



7th 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 cover crop?

What is food security?

Why is healthy soil important?

What is renewable energy?

How does climate affect our food choices?

Food Safety from Farm to Fork

Students will learn the basic science of food safety and the importance of safe food practices



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Fact or Opinion?

1. People should only eat cooked foods since, according to a media report, all bacteria are harmful
2. Microorganisms can live almost anywhere, even in food.
3. To maintain your health, it is important to eat 5 or more servings of fruits and vegetables per day.
4. A single bacterium is too small to see without a microscope.
5. Scientific research has shown that the mishandling of food by the person who prepares it or eats it accounts for most foodborne illnesses,
6. People should not eat fresh foods since your aunt says that can carry bacteria like E.Coli and Salmonella
7. The cereal box has a picture of a kid on it, that means its healthy and made for kids!

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Cover Crop



Activity

Cover crops add organic matter to the soil, and add nitrogen in a slow-release way that plants can handle. They improve soils physical properties in just one growing system, and attract beneficial insects and pollinators.

Explore the JK Community Farm and discover the covercropped areas.

Questions

- Why are we cover cropping through the winter?
- What happens to the cover crop in the spring?
- Can you identify the cover crop growing?
- If there are peppers on a plant how many would there be if 1/3 were harvested?

Materials

Blank paper
Crayons
Colored Pencils
Calculator

Compost and Sustainability



Activity

Start your activity by .finding a rotten pepper on a plant and toss it into the compost! Direct the students attention to the compost pile. Have the student guess the temperature of the compost pile .Ask the student to then read the temperature.

Discuss decomposition with the students and what causes the heat.

Questions

- What do you think the temperature is?
- What is the actual temperature?
- What observations can you make about the compost pile? Can you tell what has been composted?
- 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 Science



Activity

Soil is made up of a mixture of sand, silt, clay, and organic material. Different soil types have differing percentages of each.

Fill your jar 1/3 of the way with soil from the JK Community Farm (any site is great). Fill your jar until it is 3/4 full with water from the hose. Put the lid on and shake.

Let your jar sit until the end of the fieldtrip to observe. Record and draw observations.

Questions

- Do you see different layers?
- Can you measure each layer?
- Identify the soil layers, the bottom layer is sand, then silt, then clay. Water is next, and organic matter on top.
- What is organic matter, and why is it important?

Materials

Blank paper
Crayons
Colored Pencils
Jar with lid
Measuring Tape/ Ruler

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

Adaptation and Domestication



Activity

Plants and animals have behaviors and structures that increase their chance to survive and reproduce.

As you explore the JK Community Farm discuss adaptation and genetic mutations with the student. Can they name any examples of adaptation in nature?

Questions

- How are characteristics of plants and animals passed down?
- How do animals and plants help to ensure their survival?
- What is natural selection and how does it work?
- Can you find an example of adaptation or genetic mutation on a plant growing at the farm?

Materials

Blank Paper
Colored Pencil
Crayon

Seed Parts and Sprouting Starts



Activity

Enter the greenhouse and take time to explore the herbs growing in the planters and the seedlings growing in the trays. **Ask the student to try identifying the plants as they walk through.**

The life of nearly all plants we eat start as a seed. Seeds come in different shapes and sizes, but all share common parts and contain everything needed to reproduce and grow.

Questions

- Can you find a seedling shedding its seed coat?
- The first leaves that emerge from the seed are called cotyledons, can you identify them?
- A monocot has one cotyledon, and a dicot has two, can you identify them?
- Why do we start seeds in the greenhouse?
- Can you guess what is the largest plant seed? (a coconut)

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

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