



4th 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
compost?**

**What is a food
chain?**

**How do we get
energy?**

**What are
nutrients?**

**How do humans influence
ecosystems?**

Food Web

Can you find and list examples of these members of the food chain at the farm?
Determine their food source.



Decomposer

Producer

Consumer

Components of soil



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.

Materials

Blank paper
Crayons
Colored Pencils
Jar with lid
Measuring Tape

Geometry in Nature



Activity

Explore the JK Community Farm to identify examples of lines, line segments, rays, and angles from objects around the farm.

Ask the student to draw an image of what they saw and label the figure appropriately.

Questions

- Can you identify a parallel lines?
- Can you identify perpendicular lines?
- Can you identify an acute angle?
- Can you identify a right angle?

Materials

Blank Paper
Crayons
Colored Pencils
Measuring Tape

Plant structure and Function



Activity

While in the greenhouse, explore and name the different parts of a plant. Ask the student to identify the stem, flower, root, and leaf? Use your magnifying glass to inspect the structure.

The cells in plants are always moving water, nutrients, and waste through the plant. The transport system is made of the roots, stem and leaves. Leaves have parts called veins that carry water and nutrients. The leaves also take in gases from the air.

Questions

- What is the plant height in cm?
- How many leaves are on the stem?
- Are there any open flowers?
- What will the plant produce?
- How does the plant perform photosynthesis?

Materials

Blank Paper
Colored Pencil
Crayon
Magnifying Glass

Plant Life Cycle

life processes



Activity

Begin in the greenhouse to help students understand the cyclical nature of a plants life. **Make your way from the greenhouse and around the farm to identify the stages of the plant life cycle (seed, young plant, mature plant, flower, fruit)**

When you get to the fruit, ask "what happens now?" work with the student to **explore how the fruit grows back to seed.**

Questions

- Where do seeds come from?
- What does the plant need to grow?
- How do plants produce oxygen and food?
- What happens if the plant does not get water and nutrients?
- Do we need water and nutrients??

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

Learning Time in Nature



Activity

Walk to the human sundial at the top of the JK Community Farm.

Have the student stand in the middle of the sundial. The time will be shown by their shadow, ask the student to read the time.

Utilize the sundial to calculate elapsed time.

Questions

- What time does the sundial show?
- What time does the analog clock show?
- What time will it be in two hours?
- If we eat lunch at 1pm and we are going on a walk 3 hours later what time will it be?

Materials

Blank Paper
Colored Pencil
Crayon

Balance, Variety, and Moderation



Activity

We each have unique needs for nutrients to feel and perform our best.

It is important for all living things to eat the most nutrient-dense foods as possible.

As you explore the JK Community Farm, discuss what this means. Discuss the 4 keys to sourcing food, variety, locally seasonal, and quality. Help the student to identify macronutrients:

Carbohydrates, Fat, and Protein

Questions

- What are nutrients?
- What are Whole Foods?
- What does it mean to eat seasonally?
- What are processed foods?
- What is organic?

Materials

Blank Paper
Colored Pencil
Crayon

Benefits of Water



Activity

Plants need water just like we do, water is most important nutrient for plants, animals, and humans. [Explore the farm to learn about our irrigation process.](#)

Ask the student about the important roles of water, and what happens to the plants if they don't get enough water. People should drink half their body weight in ounces each day. For example if you weigh 50lbs, you should drink 25oz. each day. How much water should you be drinking?

Questions

- What are the roles of water?
- How do plants absorb water?
- How do we absorb water?
- What are the signs of dehydration? What does a dehydrated plant look like?
- How much water did you drink today?

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