Junior Stewards Toolkit
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Welcome!
Greetings! Thanks for your support of Junior Stewards. This toolkit serves as a basis and guide for planning youth programs in the Orchard. This is a working document, and you should feel free to add/subtract information as you see fit. With this document, we can successfully transfer knowledge and continually improve and increase the capacity of our youth programs. Thanks for your role engaging and empowering today’s youth in orcharding!

Useful files in the Resources folder
- Junior stewards team 1 pg. summary--This document contains a quick summary of the JStews team. It’s useful to bring copies of it to tabling events.
- Junior stewards call out flyer--This document contains a flyer that you can print and hang up around town to try to recruit more Junior Stewards volunteers.
- Purchasing guidelines--This document contains guidelines for making purchases and requesting reimbursements.
- Tax exemption certificate--Take this certificate with you when making purchases.

What are my responsibilities as a Junior Stewards Team Leader?
- Plan 3 special events:
  - MLK Day
  - Lotus Blossoms World Bazaar
  - Global Youth Service Day
- Plan field trips
- Organize the indoor gardening program
- Maintain the letterbox

These tasks are described in the sections below.

After every special event/field trip/indoor gardening session, please update the education tracker here:
https://docs.google.com/spreadsheets/d/1VMXA71tZsKNU99mPRj3nv3CpMOgthQMdPkYlgpNi8Uo/edit#gid=1269166117
Special Events

MLK Day of Service (January)
To honor Martin Luther King Jr, a national holiday that included a Day On Not Off is celebrated. Bloomington hosts dozens of volunteer opportunities for community members, individuals, and groups

For the past several years, the Orchard has hosted a volunteer event. We’ve done a lot of fun activities, like making mason bee homes, bird houses, and bat houses, cleaning mason bee homes, and preparing bags of soil amendments for partner plantings. There’s detailed info about these past events in the Events folder.

In past years, the city funded MLK Day volunteer projects, but stopped funding them in 2018. However, even without the funding, we continue to host these events.

I highly recommend that you begin planning this event in November. For the past few years, we’ve held it at Hilltop, and it has been a great venue. Contact: Lea Woodward lemawood@indiana.edu. That space can fit about 30 volunteers. The Bloomington Volunteer Network advertises these events, and volunteers fill the spots quickly, so be sure to tell the Volunteer Network that the maximum number of volunteers is 30. You don’t need to do any advertising outside of the Volunteer Network. Before the event, make sure you purchase all of the supplies you need and recruit at least 3 orchard volunteers to help run the event.

Lotus Blossoms (March/April)
The Lotus Blossoms World Bazaar is part of the Lotus Festival series of events throughout the year. It is hosted in late March and is a free multicultural arts-and-education event for kids. The Friday edition of the Bazaar is open only to students. The 4th graders visit in three shifts of 45-minutes each. Saturday is Family Day which is free to the public. Volunteers from the Bloomington community (and around the world) present arts, music, language, and international crafts that let kids get their hands on the world. More info: http://lotusfest.org/lotus-blossoms-main/bazaar

This event is super simple to plan, compared to MLK Day. In January or February, someone from Lotus will contact you and ask if the orchard wants to participate in the event again. They will ask you to fill out a form indicating what activity you’re doing and how many tables and chairs you need. In the past, we have always done seed planting and requested 2 tables with 4 chairs.
After you complete that form, all you need to do to prepare for the event is buy potting soil, cups to plant the seeds in, and seeds. I recommend bringing some Sharpies and boxes so that you can create a box for each school and the kids can write their names on the cups, put them in the box, and have their teachers bring them to school. That way they don’t have to carry the cup around all day.

**Global Youth Service Day (April)**

On Global Youth Service Day, Tri-North students get to leave school and volunteer in the Bloomington Community. Typically approximately 20 students volunteer at the orchard for a 2-hour period.

This event is pretty easy to plan. In January/February/March, someone from the Nonprofit Leadership Alliance at IU will email you and ask if the orchard wants to participate again this year. You can ask the Operations team for projects that need to be done at the orchard, pick one, and let the Nonprofit Leadership Alliance know. That’s all the planning you have to do before the event.

**Field Trips**

In the late spring, summer, and fall (especially the summer), school groups and summer camps come out to the orchard to take a tour, try some fruit, volunteer, and/or do fun activities.

If JStews is low on volunteers/time, you can just wait for groups to reach out to you and ask to schedule a field trip. If JStews has more volunteers/time, you can reach out to groups and invite them to the orchard. Here are some contacts you can reach out to: https://docs.google.com/spreadsheets/d/1ZRPNbVsSHQywHxNq1iAwcSXeAmpP9oDaFKSuWzKoU/edit#gid=0 And here are email templates you can use: https://docs.google.com/document/d/1Yc7f_3D4S027xJXO2M_Lmq90glaZvssUio_b1n-DD4A/edit

When a group wants to come out for a field trip, make sure you ask how many kids they anticipate bringing, what their ages are, and if there is anything specific they would like to do.

On the day of the field trip, arrive early enough to fill the water cooler at the community gardens. When the groups arrive for their field trips, ask them to sign in using the Work and Learn Day binder in the shed. Then you’re good to go!
Here are some fun activities you can do:

Leaf rubbing

- Have the kids pick comfrey leaves
- Give each child a crayon and a piece of paper
- Have the kids put the paper on the leaf and then rub the crayon over it
- Discuss the parts of a leaf

Progressive plant rock paper scissors.

- stages of plant growth: seed, seedling, sprout, plant, and compost.
- The kids all start as seeds. They walk around with one hand making the shape of a circle. They find someone who is also a seed (everyone at first) and play rock paper scissors. Whoever wins advances to the next stage: seedling, which is represented by sticking up your pointer finger. The loser remains a seed and finds another seed to play with. The seedling finds another seedling to play with. Whoever wins becomes a sprout, which is represented by holding up all of your fingers together. Then the sprout finds another sprout to play with, and the winner becomes a plant, which is represented by holding up all of your fingers spread out. Then the plant finds another plant to play with, and the winner becomes compost, which is represented by dramatically dying and lying on the ground. The game continues until most of the kids become compost. The kids played this game 3 times.

Plant part factory

- Explain that there are six different plant parts, and that each part has an important job to do to help the plant grow, survive or reproduce. In this activity, we are going to create a plant part factory to show how all of the parts work together.
- Introduce or review the six basic plant parts and functions:
  - Roots – Hold the plant in the ground. Get water and nutrients from the soil.
  - Stems – Support the plant. Move water and nutrients throughout the plant.
○ Leaves – Use sunlight to make food for the rest of the plant. If appropriate, explain photosynthesis: During photosynthesis, leaves use energy from sunlight to convert carbon dioxide (from the air) and water (from the soil) into sugar (food) for the rest of the plant.
○ Flowers – Make seeds. Attract birds, insects and other pollinators.
○ Fruits – Protect the seeds. Disperse seeds.
○ Seeds – Make new plants—“reproduce” themselves.

- Assign plant part roles to students, and explain the role of each of the parts. Have students practice the parts as they are described.
  ○ Roots – Sit or lie down on the ground and make a very loud slurping, sucking sound to represent absorbing water and nutrients from the soil.
  ○ Stems – Stand up straight and tall to represent supporting the plant and move their arms up and down, while chanting “up and down, up and down” to represent moving water and nutrients throughout the plant.
  ○ Leaves – Reach towards the sun, as if they are grabbing something, then make a stirring motion and chant “take and make, take and make” to represent taking energy from the sun and making food for the plant.
  ○ Flowers – Wave their props around and chant “Hey bee, look at me!” to represent attracting birds, insects and other pollinators.
  ○ Fruits – Make a circle with their arms to represent a big, fleshy fruit like an apple that is surrounding its seeds OR Make a “rocking the baby” motion to represent protecting the seeds.
  ○ Seeds – Jump out from the plant and crouch down to the ground. Then slowly stand up raising your arms. Chant, “Pop out, grow up!” to represent seed falling and the growth of a new plant.

- Once everyone knows their part, it’s time to assemble the plant part factory. Make sure you have enough open space for the whole group to gather. Call up the roots and ask them to start doing their action, then add the stems, leaves, etc. until you have a complete plant part factory. This may be loud and chaotic!
- It’s useful to use the sun as a cue for moderating or ending the activity. Since the leaves can’t do their job without sunlight, when the sun goes down or is covered by a cloud, it’s time for the plant part factory to take a break.
- You may want to repeat the activity, allowing students to act out a different role.
Notes: One of the 6th-8th grade groups thought this was really lame, but the other really enjoyed it.

Sun, soil, water, and air activities

- Acting
  - Sun: Leaves capture or grab the sunlight to use to make food. Have the students put their hands (leaves) toward the sun and “grab” sunlight.
  - Soil: Roots help the plants stay in place and the soil contains nutrients (plant vitamins) that the plants need to grow. (The kids don’t act out anything for this.)
  - Water: Roots drink/absorb water in the soil. Have the students wiggle their toes to stimulate drinking the water with their roots.
  - Air: Plants breathe (like humans!) in CO2 and breathe out oxygen O2. Have the students breathe in and out.

- Song
  - https://www.youtube.com/watch?v=vEYhs8m_qo4
  - Lyrics: Sun soil water and air
  - Sun soil water and air
  - Sun soil water and air
  - Sun soil water and air
  - Everything you eat
  - Everything you eat
  - And everything you wear
  - And everything you wear
  - Everything comes from
  - Everything comes from
  - Everything comes from
  - Everything comes from
  - Sun soil water and air
  - Sun soil water and air
  - Sun soil water and air
  - Sun soil water and air
Bee game

- Send one camper away while you give another camper a small object to hide in their pocket that represents honey. Everyone but the camper who goes off to the side knows who has the “honey.” The camper comes back, and the other campers buzz louder as the camper gets closer to the honey. The game ends when the camper finds the honey.

Apple tree life cycle craft

Garden Jokes

- **Why is grass so dangerous?** Because it’s full of blades!
- **What do you get when you cross poison oak with a four leaf clover?** A rash of good luck.
- **Why can't the flower ride his bike?** Because he lost his petals!
- **What do trees drink?** Root Beer!
- What did the baby Tulip say to its baby-sitter? "I want my Poppy and my Mum!"
- What is the best kind of guy to meet? A fungi!
- What happened to the plant in math class? It grew square roots!
- What do you get when you cross fruit with a necklace? A food chain!
- What kind of flower looks like it just came back from a fight? A black-eyed Susan!
- What do you call a homeless snail? A slug!
- What do you get when you cross a genius with a tree? Albert Pine-stein!
- If April showers bring May flowers, what do May flowers bring? Pilgrims!
- Did you hear about the magic tractor? It went down the road and turned into a field!
- What is a tree's least favorite month? SepTIMBER!!!
- Why is the letter "A" like a flower? A bee (B) comes after it!
- What flowers grow on faces? Tulips (Two-lips)!

Strawberry Lesson Plan
Lesson plans for multiple age groups (K-5) that teach parts of the strawberry, properly harvesting strawberries, how to grow strawberries inside, etc:


Apple Lesson Plan
Following this link: http://blogs.cornell.edu/garden/lessons-by-type/

Scroll to The Appealing Apple
Download the PDF that has dozens of kid-friendly apple activities!

Enjoy!!

Orchard Crossword Puzzle
Make your own here by typing in words and clues:
Indoor gardening program

In 2017, we received a grant to start an indoor gardening program. The idea is to use the 6 grow lights and 2 sets of shelves to start plants indoors early in the spring semester. In 2018, we piloted the program at the Bloomington Montessori School with Eve Cusack (walnut@montessori.k12.in.us) and Jess Davis’s (maple@montessori.k12.in.us) classes. We went to the school every other Friday to do activities with the kids. The actual indoor gardening aspect of the program did not work out as well as we had hoped. The kids did not water the seedlings enough in between our visits, and they all shriveled and died. Toward the end of the semester, Eve and Jess had the kids replant the seeds in containers from Cook Medical that have plastic lids. These containers keep the soil moist, and those plants did end up growing. When you do this program in the future, each out to cook and see if we can get some of those containers.

Letterbox

You might be asking yourself, “What is a letterbox?” Here’s a handy description: https://www.letterboxing.org/GettingStarted/getstart_finding.htm#startFinding

When people come to the orchard to do the letterbox, they start by opening the instruction box, which is located under the kiosk by the front gate. It is clear and has a white lid. There are general instructions on the lid, and inside the box, there are clues, a map of the orchard, and a reference guide (all of which you can find in the letterbox folder). Letterboxers use these documents to find the letterbox, which is located under the rock sculpture. Each clue leads to a location in the orchard where there is a small piece of limestone with a letter on it. When the letters are put together, they spell out “the rock sculpture.”

Maintaining the letterbox can be a bit of a pain, especially during scything season. Every once in awhile and before events, make sure that the stones are all where they should be. There is a cheat sheet in the Letterbox folder. If stones go missing (which they will), you’ll need to replace them.