



6th Grade

JK Community Farm



Field Trip

Objectives & Rules

The JK Community Farm is deeply grateful to the growing community of generous supporters who have fostered the development of our education programming

Young children are naturally curious and creative thinkers, we hope to help children develop a solid foundation for understanding of the natural world, nutrition, and agriculture.. Please use this time to explore the JK Community Farm and make connections with your child's curriculum and nature. Our education activities were carefully curated to meet Virginia's standards of learning for each grade level and integrated into the JK Community Farm.

For our self guided field trips, rules provide the structure necessary for an engaging and productive class. Please be mindful of social distancing at the JK Community Farm, masks are optional as long as distance is maintained. Please be gentle with our plants as they are growing to feed families in our community in need of our help.



Essential Questions

Discuss these questions with your student throughout the field trip.

What is a landfill vs. compost?

What is pollination?

What are food groups?

What is renewable energy?

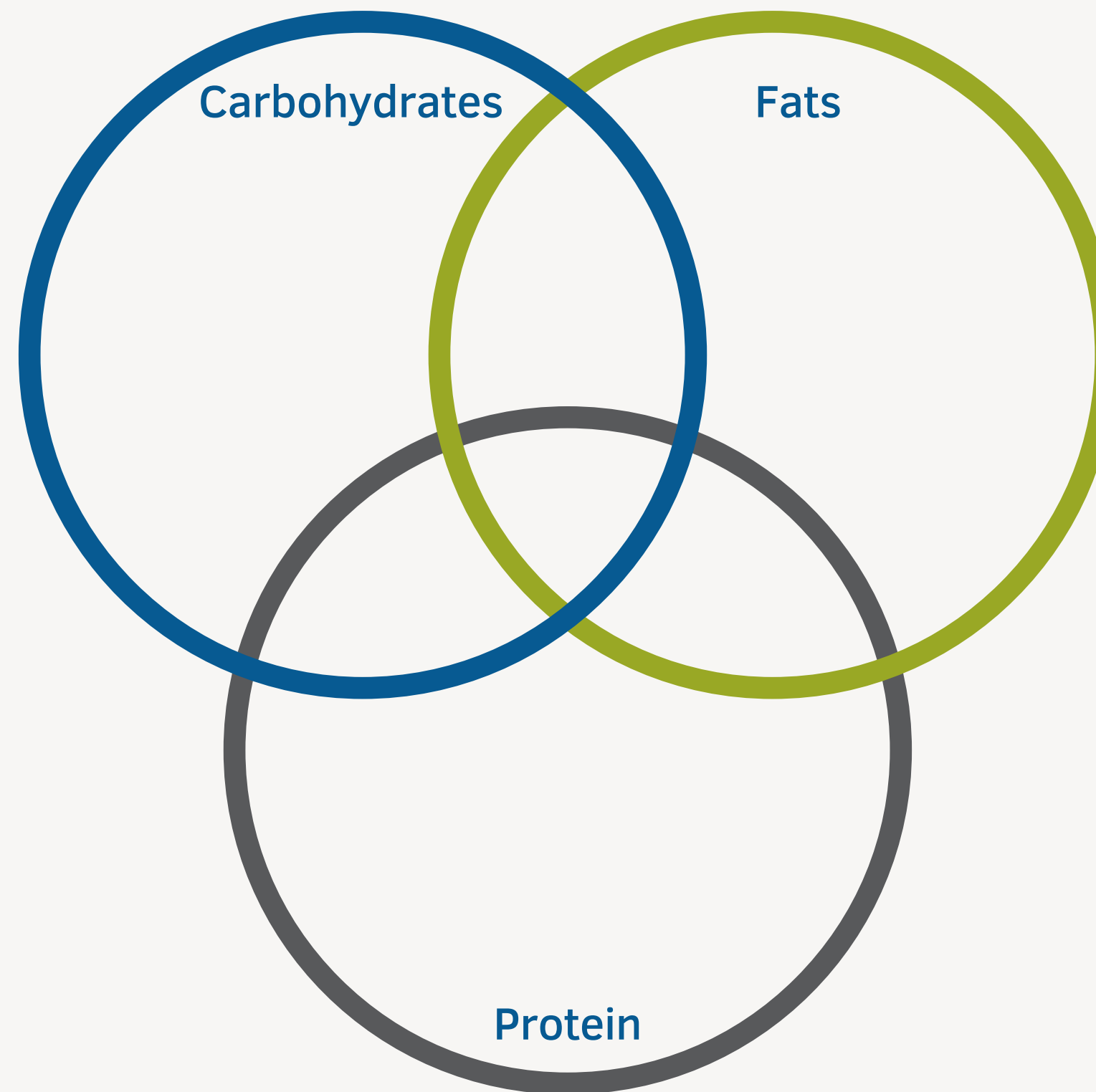
What makes agriculture "sustainable"?

Macronutrients



Macronutrients are the nutrients that our body needs in large amounts in order to function properly. They are the only nutrients that contain energy from food, which is measured in calories. Energy in our food is necessary for activity, growth, thinking, breathing, digesting etc. Can you match the foods listed to the macronutrients?

Broccoli
Salmon
Carrots
Hummus
Beef
Strawberries
Avocado
Eggs
Chicken
Butter
Olive Oil
Pecans
Cheese
Shrimp
Kale
Banana



Multiplication and Division in Nature



Activity

Walk down to the pepper and sweet potato plants, ask the student to select a row and count the plants in the row. **How many plants are in the row? If x plants are in one row, how many are in 2 rows, 6 rows, 10 rows?**

Ask the student to select a plant and count the peppers on the plant. **How many peppers are on 3 plants, 5 plants etc.? Check your math on a calculator!**

Questions

- If there are x peppers on a plant, and we harvested 3 how many would be left?
- Is it an even or odd number?
- If the farm will donate 30,000 lbs of sweet potatoes, and there is 2 lbs per plant, how many plants do we have?
- If there are peppers on a plant how many would there be if $\frac{1}{3}$ were harvested?

Materials

Blank paper
Crayons
Colored Pencils
Calculator

Compost and Sustainability



Activity

Start your activity by asking the student if they have ever thrown food away before? **What are some of the reasons that food gets thrown away at home?**

Discuss and show examples to the student of what it takes to grow food, the process of growing food and getting it to the grocery store.

Show how food can be composted and incorporated back into the soil (Our compost pile is the giant pile to the right of the raised beds).

Find a rotten pepper on a plant and toss it into the compost!

Questions

- How much time does it take for most vegetables to grow? (about 100 days)
- Can you guess how long it takes to harvest asparagus? (3 years)
- Where else do large quantities of food get thrown away?
- Why should we compost food instead of throw it away?
- What is the environmental impact of landfills vs. compost?

Materials

Blank Paper
Crayons
Colored Pencils

Soil Texture



Activity

Part a.

Ask students, What does soil have to do with our lives? Invite them to create a Venn diagram. One circle is "me" and the other circle is "soil". Inside the circles students write what each needs to survive.

Part b.

Help students identify the various organisms involved in the soil food web, and understand the importance of diversity to building a strong and resilient soil ecosystem. Dig and collect various soil samples. Observe texture, and organisms.

Questions

- We need to grow more food on Earth, how do we build more soil?
- What are the similarities you found in your venn diagram?
- What did you find in the soil?
- Describe the textures of your soil samples
- What are the cost/benefit tradeoffs in preserving our soil?

Materials

Blank Paper
Crayons
Colored Pencils
bowls or buckets
trowel

Cloud Formation



Activity

Select an area at the farm to lay in the grass. Join your students in analyzing and identifying types of clouds, and what they mean.

Ask the student to make observations and explain why they are identifying the clouds.

3 basic types of clouds:

cumulus (puffy)

stratus (stretched out)

cirrus (wispy)

Questions

- Are the clouds at a low (below 6500ft), middle, or high elevation (above 20,000ft)?
- Are the clouds developing vertically?
- What is a contrail?
- How do clouds float?
- Are the clouds moving fast or slow?

Materials

Blank Paper
Colored Pencil
Crayon

Dot Plot



Activity

Start at the picnic tables and ask the student to draw a large dot plot for the self guided field trips, Ask the group a question to collect data ex. What is your favorite vegetable, How old are you, Where do you live etc. Make a hypothesis about the findings.

At the end of the field trip, check on the chart and interpret your data.

Questions

- What does your data show?
- What is the mean, median, range?
- Was your hypothesis correct?
- What is the size of the data set?

Materials

Blank Paper
Colored Pencil
Crayon

Signs of the Food Chain



Activity

Explore the JK Community Farm looking for signs of food chains such as holes in leaves, chewed leaves, animal tracks etc. Determine whether the food source is a producer, consumer, or decomposer.

Ask the student to record their observations.

Questions

- Can you find larva/caterpillars?
- Can you find an earthworm? what role does it play?
- Do you see any insects?
- What is a beneficial insect?

Materials

Blank Paper
Colored Pencil
Crayon
Magnifying glass

Environmental Impact



Activity

Some foods have little impact on the environment while others have large impacts. Some ways to limit impact are to buy seasonal, local, organic, sustainable, fair trade, eating more vegetables and less meat.

Ask the student what they think it means to eat sustainably.

Walk the farm looking for examples of sustainability. Do you see any loose pieces of black plastic? collect them for recycling.

Questions

- What are some ways you can start eating sustainably?
- How might eating sustainably be challenging?
- Do you know where your food comes from?
- What foods are in season now?

Materials

Blank Paper
Colored Pencil
Crayon

Moderation and Energy Balance



Activity

As you explore the JK Community Farm discuss the nutrients in the foods growing. Food contains many different nutrients that help the body function, most foods are a mixture of different nutrients. What are macronutrients and their roles?

It is recommended that humans eat a diet of 40% carbs, 30% protein, and 30% fat. Why is it important to the JK Community Farm that everyone has access to healthy food? Discuss the impact of a highly processed diet.

Questions

- What are the functions of protein, carbohydrates, and fats?
- What are Whole Foods?
- What foods are protein rich?
- Where should most carbohydrates come from?
- What sugar and sugary foods or beverages do you eat or drink? Why should we not eat too much sugar?

Materials

Blank Paper
Colored Pencil
Crayon

Pollination



Activity

Pollination is the transfer of pollen from the anther to the stigma. Insects, specifically bees, aid in pollination.

Cross pollination is the transfer of pollen from the anther of one plant to the stigma of the flower of another plant.

Self pollination is the transfer of pollen from the anther of one flower to the stigma of the same flower

Find the beehives at the JK Community Farm and observe the activities of the bees. Can you identify the parts of the bees used during pollination?

Questions

- What is pollination?
- What is the relationship between bees and flowers?
- Are flowers pollinated by any other means?
- How is honey produced?
- Why are beehives beneficial to the plants growing at the farm?

Materials

Blank Paper
Colored Pencil
Crayon
Magnifying glass

Explore and Discuss

At the JK Community Farm



Nutrition

Food contains nutrients that our bodies need to live and grow. Nutrients allow us to move, think, digest, rebuild, and heal.

We get the most nutrients from our food when it is local, seasonal, colorful, and organic.



Bee Hives

Discuss how bees play an essential role in agriculture - pollinating crops, increasing yields and producing honey.

Over 1/3 of the food we eat relies on pollination by bees.



Food Insecurity

Food Insecurity is when a person or family does not have consistent access to enough food for a healthy life.

The JK Community Farm donates all of the food grown to local food pantries to make sure everyone has access to healthy food



Here are some tips to cultivate a culture of caring in young children

Offering opportunities for outdoor play will promote an essential connection to nature. Through caring relationships with nature, our food and our communities, children become interested in engaging in a healthy and just present and future.



Duration

Try to keep the duration of the project short. Young children's interests change rapidly. Service learning will be most effective if children start and finish the project in a short amount of time.



Listen

Listen to children when they have an idea for making a difference. Ask them questions to guide their thinking about what may or may not be feasible.



Make Connections

Help children make connections between their interests, experiences, and learning by asking, "how can we help?" and "Is there something we can do?"

is everything clear?

Please find Samantha and Farmer Mike at the Farm for any questions.

We'd love to help!

www.jkcommunityfarm.org



Thank you for a lovely field trip

We hope you had a great time and learned a lot! Below is some additional information on the farm!

Volunteer

We welcome volunteers of all ages throughout the season to join us for planting and harvesting projects. Sign up is available at

www.jkcommunityfarm.org/volunteer

Donate

As a nonprofit, we rely on our community to help us grow. This year the JK Community Farm will donate 135,000 lbs of healthy food to the food insecure in our region, but we need your help to expand.

www.jkcommunityfarm.org/donate

Follow

Keep up with the farm and events on social media

[@jkcommunityfarm](https://www.instagram.com/jkcommunityfarm)

We're on instagram, Facebook, and LinkedIn!



JK COMMUNITY FARM