What's to Eat

A Close Look at Food Around Our School

K-1 Classroom

Food Learning Activities Across the Curriculum

Relationship to Illinois Learning Standards

Arts and Aesthetics

*Constructing (LS26A1e)

- 3-dimensional objects such as the tractor out of boxes and junk, food out of clay (pizza, fruit, etc.)
- Build with craft supplies, paper mach, newspaper, balloons, modeling clay, cardboard (pizza dough mixer, dough flattener, shelf from a grocery store
- Build with food
- Construct tractor, farmer and animals, body showing digestion tract, dough flattening machine, and mixing bowl with dough hook made with boxes and junk
- Construct with commercial made materials:
- Cuisenaire rods
- Geoboards
- Legos
- Measure costumes made for dramatic play
- Pattern blocks
- Problem solve
- Representation of the equipment for making pizza and tractor
- *What's Important About Food* murals
- Wooden blocks

*Dramatizing (LS25A1b and LS26A1b)

- Dramatize the nursery rhyme *Pat-a-cake, There was an old lady who lived in a shoe* after discussing the food that was involved in the rhyme
- Practice play lines for puppet shows and skit
- Practice play lines for story innovation of books, *The Hungry Thing* and *Jack and the Beanstalk, etc.*
- Role-play farmer, restaurant
- Use child-made puppets to explore creative dramatics

*Memory drawing (LS26B1d)

- Draw favorite food, food they had just eaten, food they would eat, eating food, or preparation
- Draw *Jack and the Beanstalk* play, potluck and other events from memory because not appropriate to draw at the time

- Draw pictures of what their question is about to help them remember their project questions (e.g., questions for site manager, etc.)
- Draw prediction of what food they will see on walk around preschool classroom, neighboring offices, and outside around the school
- Draw predictions of what expert will say about food and nutrition

*Observational drawing (LS26B1d)
- Draw corn and bean field site visit
- Draw corn and soybeans collected on field trip (Time 1 drawings)
- Draw food brought into classroom for their lunch (Time 1 drawings)
- Draw people working with food and plants (grocery store, cafeteria, pizza restaurant, green house, Busey woods and field mill) from field site visits
- Draw plants, seeds, digestion and mold (artifacts brought in by experts)
- Revisit observational drawings and elaborate, edit, and revise to make Time 2 observational drawings of lunch food, seed sprouts, corn and soybeans

*Painting (LS26A1e)
- Paint food, plant, mold, digestion and animals eating pictures
- Paint fire tractor, dough flattening machine, and mixing bowl with dough hook made with boxes & junk
- Paint murals (depicting themes of the project) for open house and culminating display
- Revisit observational drawings to add detail or information and color with water colors

*Relating art to literature
- Draw pictures and write responses to *Jack and the Beanstalk, The Hungry Thing, There was an old Lady Who Swallowed a Fly, The Little Red Hen, etc.*

*Representations (LS26A1e)
- Create food pictures on the computer with Kid-Pix
- Create "food" mural
- Draw pictures to imitate artistic style of known artist
- Make two-dimensional drawings on a variety of food, plant, seed, digestion, mold, animals eating subjects that they drew throughout the investigation

*Responding to music (LS25A1c, LS26A1c, and LS26B1c)
- Listen for fast/slow, high/low, soft/loud and musical patterns
- Listen to sounds at food field site (feed mill, pizza shops, and cafeteria) and reproduce sounds with instruments
- Move creating a simple creative dance and draw after listening to classical music
- Write a poem with words to describe sounds

*Singing, movement and dance (LS25A1a and LS26A1a)
- Create a simple dance

- Sing *Found a Peanut; Oats, Peas Beans and Barley Grow; At the Corner Grocery Store; There was an Old Lady Who Swallowed a Fly; Take Me Out of the Bathtub* as well as tap and clap to the beat

*Viewing visual art exemplars (LS25A1d)
- Discuss art prints that feature food and analyze elements of art - line, shape, color and texture

Language and Literacy

*Analyzing (LS5B1a)
- Analyze information gathered through field studies (field notes, data tabulation, video of expert interviews, photographs, etc.)

*Classifying
- Classify memory drawings
- Classify questions that children asked to pursue study groups
- Sort and classify ideas for Student Food Topic Web 1 and Student Food Topic Web 2.

*Comparing
- Compare and articulate differences in definitions
    - Photosynthesis, chlorophyll
    - Large intestine, small intestine, pancreas, liver, esophagus, rectum
    - Herbivore, carnivore, omnivore
    - Mycelium, spore, mold, tentacles
    - Taste buds, salt, sweet, sour, bitter
    - Tilting skillet, griddle, steam jacket kettle, stack oven, proofer
    - Egg, shell, membrane, poached, coddled, scrambled, fried, sunny-side up
    - Restaurant, cafeteria, café
    - Food chain, food source, water cycle
    - Parts of plant - flower, seed, fruit, root, stem leaves
    - Pizza, loaves, rolls, hallah, humantachen
- Compare different kinds of cooking equipment
- Compare different kinds of exotic fruits
- Compare different kinds of tastes
- Compare different kinds of ways eggs could get cooked
- Compare temperature needed to make yogurt, cookies, bread

*Critical thinking (LS5A1a)
- Decide on what to present for culminating event
- Decide what to include in mural for culminating event
- Predict, hypothesize, or theorize the answers to their questions
- Support own opinions when responding to questions such as the following:
    - How does your body use food?
    - What food is bad?

  - What is important about food?
  - Where does food come from?

*Developing oral language (LS4A1a and LS4B1b)

- Brainstorm what they remember about food
- Categorize and label to form a topic web or graph
- Design survey questions and ways to show results of surveys - example - How many times do you eat in a day? How many soybean products do you have in your house?
- Discuss in group meetings (whole class, small group, or one-to-one)
  - Food project "opening event"
  - Help in solving problems
  - Puzzling questions
  - Question of the day
  - Responses to different versions of *Jack and the Beanstalk*, *There was an Old Lady who Swallowed a Fly*, and tunes for *Chicken Soup with Rice*, and art exemplars
- Interview experts
- Listen in large group discussions, small group, one to one, and to experts
- Report progress on representations, experiments, research, etc.

*Formulating questions (LS4A1b and LS5A1a)

- Develop researchable questions
- Ponder questions at the beginning, middle and end of the project

*Integrating new vocabulary

- Brainstorm words they know about the topic before and after studying (Topic Web I and Topic Web II)
- Use new vocabulary words in conversation

*Making lists

- Characters for puppet show and plays
- Jobs related to food and nutrition
- Kinds of food in our school
- Make lists of what they might see
- Make lists of what they would like to research
- Questions to be asked on parent questionnaire
- Questions, predictions, and findings
- Vocabulary list
- What kinds of things are eaten and by whom
- What they had learned
- What they might do
- What they would need for their representations, models, etc.

*Planning

- Develop power point presentation
- Draw a design for representation

- Follow phases of writing, and pre-write and discuss ideas for "*Jack and the Beanstalk, Three Little Pigs* innovation" stories
- Write web for food and plant knowledge

*Presenting (LS4B1a)

- Explain food posters, models, PowerPoint presentations, representations, stories, puppet show and food skit to the neighboring classroom and parents at the Open house and culminating event
- Serve food for the Pizza Sale and Culminating Pot Luck
- Share personal food story with the class
- Share progress on representations with the class
- Share stories, puppet show and poems written about food with the class

*Reading (LS5A1b)

- Choose food, plant, body and digestion books for Independent Reading time
- Dictate a project experience story (after a field trip, after talking with an expert)
- Make a book out of experience story
- Read about length of small intestine and mold from an Internet search
- Read child authored stories
    - Adapted stories
    - Co-operative stories
    - "Jack and the Beanstalk, There was an Old Lady and Three Little Pigs" innovations
    - Poems
- Read nursery rhymes booklets - *Pat-a-cake, Little Tommy Tucker, Lady who lived in a Shoe, Four and Twenty Blackbirds* etc.
- Use experience story for reading

*Reflecting

- Brainstorm "What I Now Know"
- Edit stories for publication
- Respond to the literature through writing or discussion
- Self - evaluate
    - Edit writings for publication
    - PowerPoint presentations
    - Progress to complete any part of the project
    - What I have learned about the project
- Think about and write or tell "what I learned" after field visits

*Using references and resources (LS5A1b)

*Writing (LS5C1a)

- Book log entries of the title, author, date and comments about books read
- Describe the sound of animals at the farm
- Label parts of a plant

- Plan representations and presentations for culminating event
- Record field trip and expert findings
- Write books that integrate new knowledge about food
- Write food chain
- Write food questions
- Write innovation stories
- Write invitations for culminating event
- Write memory stories about food
- Write number stories about the project
- Write or dictate a self-evaluation of food project
- Write poetry that integrates food
- Write PowerPoint presentation
- Write predictions of what they will find out on field trips or from experts
- Write reports on what they have learned
- Write stories about various aspects of the topic
- Write survey questions
- Write thank you letters to the experts
- Write web of what they know about food and plants

Investigative Skills-Science

*Exploring (LS11B1c)

- Explore questions such as the following:
  - Where does food come from?
  - Do you have all the food groups in your lunch?
  - What is "junk food?"
- Dissect a lima bean seed soaked over night
- Taste salty, sweet, sour, and bitter food
- Compare the feel of flour, cornmeal, cornstarch, baking soda, sugar, salt
- Use bread dough to form pizza, loaves, rolls, hallah, humantachen
- Grinding seeds (wheat, beans, and corn)

*Experimenting (LS11A1c, LS11A1f, LS11B1b, and LS11B1d)

- Answer questions such as the following:
  - Will mold form on everything - bread, fruits & vegetables, cheese, etc?
  - How long will it take to form mold?
  - How can mold be stopped?
  - Will plants grow with and/or without air?
  - Will plants grow with and/or without sunlight?
  - Will plants grow with/or without soil?
  - Will plant grow with/or without water?
  - What kind of food does the classroom turtle prefer?
  - What kind of food do worms prefer?
  - What do chocolate chip cookies taste like without the chocolate chips?

* Investigating (LS11A1b)
- Is water a food?
- How does the body use food?
- How do plants make food?
- How does food help our body?

*Observing (LS11A1a and LS11A1e)
- Dissect and describe parts of seeds and plants
- Observe mold
- Observe corn
- Observe soybeans
- Observe wheat
- Observe food from lunch

*Predicting (LS11B1a)
- Predict descriptions what food is available in the neighborhood
- Predict possible answers to questions formulated before talking to an expert
- Predict prior to conducting experiments
- Predict purpose of kitchen tools and equipment
- Predict what kinds of food are in our school and CRC

*Reporting (LS11B1e)
- Report the test process and results of their experiments
- Report what small investigating group found out on field site visit

Numeration and Problem Solving

*Counting (LS6A1b, LS6D1, LS10B1b)
- Count and compare the following:
    - Number of corn kernels on an ear of corn
    - Number of cups or fractions of cups when measuring
    - Number of inches, centimeters, pounds, ounces etc. used in measuring
    - Number of soybean seeds in a pod
    - Number of soybean seeds on a soybean plant
    - Number of wheat seeds on a stalk
    - Tally what they see on their field trips

*Estimating
- Estimate the following:
    - Amount of something (beans, etc.) that would fit into a container
    - Length, height and width of objects before measuring (ear of corn)
    - Number of days to an event, e.g., seed will sprout
    - Weight of objects before weighing (pumpkin, apple)

*Measuring (LS7A1a, LS7A1b, LS7A1d)

- Measure number of days until seeds sprout
- Measure the following items converting nonstandard measurement to standard measurement by comparing Cuisenaire links, Cuisenaire rods, inches and centimeters
    - Bean plant
    - Ear of corn
    - Onion plants
    - Spider plant
- Measure the height, height, and width of corn, beans plant and wheat stalk, etc.
- Measure the temperature of oven when baking bread, cookies and yogurt
- Measure the temperature outside to communicate whether or not students would have an inside or outside recess.
- Tractor, dough flattening machine
- Use food to build representations
- Scenery for puppet stage
- Weight of classmates, corn, pennies, beans, etc.

*Organizing, analyzing, and communicating data (LS10A1a, LS10B1b, and LS10B1c)

- Develop bar graph displaying results from surveying peers
- Develop bar graphs displaying the results of the survey sent to parents
- Develop bar graphs representing data from field trips (e.g., what we saw on walking tour of CRC building, walking in the neighborhood and at the feed mill)
- Develop pie graph displaying the results of one of the survey questions sent to parents

*Problem-solving (LS6B1, LS6C1a, LS7C1, LS7B1a)

- Building the co-operative tractor

*Predicting answers to questions such as the following: (LS10A1b)

- How many pieces do I cut my crepe to get fourths?
- How much salt will taste good in pancakes?
- What is the temperature for baking bread?
- What temperature is good for making yogurt?

*Surveying (LS10B1a)

- How many bean products do you have in your house?
- How often do you eat?
- On Thanksgiving, how many times did you eat meat?
- On Thanksgiving, how many times did you eat vegetables?

*Using geometry

- Analyze geometric relationships
    - 2-dimensional shapes to 3-dimensional shapes
    - Drawings of representation to boxes and junk models
    - Drawings of representation to clay models

Social, Emotional Growth and Dispositions

*Communicating
- Engage in group discussion
- Frame questions skillfully
- Listen to others
- Negotiate roles, turn-taking, problems to solve
- Report progress of investigations at group meetings
- Share research
- Use new vocabulary

*Cooperating and collaborating while working with others
- Prepare displays
- Present final reports
- Study collaboratively in teams

*Empathizing with others and their needs
- Appreciate work of peers noting evidence of effort, care and originality
- Share friends, materials, space and time
- Share praise and appreciation of peers

*Enjoying

*Gaining confidence in abilities to do the following:
- Investigate
- Make presentations to an audience
- Observe people communicating more closely
- Remember experiences of foods
- Represent food in drawings
- Use a variety of mediums to express their ideas

*Helping peers
- Clean up joint project
- Discuss for better understanding
- Problem solve
- Represent

*Initiating
- Choose appropriate materials
- Experiment
- Predict and manage time
- Research to answer questions

*Persevering

*Persisting at a task

*Problem solving

*Risk taking

- State disagreements in conversations or at group meetings
- Support own opinions
- Verbalize estimations, predictions, and hypotheses