

# Childcare & School Gardens

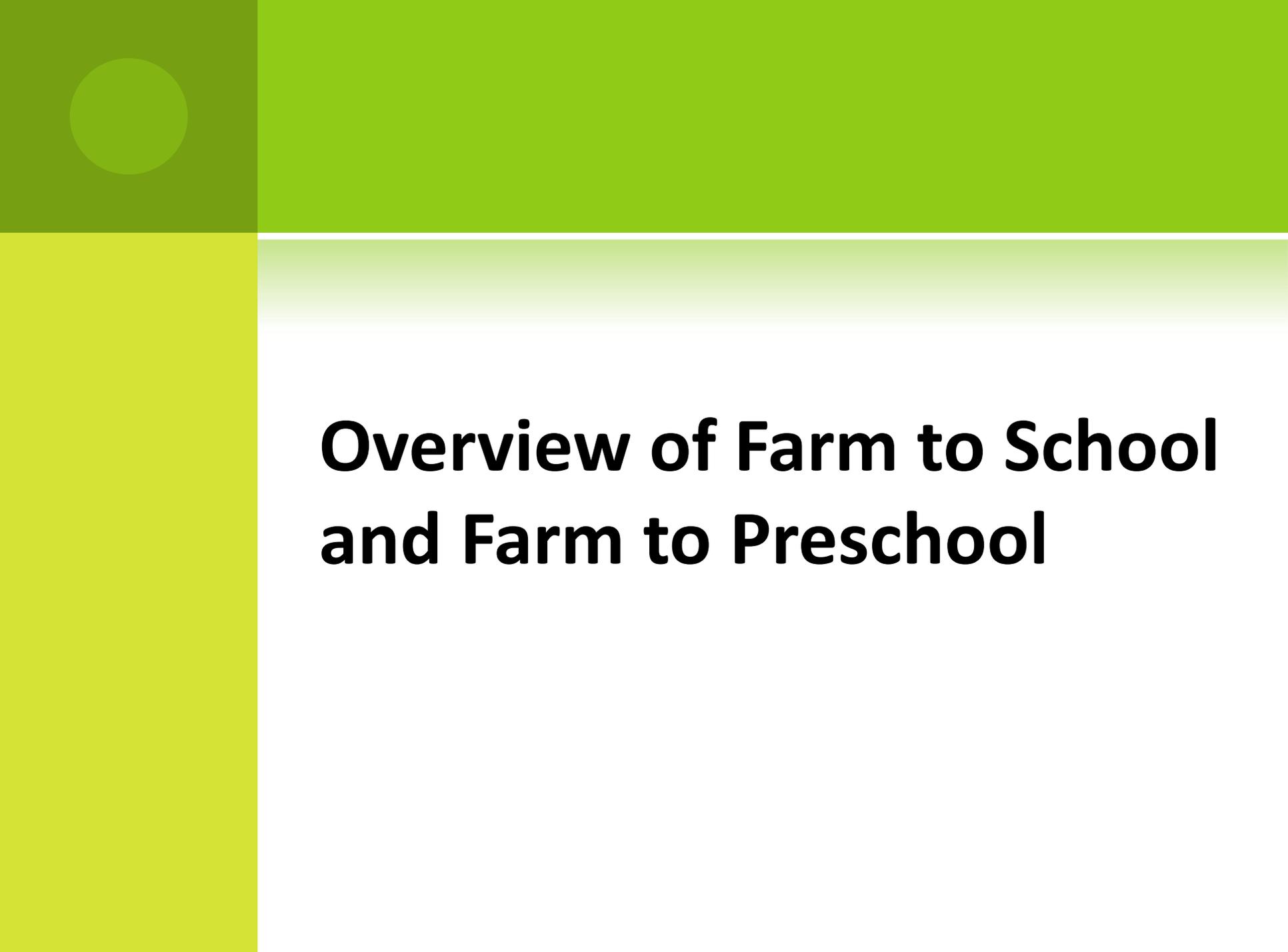


*Improving our kids' health and nutrition is a lesson that lasts a lifetime.  
And what better venue for a life lesson than at school?*



# AGENDA

- ③ Overview of Farm to School and Farm to Preschool
- ③ Benefits of school gardens
- ③ Starting a garden
- ③ Discuss your call to action
- ③ Provide resources



# **Overview of Farm to School and Farm to Preschool**



INDIANA  
**FARM TO SCHOOL**  
NETWORK

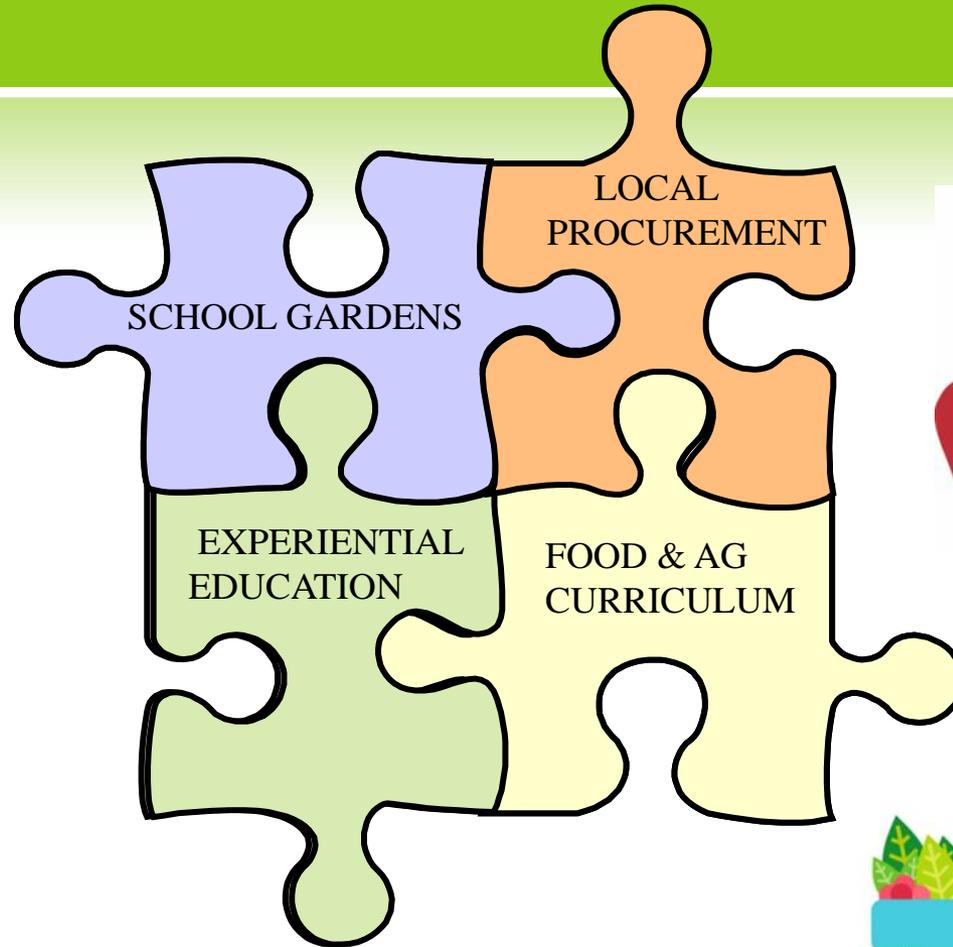
**NOURISHING Kids and Communities**

# WHAT IS FARM TO SCHOOL?

Farm to school is the practice of sourcing local food for schools or preschools and providing agriculture, health and nutrition education opportunities, such as school gardens, farm field trips and cooking lessons. Farm to school improves the health of children and communities while supporting local and regional farmers.



# FARM TO SCHOOL: A HOLISTIC APPROACH



# FARM TO SCHOOL: GAINING MOMENTUM IN INDIANA

- Support for Farm to School has been gaining momentum in IN since the fall of 2012
- Indiana Farm to School Network was created to grow f2s efforts in IN



Indiana State  
Department of Health



**PURDUE EXTENSION**  
*We transform lives and livelihoods through research-based education*

# WHAT IS FARM TO PRESCHOOL?

- ③ Farm to Preschool is a natural expansion of the national farm to school model and encompasses a wide range of programs and activities.
- ③ Farm to Preschool serves the full spectrum of child care delivery: preschools, Head Start, center-based, programs in K-12 school districts, nurseries and family home care facilities.





# **Benefits of Farm to Preschool & School Gardens**

# BENEFITS OF FARM TO PRESCHOOL & SCHOOL GARDENS

- ◎ Tending to new plants teaches children responsibility and teamwork.
- ◎ It provides an opportunity to bring science, math, social studies, and language and visual arts to life through hands-on learning.
- ◎ Vegetable gardens let children taste the wonders of fresh food.
- ◎ Plus, parents, students and teachers can all enjoy the growing feeling of community that comes from sharing a new adventure.

# BENEFITS OF FARM TO PRESCHOOL & SCHOOL GARDENS



- ① Environmental stewardship and connection with nature
- ① Lifestyle and Nutrition
- ① Active learning and student engagement
- ① Connection to history and the community
- ① School pride

# BENEFITS OF FARM TO PRESCHOOL & SCHOOL GARDENS

- Beyond the student population...
- **Teachers & Staff:** Positive changes in diets and lifestyles
- **Parents:**
  - Increased ability and interest in incorporating healthier foods in family diets
  - Guide children to make healthier food choices
- **Family:** Improved household food security
- **Community:** Increase awareness and interest in local foods and healthy eating

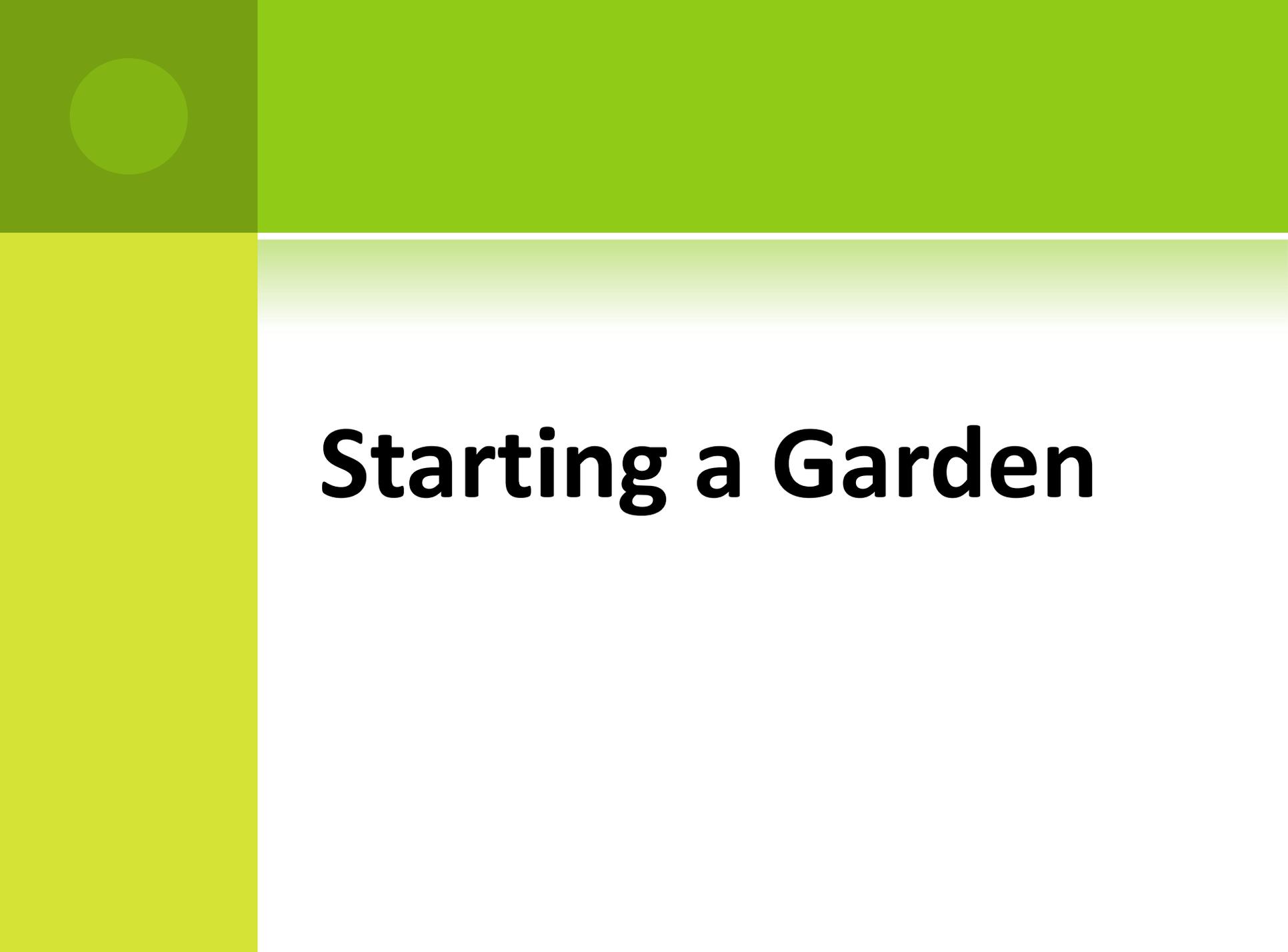
# START SMALL, GROW SLOWLY

Farm to Preschool programs are most successful when they start small and expand as support, awareness and resources grow. Choose one action item to incorporate as you begin your programming.

Suggestions include:

- **School Gardens**
- Chef or Farmer Visits
- Nutrition Education
- Experiential Education





# Starting a Garden

# STARTING A GARDEN

- Organize a school garden committee
- Find a place to plant
- Get seeds & tools
- Prepare the soil
- Start your garden
- Plant
- Care for your garden





# SCHOOL GARDEN TEAM ROLES

- ◎ Facilitator/Principal
  - ◎ Generally, the principal will facilitate the garden operations rather than be directly involved
- ◎ Garden Coordinator
  - ◎ This individual organizes regular meetings with the team and takes the lead for making plans
- ◎ Planting Day Leader
  - ◎ The Planting Day Leader works ahead of time to promote pre-planting activities such as getting seeds started in classrooms and training staff for the big day

# SCHOOL GARDEN TEAM ROLES



- ◎ Resource Leader
  - ◎ The Resource Leader's job is to find garden and/or nutrition educational materials for teachers to use in the classroom or garden
- ◎ Parent/Teacher Liaison
  - ◎ This person can recruit parents and members of the community to assist with the garden by volunteering with labor, money or supplies
- ◎ Fundraising/PR Leader
  - ◎ This person may need to seek additional funding and may begin with seeking donations from neighborhood businesses and organizing a school fundraiser

# WHO ELSE TO GET INVOLVED?

- ◎ Administration
- ◎ Teachers
- ◎ Maintenance staff
- ◎ Parents  
(PTO/PTA)
- ◎ All Students
  - ◎ Life Skills
- ◎ Food Service





# FIND A PLACE TO PLANT

**Use these questions to guide your thinking, and then decide on the garden location accordingly...**

- Is the site easy and safe for both students and teachers to access?
- Is it big enough?
- Is there a nearby and dependable water source?
- Is the site protected from vandals, rodents or other potential threats?
- Is the area big enough to allow for future growth?
- Is the site exposed to sunlight *at least* 6 hours a day, if planting flowers, herbs and vegetables?
- Is the soil contaminated with lead or other heavy metals?

# GET SEEDS & TOOLS

- ◎ Buy seeds early in the year
  - January - March for the best selection
- ◎ Select seeds based on time of maturity & disease tolerance
  - how long they need to grow
- ◎ To ensure germination, purchase new seeds every year
- ◎ Choose varieties marked “easy to grow”



# GET SEEDS & TOOLS

## Tools and Other Items Needed for Your Garden...

### Necessities

- ⊙ Rake
- ⊙ Shovel
- ⊙ Garden hoe

### Other Accessories

- ⊙ Small hand trowels
- ⊙ Watering cans
- ⊙ Turning fork
- ⊙ Small buckets



- Plant labels or row markers
- Garden hose
- Lawn sprinkler

# PREPARE THE SOIL

## Ultimate garden soil is...

- ◎ Deep
- ◎ Loose
- ◎ Fertile
- ◎ Well drained
- ◎ Slightly acidic
- ◎ Has lots of organic matter
  - manure, leaves, grass clippings, compost, green manure, crop residues



# PREPARE THE SOIL

Have your soil tested for ...

- pH
- nutrients
- lead contamination



by a soil testing laboratory

Contact Local Health Dept. for soil testing

<http://www.state.in.us/isdh/24822.htm>



# PREPARE THE SOIL

- ⊙ If your site is contaminated, the simplest solution may be to find another site or try container gardening with different soil.
- ⊙ Contact your nearest Cooperative Extension office to learn how to take a soil sample & where to send it for analysis.

# START YOUR GARDEN

- © Growing season can vary
- © Seeds requiring longer growing seasons may be started indoors
- © May see better results with purchasing vegetable plants that have already been started





# START YOUR GARDEN

1. Timeline for Your garden
2. Getting ready to plant in the garden
3. Planting in the garden

Use the table to help you decide the best time to plant your garden (handout)

[http://www.in.gov/isda/files/Harvest\\_Calendar.pdf](http://www.in.gov/isda/files/Harvest_Calendar.pdf)

# START YOUR GARDEN

Cool season crops can be planted when the ground temperature is **50 degrees**

- ⦿ beets
- ⦿ carrots
- ⦿ peas
- ⦿ lettuce
- ⦿ chard
- ⦿ mustard
- ⦿ greens
- ⦿ cabbage
- ⦿ broccoli
- ⦿ brussels sprouts



Warm season crops are planted when the ground is at **60 degrees**

- ⦿ corn
- ⦿ beans
- ⦿ Squash
- ⦿ tomatoes
- ⦿ pumpkins
- ⦿ peppers
- ⦿ eggplant
- ⦿ melons
- ⦿ cucumbers



# PLANTING

1. Straight-Row Furrows
2. Wide Row Planting
3. Square-Foot Gardening



## quick tip

"Keep in mind that a garden cannot be planted in one day. Some fruits and vegetables grow best in cooler temperatures, while others require warm soil or hot air."

— Iowa State University Extension

# CARE FOR YOUR GARDEN

## ⊙ Weeding

- a layer of leaf mulch did a great job of keeping the weeds down

## ⊙ Watering

- best time to water is in the early morning or early afternoon.

## ⊙ Adding Organic Matter

- provides nutrients for plants

# WATER YOUR GARDEN

- Plants need 1.5 inches of water per week
- Too much water will leach out the much needed fertilizer
- Excessive water could suffocate the plants by depriving the roots of oxygen



# SUMMER MAINTENANCE PLAN

## What happens in the summer?

- ◎ Very little needs to happen in the summer
- ◎ Watering once a week and slight weeding, some harvesting
- ◎ Great opportunity for parents and community members to become involved, or staff who live near the school
- ◎ Include summer maintenance plan in School Garden Plan



# HOW TO ENGAGE YOUTH

- ◎ Provide a safe location, a hand trowel, some seeds and plants, and a volunteer to show them what to do—kids love learning how to grow things
- ◎ Start small, either with a container garden or a small raised bed no larger than 4 x 4 feet
- ◎ Square foot gardening is a technique that works well with kids

# HOW TO ENGAGE YOUTH

- ◎ Have them choose which plants they want & where
- ◎ Have them plant
- ◎ Caring for their garden and watching it grow will be a delight



# HOW TO ENGAGE YOUTH

Resources from Fruits & Veggies More Matters

⦿ Kids in the garden

<http://www.fruitsandveggiesmorematters.org/kids-in-the-garden>

⦿ DIY Gardening Projects

<http://www.fruitsandveggiesmorematters.org/5-do-it-yourself-gardening-projects-for-home-or-school>

# TIPS FOR GARDENERS WORKING WITH YOUNG KIDS

- © Young children have very short attention spans
  - Digging holes seems to hold endless fascination
- © Kids need instant gratification
- © A picture is worth a thousand words
  - Never tell kids something that you could show them instead

# TIPS FOR GARDENERS WORKING WITH YOUNG KIDS



- ⊙ When giving out supplies to kids, try to keep seeds, tools, and watering cans as similar as possible to avoid squabbles (i.e. purchase all red watering cans, not pink and blue ones.)

# ENGAGING THE YOUTH ACTIVITY



# MAKING THE BUTTERFLIES

1. **Gather supplies**
2. **Play around with clothespin (fine motor development)**
3. **Paint clothespin (optional)**
4. **Add tissue paper wings**
  1. **Cut tissue paper into 12 x 8 rectangles (may cut smaller rectangles)**
  2. **Gather tissue paper by clinching it in the middle**
  3. **Can use 2-3 sheets of the same color or a few different colors**
  4. **Clamp clothespin around the clinched part of the tissue paper**
  5. **Fluff the wings up**
5. **Decorate wings (optional)**
6. **Add piper cleaner antennae**

# FROM THE CLASSROOM...

*“Start small -- indoor plants on your window sill, one raised bed in the schoolyard, food tasting in your classroom or a field trip to a local farm -- and watch how the excitement grows. Students talk to other students, to their parents, to their other teachers and pretty soon others want to get involved. And don't forget to take lots of pictures. No one can resist a child having fun!”*





# ACTION

- ⦿ Encourage students to share their ideas and include them in the building and planting of the garden
- ⦿ Get their hands in the soil every step of the way
  - ⦿ Their participation will instill a sense of ownership, pride, and responsibility among students

# ACTION

- © Use the garden to connect students to the source of their food



- © Plant herbs, fruits, & vegetables that are easy to grow, pick, and cook and you'll succeed at introducing a greater variety of fruits & vegetables to youth

# RESOURCES

- ③ [USDA's People's Garden website](#) has how-to videos and databases filled with garden-based learning curricula, free seed and funding sources, and healthy gardening practices.
- ③ You can call on an [Extension Master Gardener](#) volunteer in your area to help with your garden.

# RESOURCES

- © Farm to Preschool  
[www.farmpreschool.org/preschoolgardens.html](http://www.farmpreschool.org/preschoolgardens.html)
- © Farm to Childcare  
<http://www.doe.in.gov/nutrition/farm-childcare>
- © Got Dirt? (Gardening Toolkit)  
<http://www.dhs.wisconsin.gov/publications/P4/p40112.pdf>

# RESOURCES

- ③ Food & Nutrition Fun for Preschoolers  
[http://www.fns.usda.gov/sites/default/files/grow  
it\\_fun.pdf](http://www.fns.usda.gov/sites/default/files/grow_it_fun.pdf)
- ③ Grow it, Try it, Like it  
<http://www.fns.usda.gov/tn/grow-it-try-it-it>

# RESOURCES

- ◎ Team Nutrition's Nibbles for Health: Grow a Family Garden  
[www.fns.usda.gov/tn/Resources/Nibbles/grow\\_garden.pdf](http://www.fns.usda.gov/tn/Resources/Nibbles/grow_garden.pdf)
- ◎ Growing Vegetables in Containers  
[http://www.kiddiegardens.com/growing\\_vegetables\\_in\\_containers.html](http://www.kiddiegardens.com/growing_vegetables_in_containers.html)
- ◎ Two Bite Club  
<http://www.fns.usda.gov/sites/default/files/TwoBiteClub.pdf>

# RESEARCH

- ◎ The National Environmental Education Foundation (2010) summarizes a number of research studies on the health benefits of time spent in green spaces:
- ◎ Children's stress levels are lower when they spend time in natural environments (Wells & Evans, 2003).
- ◎ Exposure to natural environments can reduce the symptoms of attention deficit hyperactivity disorder (Taylor, Kuo, & Sullivan, 2001; Kuo & Taylor, 2004).
- ◎ Access to natural environments is associated with reduced risk of suffering from depression, anxiety disorders, and other mental health issues, as well as various diseases and digestive problems (Maas et al., 2009).
- ◎ Those who live in the greenest environments are less likely to die from all causes, and green spaces may reduce socioeconomic inequities in overall health (Mitchell & Popham, 2008).
- ◎ Children living in greener areas are less likely to become obese (Bell, Wilson, & Liu, 2008).
- ◎ Green school grounds promote increased and more vigorous physical activity (Council on Sports Medicine and Fitness & Council on School Health, 2006).

# QUESTION & ANSWER





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