



IQhub Program Descriptions



Pre-Kindergarten

Programs 1.5 hours

(Click on a lesson title, to see more information about what the program entails and possible careers to be covered.)

- **How Do Plants Grow?:** Who can grow their own food? The answer is anyone, anywhere! Come along and learn how to plan out and have a successful garden this year. Students will go on reading adventure, learn about gardening and germinate a seed for their own garden!
 - Pre-Kindergarten – How Do Plants Grow?
 - <https://www.iqhubag.org/wp-content/uploads/2023-How-Do-Plants-Grow-Lesson-Plan-Pre-K-with-Careers.pdf>

Kindergarten and 1st Grade

Programs: 1.5 - 2 hours

(Click on a lesson title, to see more information about what the program entails, as well as possible science benchmarks and careers to be covered.)

- **Farm to Fork:** Where in the world does our food come from? Farmers of course! Join in the conversation to learn how many of our favorite foods are grown and even taste test a special treat! (Please let us know if your group has any food allergies)
 - Kindergarten – Cheese Tasting (1.5 Hours)
 - <https://www.iqhubag.org/wp-content/uploads/2023-Farm-to-Fork-Lesson-Plan-1.5-Hr-Cheese-Kindergarten-Sci-Standards.pdf>
 - Kindergarten – Make Butter (2 Hours)
 - <https://www.iqhubag.org/wp-content/uploads/2023-Farm-to-Fork-Lesson-Plan-2-Hr-Butter-Kindergarten-Sci-Standards.pdf>
 - 1st Grade – Cheese Tasting (1.5 Hours)
 - <https://www.iqhubag.org/wp-content/uploads/2023-Farm-to-Fork-Lesson-Plan-1.5-Hr-Cheese-1st-Gr-Sci-Standards.pdf>
 - 1st Grade – Make Butter (2 Hours)
 - <https://www.iqhubag.org/wp-content/uploads/2023-Farm-to-Fork-Lesson-Plan-2-Hr-Butter-1st-Gr-Sci-Standards.pdf>

- **Apples and Bees:** Did you know that bees and apples rely on each other? Bees play a big role in all sorts of crops, including apples! Together we will explore the importance of bees and how they help create our favorite foods! Students will work on their five senses and enjoy a special treat!
 - Kindergarten – Apples and Bees (1.5 Hours)
 - <https://www.iqhubag.org/wp-content/uploads/2023-Apple-and-Bees-Lesson-Plan-Kindergarten-Sci-Standards.pdf>
 - 1st Grade – Apples and Bees (1.5 Hours)
 - <https://www.iqhubag.org/wp-content/uploads/2023-Apple-and-Bees-Lesson-Plan-1st-Gr-Sci-Standards.pdf>

2nd and 3rd Grade

Programs: 2 hours or 4 hours (Teachers choose a half or full day – Topics covered will change based on time)

(Click on a lesson title, to see more information about what the program entails, as well as possible science benchmarks and careers to be covered.)

- **Pollinators for Healthy Foods:** Have you ever stopped to wonder what a world without bees would be like? Hopefully that thought never becomes a reality! Come along and see just how important bees truly are to our planet! Teachers get to choose between apple cider and apple juice taste testing, the honey bee hustle activity or fruit and veggie bingo.
 - 2nd Grade – Pollinators for Healthy Foods
 - <https://www.iqhubag.org/wp-content/uploads/2023-Pollinators-for-Healthy-Foods-Lesson-Plan-2nd-Gr-Sci-Standards.pdf>
 - 3rd Grade – Pollinators for Healthy Foods
 - <https://www.iqhubag.org/wp-content/uploads/2023-Pollinators-for-Healthy-Foods-Lesson-Plan-3rd-Gr-Sci-Standards.pdf>
- **The Three Sisters:** Who are the three sisters? What do they do? This lesson looks into Native American Culture and the life cycles of plants. Come enjoy the story and start your garden.
 - 2nd Grade – The Three Sisters
 - <https://www.iqhubag.org/wp-content/uploads/2023-Three-Sisters-Lesson-Plan-2nd-Gr-Sci-Standards.pdf>
 - 3rd Grade – The Three Sisters
 - <https://www.iqhubag.org/wp-content/uploads/2023-Three-Sisters-Lesson-Plan-3rd-Gr-Sci-Standards.pdf>
- **Vermicomposting:** This lesson will allow students to dig a little deeper into the lives of our composting friend, the worm! Jump on in and learn the good, the bad and the wiggly facts of vermicomposting! (Please let us know if your group has any food allergies.)
 - 2nd Grade – Vermicomposting
 - <https://www.iqhubag.org/wp-content/uploads/2023-Vermicomposting-Lesson-Plan-2nd-Gr-Sci-Standards.pdf>
 - 3rd Grade – Vermicomposting
 - <https://www.iqhubag.org/wp-content/uploads/2023-Vermicomposting-Lesson-Plan-3rd-Gr-Sci-Standards.pdf>

4th and 5th Grade

Programs: 2 hours or 4 hours (Teachers choose a half or full day – Topics covered will change based on time)

(Click on a lesson title, to see more information about what the program entails, as well as possible science benchmarks and careers to be covered.)

- **Field to Fitness (Explore healthy habits):** Explore how decisions we make every day, such as the food we eat and how much we exercise, can affect our lives in a big, big way! Students will learn about a wide range of things, from food selection at restaurants to resting and elevated heart rates.
 - 4th Grade – Field to Fitness
 - <https://www.iqhubag.org/wp-content/uploads/2023-Field-to-Fitness-Lesson-Plan-4th-Gr-Sci-Standards.pdf>
 - 5th Grade – Field to Fitness
 - <https://www.iqhubag.org/wp-content/uploads/2023-Field-to-Fitness-Lesson-Plan-5th-Gr-Sci-Standards.pdf>
- **Plant Picasso (Paint with plants):** Students will learn how plant color is a good indicator of plant and soil health, as well as plant development. Come see these colors in action as the students create their paintings with the help of fruits and vegetables! (Please note that paint could stain clothes.)
 - 4th Grade – Plant Picasso
 - <https://www.iqhubag.org/wp-content/uploads/2023-Plant-Picasso-Lesson-Plan-4th-Gr-Sci-Standards.pdf>
 - 5th Grade – Plant Picasso
 - <https://www.iqhubag.org/wp-content/uploads/2023-Plant-Picasso-Lesson-Plan-5th-Gr-Sci-Standards.pdf>
- **Vermicomposting (Make dirt cups):** This lesson will allow students to dig a little deeper into the lives of our composting friend, the worm! Jump on in and learn the good, the bad and the wiggly facts of vermicomposting! (Please let us know if your group has any food allergies.)
 - 4th Grade – Vermicomposting
 - <https://www.iqhubag.org/wp-content/uploads/2023-Vermicomposting-Lesson-Plan-4th-Gr-Sci-Standards.pdf>
 - 5th Grade – Vermicomposting
 - <https://www.iqhubag.org/wp-content/uploads/2023-Vermicomposting-Lesson-Plan-5th-Gr-Sci-Standards.pdf>
- **Water Cycle (Make clouds):** Dive into this lesson and make a big splash! Our planet is made of approximately 75% water, but how does it move? This interactive lesson plan will allow students to experience the water cycle in new and exciting ways!
 - 4th Grade – Water Cycles
 - <https://www.iqhubag.org/wp-content/uploads/2023-Water-Cycle-Lesson-Plan-4th-Gr-Sci-Standards.pdf>
 - 5th Grade – Water Cycle
 - <https://www.iqhubag.org/wp-content/uploads/2023-Water-Cycle-Lesson-Plan-5th-Gr-Sci-Standards.pdf>

6th to 8th Grade

Programs: 2 hours or 4 hours (Teachers choose a half or full day – Topics covered will change based on time)

(Click on a lesson title, to see more information about what the program entails, as well as possible science benchmarks and careers to be covered.)

- **Birds and Bees of Plants (Plant reproduction):** Students will explore the plant structures and what role they play in plant reproduction. The various life cycles will be explained, as well as the importance of seeds and fruit. Students will understand how symbiotic relationships are essential to plant reproduction.
 - 6th – 8th Grade – Birds and Bees of Plants
 - <https://www.iqhubag.org/wp-content/uploads/2023-Birds-and-Bees-of-Plants-Lesson-Plan-6th-to-8th-Gr-Sci-Standards.pdf>
- **Careers in Agriculture (Middle School Version):** When you think of jobs in agriculture, what do you think of? Most people would say “vet” or “farmer”. While those answers are true, there are so many more careers out there that all relate back to agriculture. Select this program to learn how many there are!
 - 6th – 8th Grade – Careers in Agriculture
 - <https://www.iqhubag.org/wp-content/uploads/2023-Careers-in-Agriculture-Lesson-Plan-6th-to-8th-Gr-Sci-Standards.pdf>
- **Forestry (Evaluate trees):** Students will learn why it’s important to conserve our natural resources and our animal habitats. With a growing world population, they will see why we all must do our part to preserve our planet! Students will learn how to measure trees and decide when its best to cut them down or keep them for animals!
 - 6th – 8th Grade – Forestry
 - <https://www.iqhubag.org/wp-content/uploads/2023-Forestry-Lesson-Plan-6th-to-8th-Gr-Sci-Standards.pdf>
- **Plant Picasso (Paint with plants):** Students will learn how plant color is a good indicator of plant and soil health, as well as plant development. Come see these colors in action as the students create their paintings with the help of fruits and vegetables! (Please note that paint could stain clothes.)
 - 6th – 8th Grade – Plant Picasso
 - <https://www.iqhubag.org/wp-content/uploads/2023-Plant-Picasso-Lesson-Plan-6th-to-8th-Gr-Sci-Standards.pdf>
- **WWW - Wonderful World of Water (Water quality):** This lesson allows students to investigate just how lucky we are to live in the Great Lakes State! Students will discuss how people are affected when water quality is compromised and they will come up with a plan to help. This program will open student’s eyes to other water issues around the world, as well.
 - 6th – 8th Grade – Wonderful World of Water
 - <https://www.iqhubag.org/wp-content/uploads/2023-Wonderful-World-of-Water-Lesson-Plan-6th-to-8th-Gr-Sci-Standards.pdf>

9th to 12th Grade

Programs: 2 hours or 4 hours (Teachers choose a half or full day – Topics covered will change based on time)

(Click on a lesson title, to see more information about what the program entails, as well as possible science benchmarks and careers to be covered.)

- **Careers in Agriculture (High School Version):** In the 21st century, it is far more than just cows, sows and plows, it's marketing, research, and so much more! This program can either feature some guest speakers from the agriculture industry or tips and tricks about landing a career. (Fits best with high school juniors and seniors.)
 - 9th – 12th Grade – Careers in Agriculture
 - <https://www.iqhubag.org/wp-content/uploads/2023-Careers-in-Agriculture-Lesson-Plan-9th-to-12th-Gr-Sci-Standards.docx.pdf>
- **Cool Chemistry (Demonstration and tour):** Dive into the world of chemistry and see how it applies to your everyday life. Students will have the chance to learn from an AgroLiquid Chemist and possibly get a tour of our chemistry lab.
 - 9th – 12th Grade – Cool Chemistry
 - <https://www.iqhubag.org/wp-content/uploads/2023-Cool-Chemistry-Lesson-Plan-9th-to-12th-Gr-Sci-Standards.pdf>
- **How Important is the Soil? (Land conservation):** Students will learn why it's important to have healthy soil. With a growing world population and a limited supply of fertile land, they will see why we all must do our part to preserve this precious resource! From consumer to producer, it's important we all understand the soil properties and how the color, texture and slope can influence the food and fiber we use!
 - 9th – 12th Grade – How Important is the Soil?
 - <https://www.iqhubag.org/wp-content/uploads/2023-How-Important-is-the-Soil-Lesson-Plan-9th-to-12th-Gr-Sci-Standards.pdf>
- **Introduction to Genetics (Heredity and traits):** Genetics is a very exciting topic... Especially for plants! Students will learn what DNA is, what it's made of and how it affects the outcome of your garden. The Punnet square, GMOs and advancements in genetic engineering will also be discussed.
 - 9th – 12th Grade – Introduction to Genetics
 - <https://www.iqhubag.org/wp-content/uploads/2023-Intro-to-Genetics-Lesson-Plan-9th-to-12th-Gr-Sci-Standards.pdf>
- **Protein Please (Cheese making):** Protein is an important piece of everyone's diet! Students will learn what protein is, what it's made of and how important it is to keep everyone healthy. Cheese is a food that is packed with protein and fun to make! (Please let us know if your group has any food allergies.)
 - 9th – 12th Grade – Protein Please
 - <https://www.iqhubag.org/wp-content/uploads/2023-Protein-Please-Lesson-Plan-9th-to-12th-Gr-Sci-Standards.pdf>

COLLEGE

Programs: 1.5 hours

(Click on a lesson title, to see more information about what the program entails and possible careers to be covered.)

- **AgroLiquid - Commitment to Environmentally Friendly Products:** With 40 years in the liquid fertilizer industry, AgroLiquid feels that it is very important to make sure our world is left, far better than how we found it. That's why we strive to become great stewards of the land and ensure that our products are good for environment.
 - College - AgroLiquid - Commitment to Environmentally Friendly Products
 - <https://www.iqhubag.org/wp-content/uploads/2023-AgroLiquid-Lesson-Plan-College-with-Careers.pdf>
- **Real Science - Why is being “Green” and the Scientific Method so important?:** This program helps open student’s eyes to the importance of research and taking care of our planet. Students will get to learn about a variety of Agriculture topics, tour a “Green” building and understand how the Scientific method works in real life.
 - College - Real Science - Why is being “Green” and the Scientific Method so important?
 - <https://www.iqhubag.org/wp-content/uploads/2023-Real-Science-Lesson-Plan-College-with-Careers.pdf>

Please contact us today for more information on any program listed above. Remember, all programs can be modified and new programs will be created, to meet the needs of the teachers and the various learning objectives!

We look forward to working with you at the IQhub soon!

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