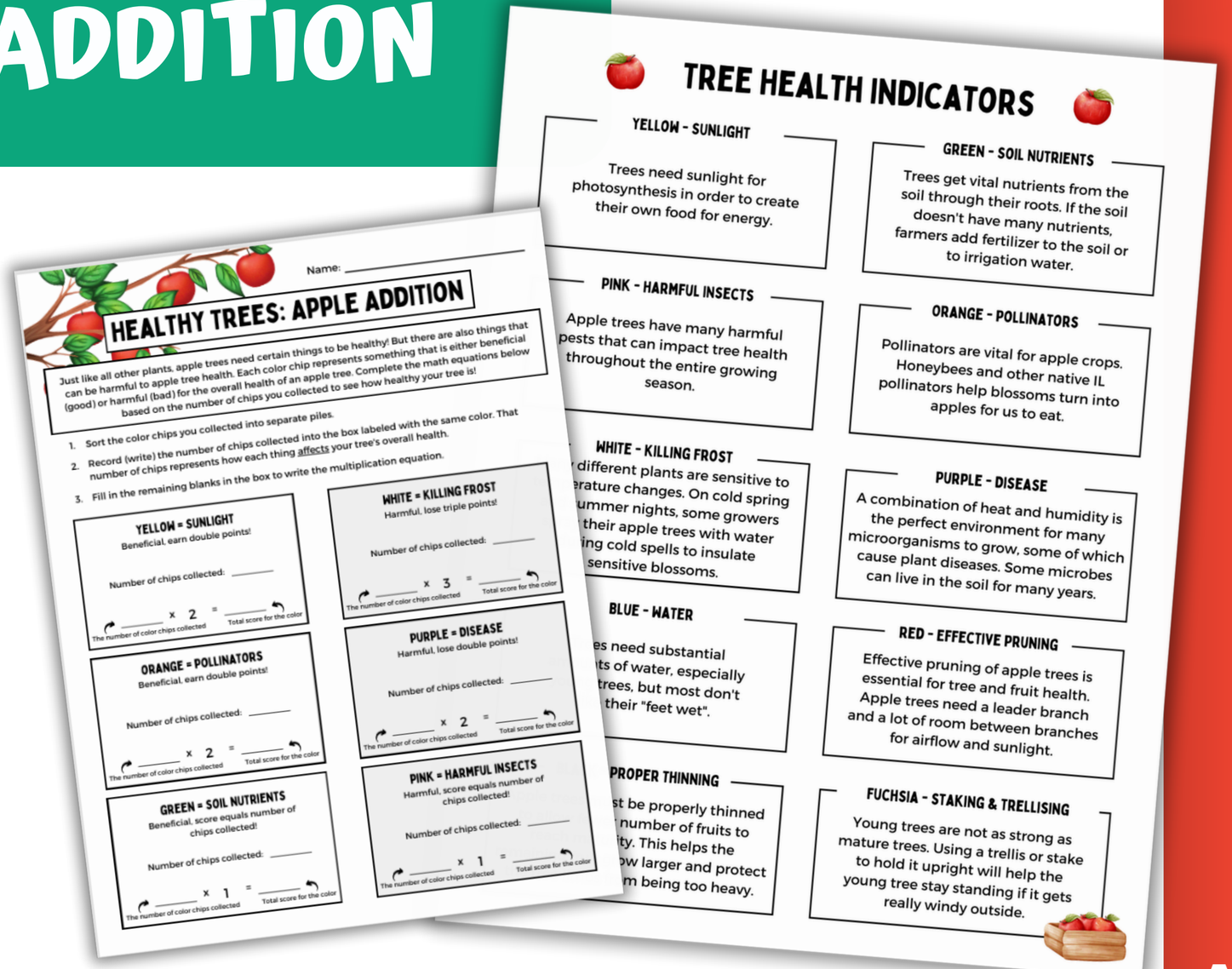
- POPSICLE STICKS
- STRAWS
- PAPER DIXIE CUPS
- PAPER
- TAPE





APPLE ADDITION

YELLOW=SUNLIGHT
GREEN=SOIL NUTRIENTS
PINK=HARMFUL INSECTS
ORANGE=POLLINATORS
WHITE=KILLING FROST
PURPLE=DISEASE
BLUE=WATER
RED=EFFECTIVE PRUNING
BLACK=PRPER THINNING
FUCHISIA=STAKING & TRESLLISING



Name: _____

HEALTHY TREES: APPLE ADDITION

Just like all other plants, apple trees need certain things to be healthy! But there are also things that can be harmful to apple tree health. Each color chip represents something that is either beneficial (good) or harmful (bad) for the overall health of an apple tree. Complete the math equations below based on the number of chips you collected to see how healthy your tree is!

1. Sort the color chips you collected into separate piles.
2. Record (write) the number of chips collected into the box labeled with the same color. That number of chips represents how each thing affects your tree's overall health.
3. Fill in the remaining blanks in the box to write the multiplication equation.

YELLOW = SUNLIGHT
Beneficial, earn double points!
Number of chips collected: _____
_____ (The number of color chips collected) x 2 = _____ (Total score for the color)

WHITE = KILLING FROST
Harmful, lose triple points!
Number of chips collected: _____
_____ (The number of color chips collected) x 3 = _____ (Total score for the color)

ORANGE = POLLINATORS
Beneficial, earn double points!
Number of chips collected: _____
_____ (The number of color chips collected) x 2 = _____ (Total score for the color)

PURPLE = DISEASE
Harmful, lose double points!
Number of chips collected: _____
_____ (The number of color chips collected) x 2 = _____ (Total score for the color)

GREEN = SOIL NUTRIENTS
Beneficial, score equals number of chips collected!
Number of chips collected: _____
_____ (The number of color chips collected) x 1 = _____ (Total score for the color)

PINK = HARMFUL INSECTS
Harmful, score equals number of chips collected!
Number of chips collected: _____
_____ (The number of color chips collected) x 1 = _____ (Total score for the color)

TREE HEALTH INDICATORS

YELLOW - SUNLIGHT
Trees need sunlight for photosynthesis in order to create their own food for energy.

GREEN - SOIL NUTRIENTS
Trees get vital nutrients from the soil through their roots. If the soil doesn't have many nutrients, farmers add fertilizer to the soil or to irrigation water.

PINK - HARMFUL INSECTS
Apple trees have many harmful pests that can impact tree health throughout the entire growing season.

ORANGE - POLLINATORS
Pollinators are vital for apple crops. Honeybees and other native IL pollinators help blossoms turn into apples for us to eat.

WHITE - KILLING FROST
different plants are sensitive to erature changes. On cold spring ummer nights, some growers their apple trees with water ing cold spells to insulate sensitive blossoms.

PURPLE - DISEASE
A combination of heat and humidity is the perfect environment for many microorganisms to grow, some of which cause plant diseases. Some microbes can live in the soil for many years.

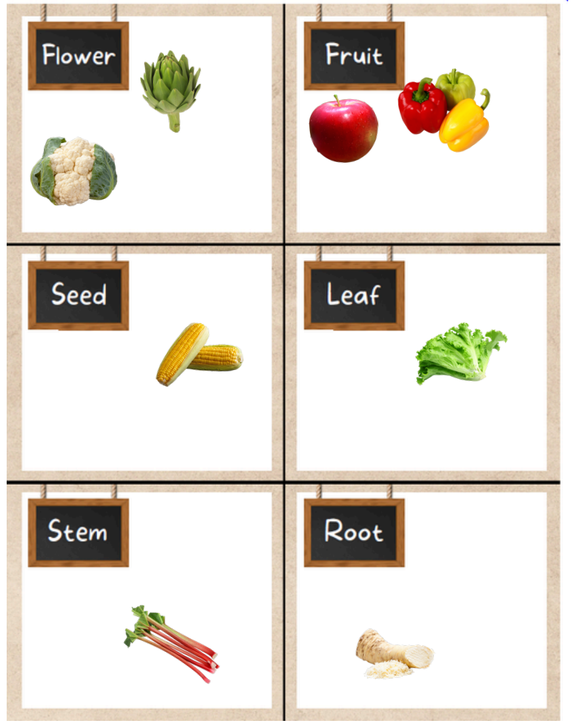
BLUE - WATER
es need substantial ts of water, especially trees, but most don't their "feet wet".

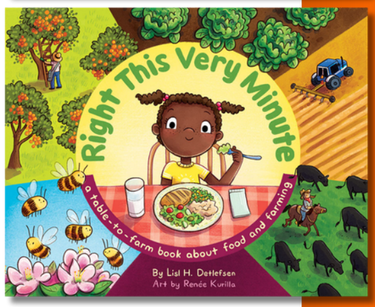
RED - EFFECTIVE PRUNING
Effective pruning of apple trees is essential for tree and fruit health. Apple trees need a leader branch and a lot of room between branches for airflow and sunlight.

PROPER THINNING
st be properly thinned number of fruits to ty. This helps the w larger and protect m being too heavy.

FUCHSIA - STAKING & TRELLISING
Young trees are not as strong as mature trees. Using a trellis or stake to hold it upright will help the young tree stay standing if it gets really windy outside.

PLANT PARTS LOGIC PUZZLE





ROCKS TO ROBOTS: AG TECH TIMELINE

Rocks to Robots: Ag Tech Timeline INSTRUCTIONS

Game Setup:

Shuffle and deal the cards according to the chart. Keep cards with the date side down! Place remaining cards in a pile at the center of the gameplay area, also with the date side down.

Deal:

Number of players	2-3	4-5	6-8
Number of cards	6	5	4

Starting Card: Draw one card from the top of the pile and place it date side up at the center of the playing area. This card will serve as the starting place for the timeline.

Objective: Be the first player to get rid of all your cards by placing them in chronological order.

1

Rocks to Robots: Ag Tech Timeline INSTRUCTIONS

Game Play :

The youngest player goes first, and play continues clockwise.

- Placing Cards: On their turn, a player selects one of their cards and places it next to the starting card based on their belief of its chronological position:
  - If they think their event is earlier, they place their card to the left.
  - If they think it is later, they place it to the right.
  - Players can also place their cards between two existing cards if they believe it fits chronologically there.
- Revealing Dates: After placing a card, the player flips it over to reveal the date.
  - If the card is correctly placed, it remains on the table with the date side up and the game proceeds to the next player.
  - If the card is incorrectly placed, it is discarded, and the player must draw a new card from the pile.

2

Farming Practice

Pig insulin is first used to treat diabetes.

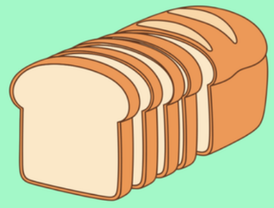
Ag Statistic

One U.S. farmer produces enough food to feed approximately 165 people.

Illinois History

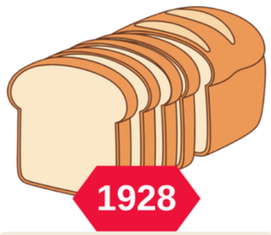
Josephine Garris Cochrane invents the dishwasher.

Ag Invention



The first commercially sliced loaf of bread is sold.

Ag Invention



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ROCKS TO ROBOTS: AG TECH TIMELINE

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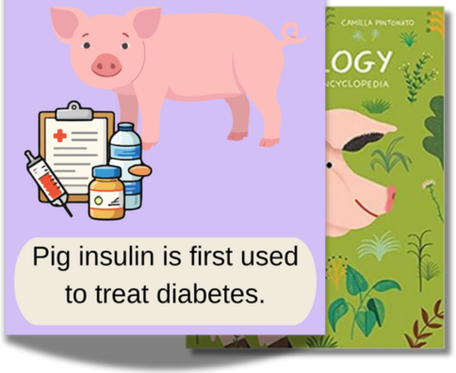
Farming Practice



Pig insulin is first used to treat diabetes.

Ag Statistic

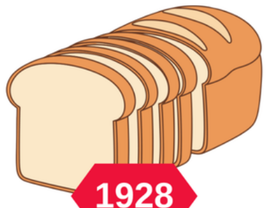
One U.S. farmer produces enough food to feed approximately 165 people.

Illinois History

1886

Josephine Garris Cochrane invents the dishwasher.

Ag Invention



1928

The first commercially sliced loaf of bread is sold.

Farming Practice

1930

Pig insulin is first used to treat diabetes.

Ag Statistic

2026

One U.S. farmer produces enough food to feed approximately 165 people.

SPOT IL!

Spot IL!

a game from

Illinois AGRICULTURE in the Classroom℠

Science

SPOT IL!

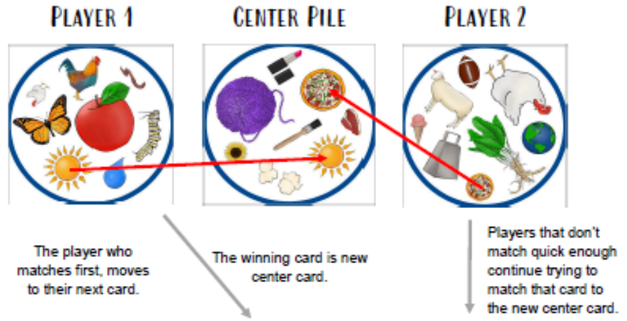
From the clothes you wear and the food you eat, to the sun in the sky and worms below your feet, the world of agriculture is all around you! This game highlights various parts of the world of agriculture all throughout the supply chain, environment, and more.

Directions:

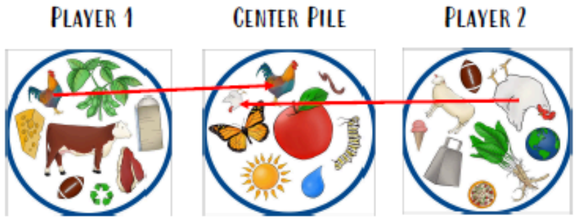
1. Shuffle the deck of cards and deal them out, one card at a time to each player, until they are gone. Players should keep their cards in a stack, face down.
2. Put the very last card down in the center of the players, face up.
3. To begin playing, each player will flip over the top card of their stack and try to find the one symbol on their card that matches the center card.
4. When the matching symbol is found, the player will quickly lay their card down on the center pile and say, out loud, which symbol they've matched.
5. Players will continue to find the one matching symbol on the top card in their hand to the center card. Continue this until one player runs out of cards.
    - Every card has only one matching symbol to every other card. Symbols will be in different locations and have different sizes on various cards.
5. Whoever runs out of cards first, wins!

Example:

Player one's card has a sun symbol that matches the center card. Player two matches the pizza. Whoever finds the match and lays it down first, while saying their symbol out loud, moves onto their next card.

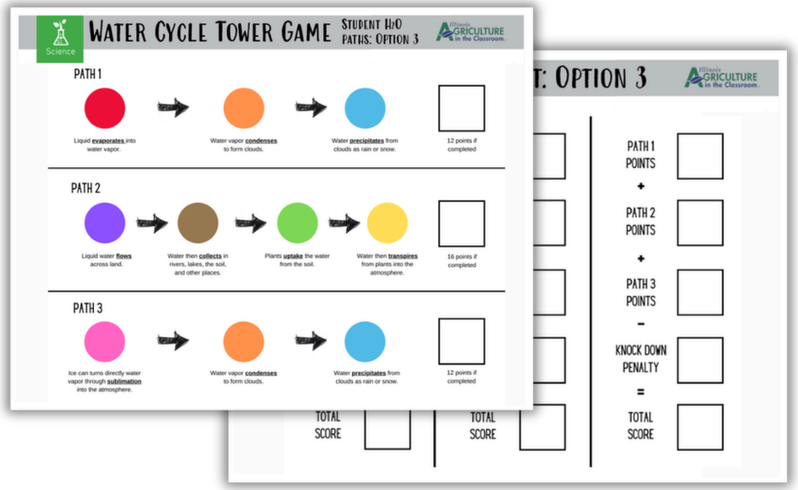


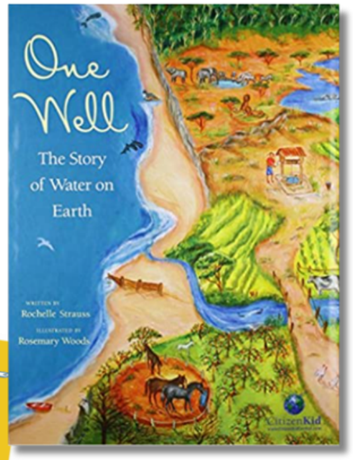
Player one laid their card down first and said "sun" before player two could spot their matching symbol. Now, players have to match their cards to player one's card that was laid in the center.

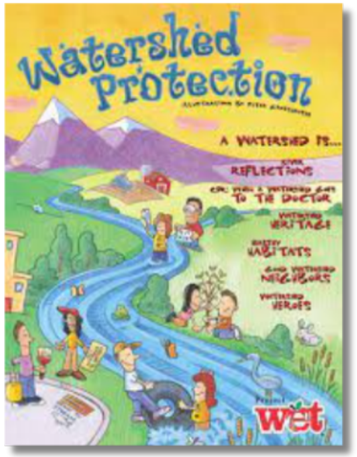


WATER CYCLE TOWER GAME

Blue = Precipitation (6)
Green = Uptake water (4)
Pink = Sublimation (4)
Red = Evaporation (4)
Brown = Collects (4)
Orange = Condensation (6)
Yellow = Transpiration (4)
Purple = Flows (4)







CORN SOY HOGS CATTLE PUMPKIN

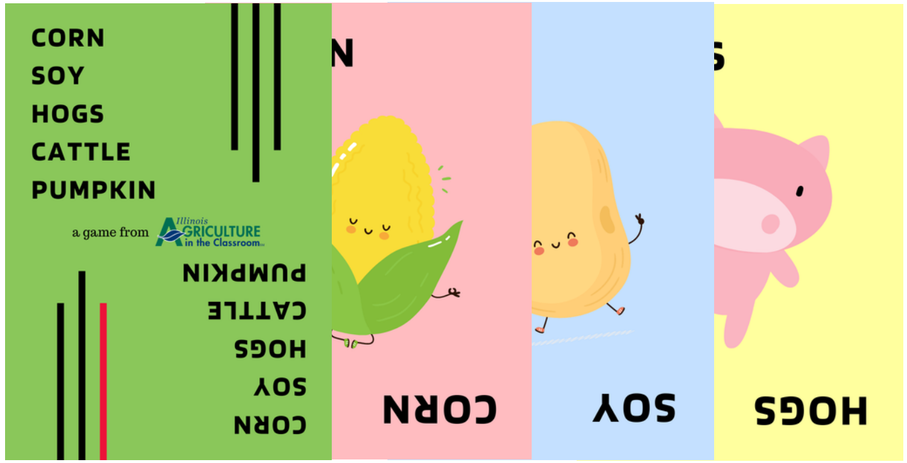
DIY PACKING PEANUT

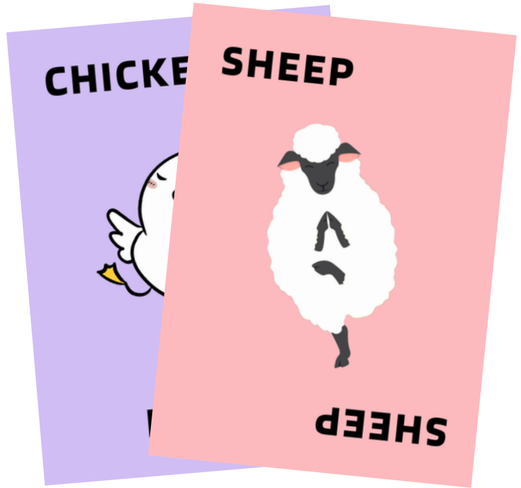
BEANIE BABY

PIG PLACEMAT

MOO MASK

3D PUMPKIN





CORN SOY HOGS CATTLE PUMPKIN TEACHER GUIDE

Game Play:

Play continues as outlined on Instructions Card 1, until the card just laid matches the word spoken by the player (eg., they put down a 'Hog' while saying "Hogs"). At this point, all the players must SLAP their hands on top of the pile of cards in the center, and the LAST player to do so takes the entire pile, and puts them on the bottom of the pile in his/her hand. He/She then starts off the next round saying, "Corn," the next player, "Soy," the next player, "Hogs," etc...

IF the card laid pictures the commodity holding a PRODUCT that comes from that commodity, all players must also - in addition to slapping the deck - name another PRODUCT that comes from that commodity (i.e. - "corn syrup" from Corn, or "bacon" from Hogs). The last to do so takes the center pile!

The following are some ideas of acceptable products originating from each commodity that the players might NAME while they SLAP the deck. Other products could be named!

CORN

- Sweet Corn
- Canned Corn
- Corn Syrup
- Cornstarch
- Pet Food
- Livestock Feed
- Ethanol
- Vegetable Oil
- Popcorn
- Corn Flour
- Breakfast Cereal (Corn Flakes, Fruit Loops, etc)
- Corn Bread
- Corn Chips (Doritos, Fritos, tortilla chips, etc)

SOY

- Edamame
- Tofu
- Soy Milk
- Soy Yogurt
- Soy Sauce
- Soy Flour
- Biodiesel
- Livestock Feed
- Vegetable Oil
- Tempeh

HOGS

- Ham
- Bacon
- Pork Chops
- Pork Loin
- Ground Pork
- Sausage
- Pork Ribs
- Pet Food
- Insulin
- Suede

CATTLE

- Steak
- Hamburger
- Ground Beef
- Beef Ribs
- Milk
- Cheese
- Yogurt
- Ice Cream
- Butter
- Sour Cream

PUMPKINS

- Pumpkin Pie
- Pumpkin Bread
- Pumpkin Spice
- Pumpkin Seeds
- Pumpkin Blossoms


04:59

How To Find Us Again :)

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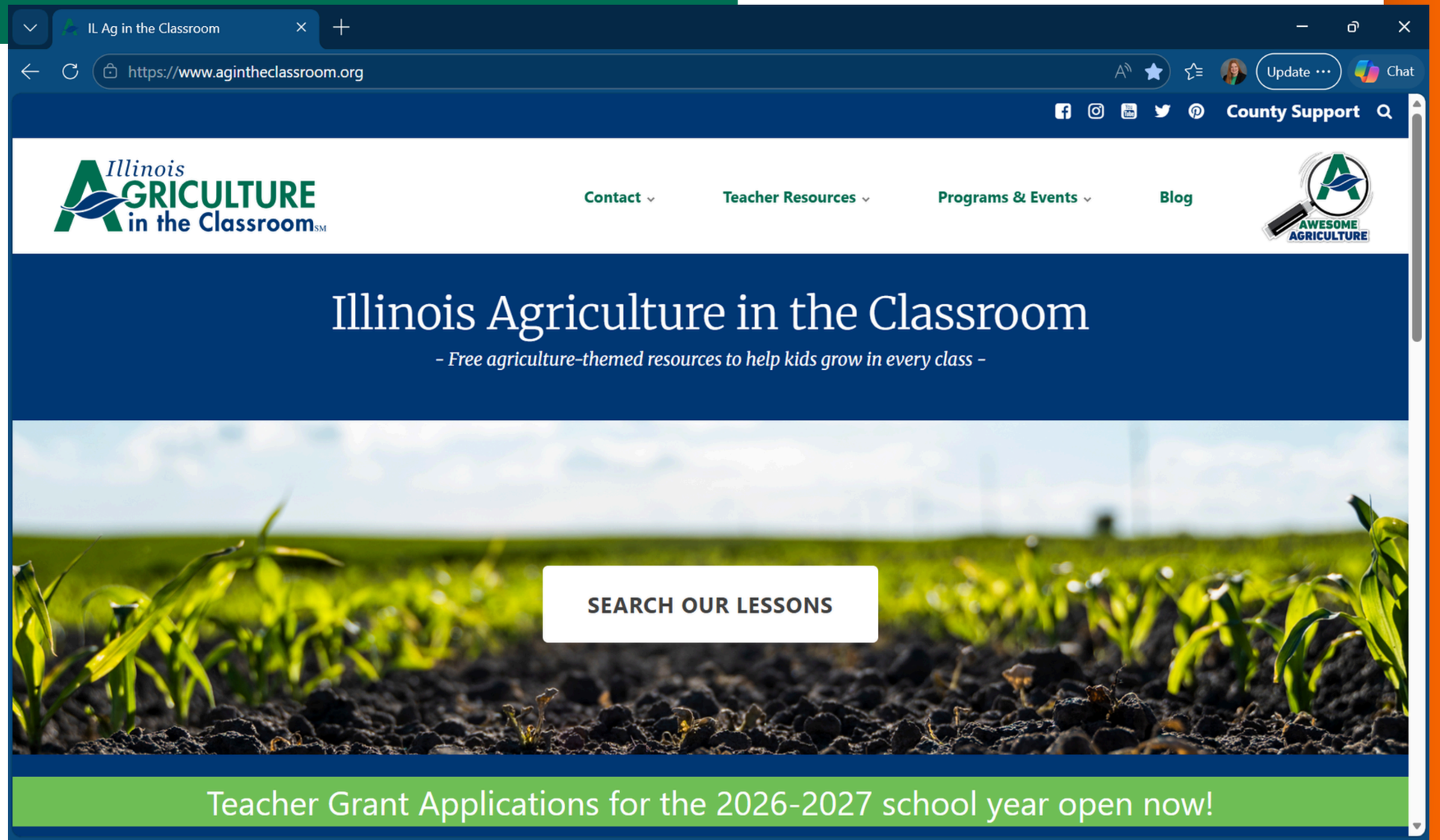

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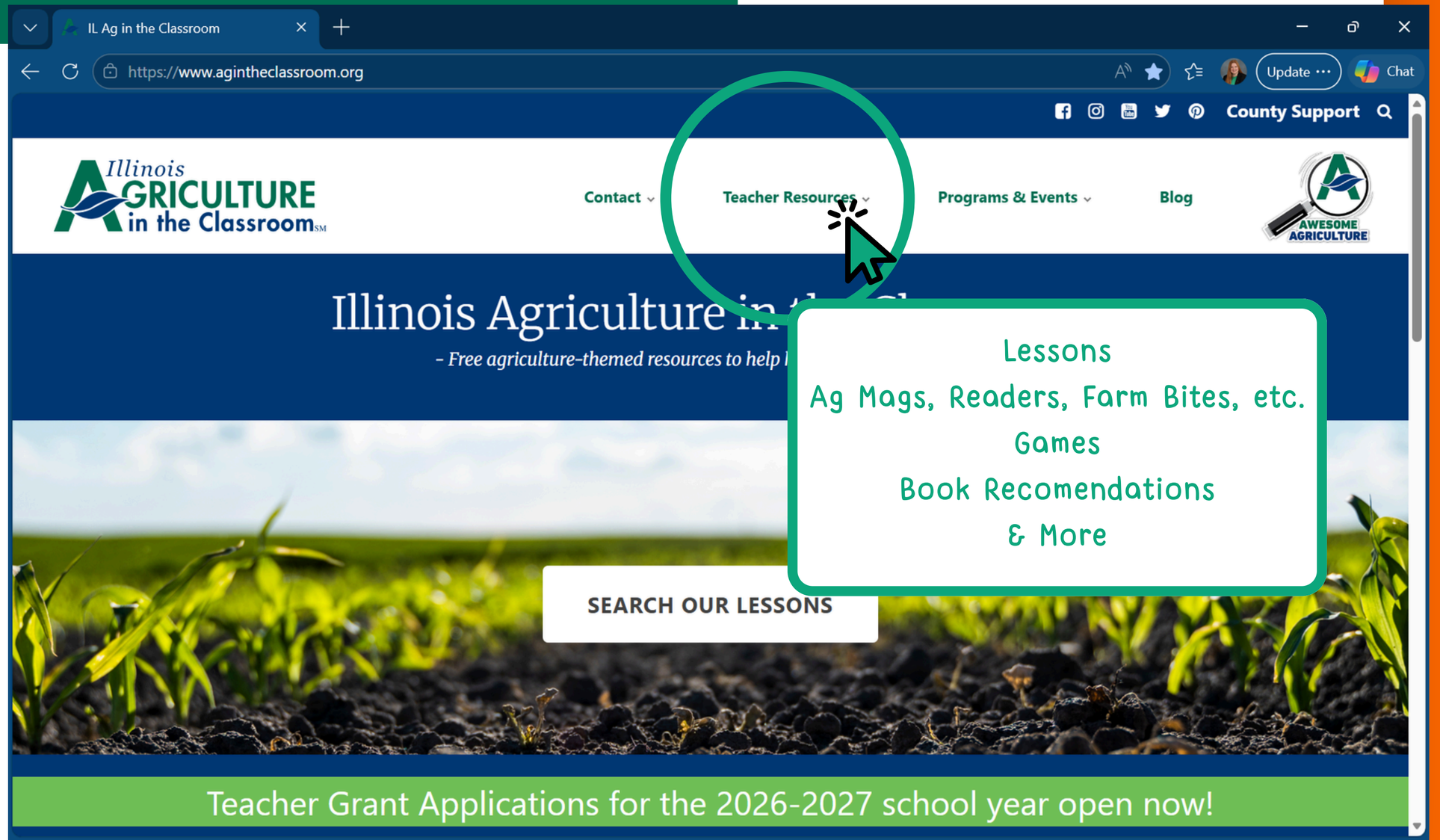

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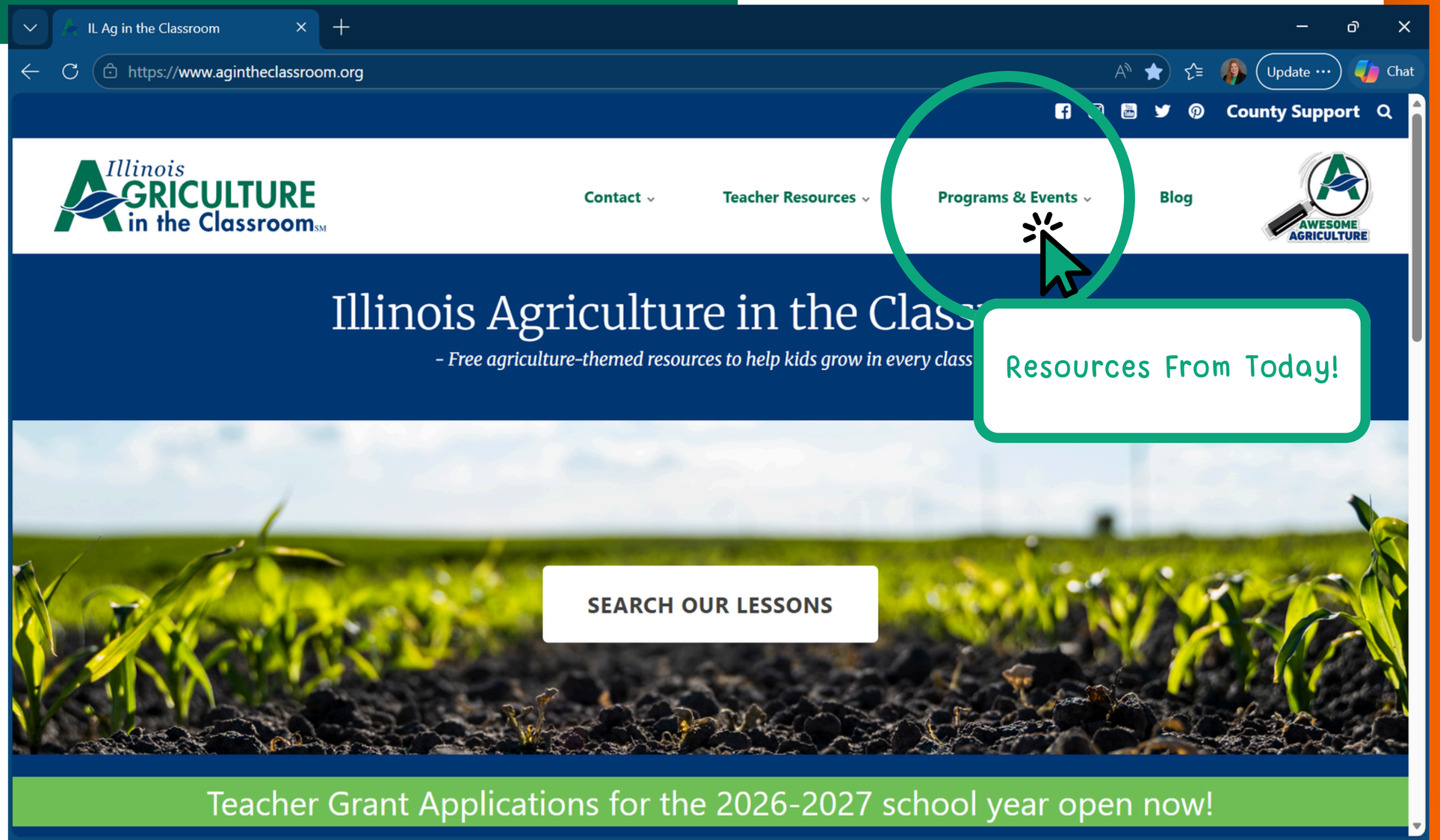

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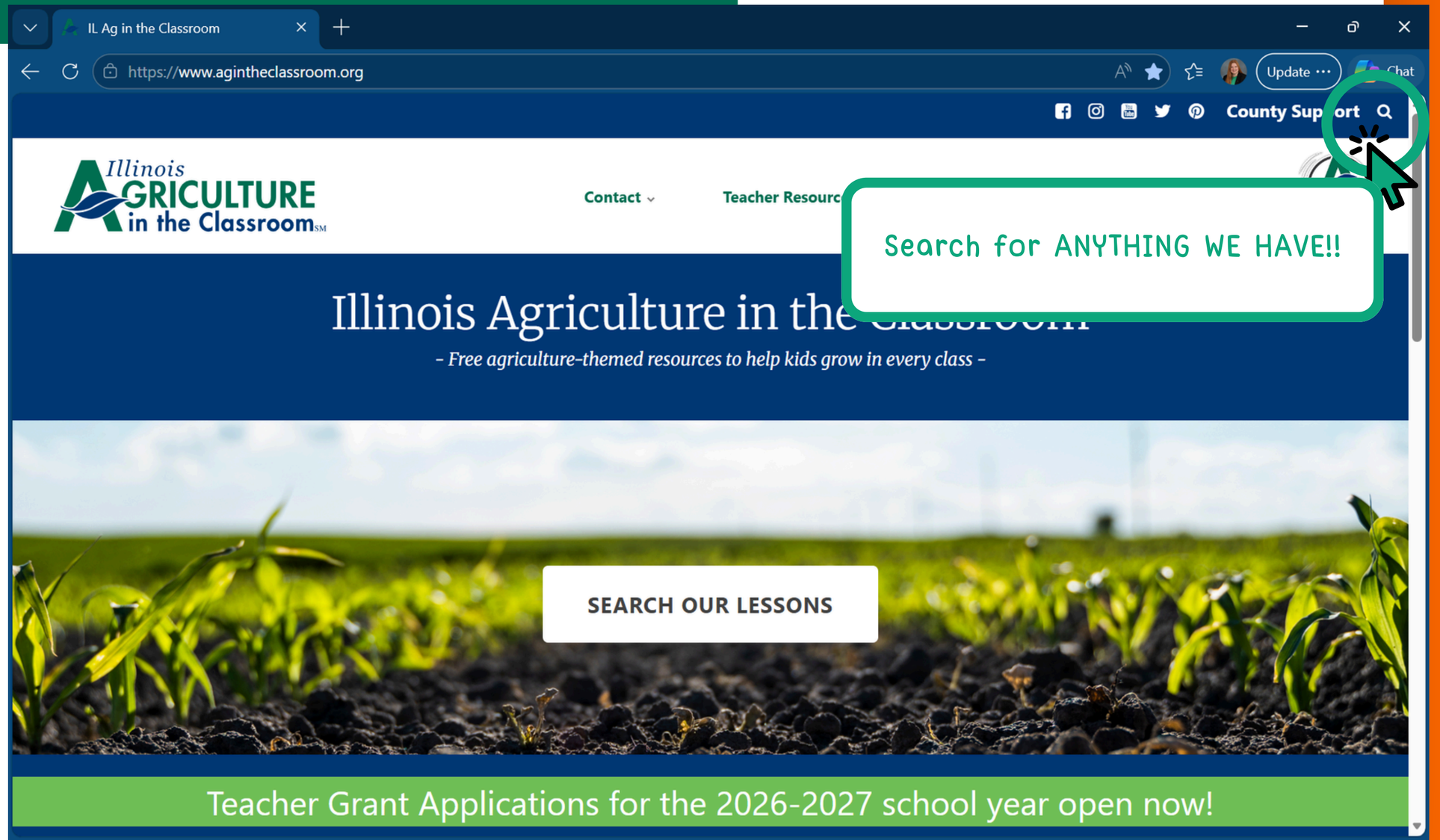

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- @ilaitc
- @Illinois Ag in the Classroom

Use the QR code to find all the resources, and more, from today's presentation!

HARVEST A GOOD TIME: ENGAGING LESSONS THAT GET KIDS OUT OF THEIR SEATS

iaitc.co/harvestagoodtime