

## ***How Learning Experience Supports Standards:***

### **English Language Arts**

- Read and listen to stories; develop vocabulary related to insects.
- Collect data, facts and ideas from books, magazines and other reference material.
- Record observations in journals.

### **Mathematics, Science, and Technology**

- Work in teams to collect insects and conduct research.
- Classify insects using CD Rom reference materials.
- Gather and process information from a variety of sources.

### **Social Studies**

- Describe how people and bugs live together in the same environment.

### **The Arts**

- Create and perform songs, rhymes, or skits using “bug” words.
- Construct insect puppets, marionettes, or costumes.
- Create various types of insects using a variety of materials, (e.g., clay, glue, pipecleaners).

### **Health, Physical Education, and Home Economics**

- Discuss health and safety information regarding contact with bugs.

### **Career Development and Occupational Studies**

- Research types of businesses which are related to insects.

### **Languages Other Than English**

- Determine if and where insects exist in target language areas.
- Collect and label drawings or pictures of insects in a language other than English.
- Choose three insects and conduct a class survey in a language other than English to determine the most and least popular of the three. Create a graph showing the results.

### ***Knowledge Guiding Practice:***

- Children develop higher order thinking skills through exploration, examination, and questioning.
- Creative expression is enhanced as students share information and feelings about insects in discussion, in writing and in art projects.
- Children enjoy learning about creatures found in a natural environment.

### ***Assessment Tools & Evidence:***

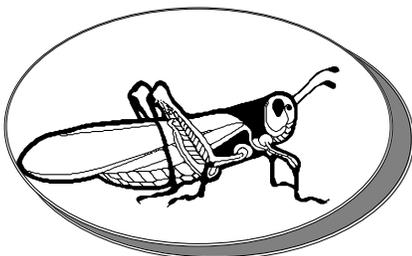
- Anecdotal notes of teacher.
- Student logs or journals describing their experiences.
- Display of student puppets, drawings and replicas.
- Display of insect collections including comparisons, similarities and differences.

### ***Resources & Materials***

**Magnifying glass   Paint   Containers   Clay   Paste**

#### **Books:**

The Very Busy Spider; E. Carle  
The Very Quiet Cricket, E. Carle  
The Very Hungry Caterpillar, E. Carle  
The Very Lonely Firefly, E. Carle  
The Grouchy Lady Bug, E. Carle  
The Ladybug and Other Insects, G. F. Jeunesse & P. deBourgoigne  
Insects Around the House; Insects in the Garden: What Bit Me? D. M. Souza



# Growing Seeds

## Learning Context:

- The teacher prepares the environment by displaying books, pictures, plants, watering cans, potting soil, planters, gardening tools, terrariums, etc.
- The teacher discusses growing things with students raising questions such as:
  - What is a plant?
  - Where does a plant come from?
  - What is a seed?
  - How does a seed grow?
- Students make and chart predictions such as:
  - How many days will it take for the seed to sprout?
  - Will the root or stem sprout first?
  - What color will the plant be?
  - How much does a plant grow each week?
- Teacher reads *The Carrot Seed* by Ruth Kraus.
- Teacher may arrange a field trip to a greenhouse, florist, or garden. Parents may be invited.

## Planning Checklist

- Research topic prior to activity
- Provide extended work time
- Reserve space for student work
- Allow student choice
- Support with reading and writing materials

## Student Activity:

- Sprout a seed in a small zip loc baggie. Tape a wet paper towel in the baggie, place a seed on the towel, seal the baggie and place in a dark area. After the seeds have sprouted, hang the bags in the window. Students can measure and graph the growth of the roots and stem.
- Grow seeds in a paper cup. Put a hole in the bottom of a cup for drainage. Fill 3/4 full with soil, lay seeds on top and then cover with more soil. Water and place in sunlight. Students can record plant growth in journals.
- Work in pairs or small groups to make a terrarium using a two liter plastic bottle, scissors, potting soil and a small plant. Cut top off 2 liter bottle; remove hard plastic bottom; put pebbles in bottom of hard plastic piece, add potting soil, place plant into soil and cover the roots; add water. Turn clear plastic bottle upside down into hard plastic piece (dome effect). Place terrarium in light. Watch plant grow and collect data.
- Discuss a field trip and what was learned about how plants, seeds, and flowers grow.
- Make a Big Book about the experiences with growing seeds, etc.



## ***How Learning Experience Supports Standards:***

### **English Language Arts**

- Describe different kinds of seeds and plants.
- Explain vocabulary related to topic.
- Work cooperatively to plan, complete and share projects with peers.
- Make journal entries about the growth of their plant.

### **Mathematics, Science, and Technology**

- Make predictions about conditions necessary for a plant to grow.
- Describe experience of growing a seed to confirm predictions.
- Identify parts of the plant and their function.

### **Social Studies**

- Discuss and describe a variety of places where plants grow (e.g., indoor, outdoor, etc.).
- Explain why some geographic areas are more suitable to growing plants.

### **The Arts**

- Express understanding of stages of plant growth through a variety of art media.

### **Health, Physical Education, and Home Economics**

- Compare similarities and differences between what plants and humans need to grow.

### **Career Development and Occupational Studies**

- Identify workers who use seeds and/or plants (e.g., farmers, florists).

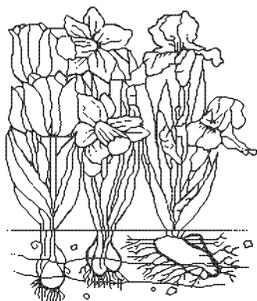
### **Languages Other Than English**

- Draw and label in a language other than English a plant in the growing process.
- Research the plants which grow in the target area.



### ***Knowledge Guiding Practice:***

- Student learning is extended through observation, research, questioning, and first hand experience with plants.
- Active engagement reinforces learning and helps students find answers to their questions.
- Opportunities to observe things growing in different environments help students to make comparisons and draw conclusions.
- Making choices helps students develop decision-making skills and learn responsibility.



### ***Assessment Tools & Evidence:***

- Anecdotal notes of teacher and parents.
- Group discussions of materials needed and procedures involved.
- Graphs, charts, and art work recording plant growth.
- Student journals describing the growing process.
- Displays of plants and terrariums.

### ***Resources & Materials***

**Zip Loc Baggies**  
**Paper towels**  
**Seeds**  
**Tape**

**2 liter soda bottles**  
**Small plants**  
**Potting soil**  
**Paper cups**

#### **Books:**

The Carrot Seed, R. Kraus  
From Seed to Plant, G. Gibbons

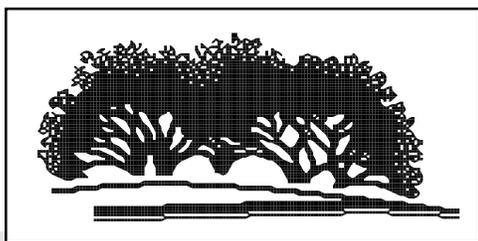
#### **Song:**

The Carrot by Mary Lou Walker

# Hello Tree

## Learning Context:

- The teacher provides materials such as leaves, grass, twigs, dried flowers, pine cones, ever-green branches, acorns, and pussy willows to encourage students to investigate, explore and experiment.
- Pictures, posters, puzzles, games, books and music about trees are displayed.
- The teacher may research places the class can go (e.g., museum, park, playground) and people they can meet (e.g., artist, landscaper, farmer) who might share information about their work with trees.
- The teacher may help students develop a KWL chart to record what they **know**, what they **want to know** and what they have **learned**.



## Planning Checklist

- Research topic prior to activity
- Provide extended work time
- Reserve space for student work
- Review health and safety rules
- Allow student choice
- Invite family and community participation
- Support with reading and writing materials

## Student Activity:

- Study a tree and the environment/ecosystem near the tree.
- Identify and label the parts of a tree (e.g., root, trunk, bark, leaves, branches, fruit).
- Collect specimens of things found around the tree and examine them under a microscope.
- Use reference materials or visit a park or orchard to name and compare different types of trees.
- Make predictions, investigate and draw conclusions about what trees need to grow. Keep a journal of the findings.
- Read or listen to books such as A Tree is Nice, Hello Tree and Over in the Meadow..
- Create a poster describing the kinds of food that grows on trees.
- Listen and respond to a recording about trees.
- Write job descriptions for employment related to trees (e.g., lumberjack).
- Research and write a report about products made from trees (e.g., paper, furniture, foods) and the jobs related to these products.



## ***How Learning Experience Supports Standards:***

### **English Language Arts**

- Collect data, facts and ideas about trees.
- Read and discuss books about trees.
- Label chart with parts of a tree (e.g., roots, trunk, bark, leaves, branches, fruit).

### **Mathematics, Science, and Technology**

- Record data from observations of trees and analyze it using charts and graphs (e.g., type, height, size, leaves).
- Identify and compare kinds of trees and what each needs for healthy growth.
- Make predictions, investigate and draw conclusions about trees.
- Study a tree using a variety of materials (e.g., magnifying glass, tape measure).

### **Social Studies**

- Describe the plant and animal life observed in the environment around their tree.
- Explain how the same type of tree is used in different cultures.

### **The Arts**

- Make picture, paintings, drawings of their tree (may continue drawing during different seasons).
- Describe the musical elements of a selection on trees.

### **Health, Physical Education, and Home Economics**

- Identify foods which grow on trees.
- Prepare a food that grows on a tree (e.g. applesauce).
- Identify edible and non-edible fruit from trees.

### **Career Development and Occupational Studies**

- Describe jobs in their community that are directly linked to trees.

### **Languages Other Than English**

- Identify and label the parts of a tree in a language other than English.
- Collect photos of trees that grow in the target language areas.

### ***Knowledge Guiding Practice:***

- Knowledge is constructed through experiencing and experimenting with concrete materials.
- Students gain confidence and have time to ask questions and find answers through an interactive, flexible learning environment.
- Collaborative learning is enhanced through group project work.
- Students are able to apply concepts when they experience them through tangible activities.

### ***Assessment Tools & Evidence:***

- Photographs or videotapes of students engaged in various stages of the study.
- Charts, drawings, posters of trees (may be seasonal).
- Student journals describing their studies of trees.
- Teacher anecdotal records.

### ***Resources & Materials***

<b>Magazines</b>	<b>Tapes</b>	<b>Yardstick/tape measure</b>
<b>Magnifying glasses</b>	<b>Shoebox for specimens</b>	

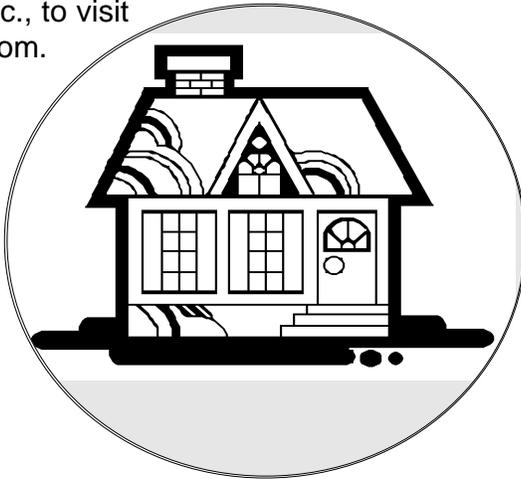
#### **Books:**

A Tree is Nice, J. M. Udry  
Hello Tree, J. Ryder  
Over the Meadow, P. Galdone  
The Tree, J. Hindley  
ABCedar: An Alphabet of Trees, G.E. Lyon

## ***Homes: Where People Live***

### ***Learning Context:***

- The teacher initiates a discussion of the various kinds of homes (e.g., farmhouse, trailer, apartment, single family house, townhouses, duplex), the different locations of homes (e.g., rural, urban, suburban), and how homes differ in other neighborhoods and countries.
- Books, pictures and videotapes are made available to students.
- The teacher and students make a list of the types of homes they live in and record the data on a poster.
- The teacher may arrange a field trip to an area where a home is under construction; discuss safety rules prior to departure.
- The teacher may invite a carpenter, mason, plumber, etc., to visit the classroom.



### ***Planning Checklist***

- Research topic prior to activity
- Provide extended work time
- Reserve space for student work
- Allow student choice
- Invite family participation
- Support with reading and writing materials

### ***Student Activity:***

- Discuss similarities and differences among homes (e.g., color, style, number of floors, windows, doors, outdoor space).
- Record observations on an experience chart or in journals.
- Walk through the school neighborhood to look for different types of homes; take photographs or make a videotape.
- Construct a neighborhood map including a description of several homes (e.g., written or pictorial).
- Design and construct a replica of a home.
- Discuss the cultural and artistic aspects of different types of homes.
- Discuss why certain types of homes are found in different environments.
- Investigate careers in the construction industry and write a report on findings.

## ***How Learning Experience Supports Standards:***

### **English Language Arts**

- Observe, describe and collect pictures of homes in their neighborhood.
- Share information about homes and seek additional information through books, magazines, walks and discussions.

### **Mathematics, Science, and Technology**

- Work with peers to construct a replica of a home.
- Construct a replica of a home using a variety of tools and materials.
- Design the home using number sense and patterning.

### **Social Studies**

- Describe similarities and differences among homes in different parts of the community, country, and the world.
- List the characteristics and functions of a home.
- Discuss the ways in which the environment determines our housing needs.



### **The Arts**

- Draw, paint, or write about homes and things found inside or outside a home.
- Discuss cultural and artistic activities which take place at home.

### **Health, Physical Education, and Home Economics**

- Discuss the health and safety features of a home.

### **Languages Other Than English**

- Compare and contrast a home in the neighborhood with a home found in the target language countries.
- Describe a home in their neighborhood in a language other than English.

### ***Knowledge Guiding Practice:***

- Critical thinking skills are developed through making comparisons and recording observations.
- Decision making skills and sequencing are strengthened through the construction of replicas.
- Concepts such as neighborhood, environment and home are reinforced through neighborhood walks.
- Students become more aware of how different people live when exposed to a variety of living arrangements.



### ***Assessment Tools & Evidence:***

- Student journals describing the process of selecting and constructing homes.
- Experience chart of neighborhood walk to observe homes.
- Photographs or videotapes of homes in different settings.
- Teacher anecdotal notes.
- Display of student replicas.

### ***Resources & Materials***

<b>Camera</b>	<b>Magazines</b>	<b>Markers</b>
<b>Tape recorder</b>	<b>Videotape</b>	<b>Crayons</b>
<b>Drawing paper</b>	<b>Pencils</b>	<b>Building materials</b>

#### **Books:**

Under the Moon, J. Ryder  
Percy and the Firehouse, E.H. Minarik  
Come by Chance, M. Winch  
Louise Builds a House, L. Pfanner  
How a House is Built, G. Gibbons

# Me-Stew

## Learning Context:

- Teacher introduces activity by reading Me-Stew, by Shel Silverstein.
- Teacher provides a large pot for the make-believe stew.
- Teacher leads a discussion to help students identify “ingredients” and records the discussion on a language chart.
- Teacher describes differences between real and make-believe, and gives examples of real ingredients for stew.
- Teacher contacts parents to request that they assist students with choosing ingredients for make-believe stew.
- Teacher makes sure that each item is properly labeled so that it can be returned to the appropriate student.
- Teacher may invite the school’s food service manager or a chef to discuss the ingredients for a real stew.

## Planning Checklist

- Research topic prior to activity
- Provide extended work time
- Reserve space for student work
- Arrange student work in pairs or teams
- Review health and safety rules
- Allow student choice
- Invite family and community participation
- Support with reading and writing materials

## Student Activity:

- Work with parents to identify four or five items that express something unique about themselves (e.g., toy, photo of a favorite sports figure, doll, hat).



- Label each item brought to the classroom to identify it as their property.
- Take turns sharing ingredients and expressing why each is special.
- Listen attentively to other students and work in pairs or small groups to document the activity by developing a “recipe,” a cookbook list of descriptive words, drawings, etc.
- Choose an item from the make-believe stew pot and try to guess what it is by touching it, smelling it, listening to it, and tasting it (if appropriate).

## ***How Learning Experience Supports Standards:***

### **English Language Arts**

- Identify things they have in common with their peers.
- Express parts of stories that remind them of themselves or people they know.

### **Mathematics, Science, and Technology**

- Develop a chart or graph of ingredients for the stew.
- Classify, count and sort ingredients.
- Predict the relative weights of the ingredients.
- Compute the cost of ingredients for a real stew.

### **Social Studies**

- Students will describe some of the things they have in common with their peers.

### **The Arts**

- Use a variety of art media to represent items chosen for the stew.
- Use familiar objects to create stories or communicate ideas and feelings.

### **Health, Physical Education, and Home Economics**

- Identify ingredients which may be used in a real stew.

### **Career Development and Occupational Studies**

- Describe jobs related to cooking.

### **Languages Other Than English**

- Identify and label the items for the stew in a language other than English.

### ***Knowledge Guiding Practice:***

- Sharing special things helps students express what is meaningful to them.
- Listening to others share special things increases students' awareness of their similarities and differences.
- Opportunities to make choices enhances student creativity and responsibility.
- Using the senses to explore objects increases students' ability to determine form and function.

### ***Assessment Tools & Evidence:***

- Teacher observations.
- Language chart.
- Individual presentations of ingredients for stew.
- Group projects to demonstrate awareness of various methods of expressing our observations.

### ***Resources & Materials***

**One large pot/basket    Four or five objects per student**  
**Videotape recorder and/or still camera**

#### **Books:**

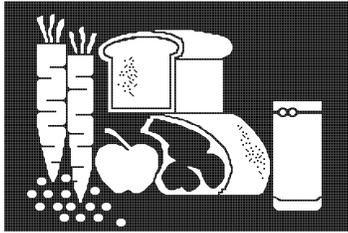
Stone Soup, J. W. Stewig, reteller  
Potluck, A. Shelby  
All About You, C. & L. Anholt  
Cookbooks for children



# ***Munching Mark***

## ***Learning Context:***

- To encourage writing, the teacher may create a language rich environment which includes message boards, charts, graphs, labels, cookbooks, magazines, and miniature replicas of nutritious foods. A writing center may include pencils, crayons, markers, cards, paper of varied sizes and colors, date stamps, rubber stamps, templates, a computer, and software.
- Parents may be invited to select foods from their ethnic background/culture to share with the class.
- The teacher may read *Munching Mark*, a book about a boy who snacks on junk food and gets a toothache.
- The teacher may provide posters or a display of junk foods and nutritious foods. Parents may be invited to assist with this project.
- The teacher may invite a dietician or dentist to discuss nutritious foods and arrange a tasting party.



## ***Planning Checklist***

- Provide extended work time
- Reserve space for student work
- Review health and safety rules
- Allow student choice
- Support with reading and writing materials

## ***Student Activity:***

- Listen to and discuss *Munching Mark*. Write and/or draw their reactions in a response journal.
- Discuss questions such as:
  - Why did Mark get a toothache?
  - What are examples of good snacks?
  - What are your favorite foods?
- Make a chart of healthy snack foods and/or students' favorite foods.
- Research different types of foods and create a food book or chart which classifies food into basic groups.
- Discuss care of teeth and practice brushing their teeth. A graph may be used to depict the number of times students brush their teeth in a week.
- Read and write about a variety of books related to food.
- Prepare sample menus using nutritious foods.
- Bring in their favorite foods; teacher may limit categories (e.g., fruit or vegetable) to share with the class.

## How Learning Experience Supports Standards:

### English Language Arts

- Demonstrate concepts/themes of story by responding in writing or using illustrations.
- Describe real or imaginary events in writing.

### Mathematics, Science, and Technology

- Count, classify chart and graph different types of food.

### Social Studies

- Describe foods from different ethnic backgrounds/cultures.

### The Arts

- Make replicas of various foods using appropriate media.

### Health, Physical Education, and Home Economics

- Identify various foods by taste, smell, feel, etc.
- Differentiate between health food and junk food.
- Classify foods into basic groups.
- Discuss care of the teeth.

### Languages Other Than English

- Create a graph in a language other than English showing the favorite healthy foods of the class.
- Describe ingredients used to prepare a typical dish from a target language country.



### Knowledge Guiding Practice:

- Writing skills are developed as students write entries in response journals.
- Listening skills are developed as students listen to books being read and participate in group discussions.
- Students learn to make healthy food choices by participating in activities where real foods are used and discussed.
- Students develop reading, writing, and mathematics skills through planning menus and preparing foods.

### Assessment Tools & Evidence:

- Response journals.
- Teacher anecdotal notes.
- Student writing samples and drawings.
- Feedback from parents regarding changes in eating habits.
- Charts and graphs showing food preferences.
- Food book or simple menus.

### Resources & Materials

Writing materials

Pictures of various foods

Chart/graph paper

Real food item

#### Books:

Munching Mark, E. Cannard

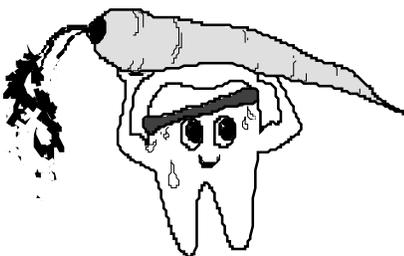
Lunch, D. Fleming

Eating the Alphabet, L. Ehlert

Alexander's Midnight Snack, C. Stock

Tomato Soup, T. Hurd

I'm Growing, Alike



# My Family

## Learning Context:

- The teacher prepares the classroom using books, puzzles, tapes, records, magazines, dolls, puppets, pictures or posters of people from a variety of ethnic groups and cultures.
- Parents may be involved by sharing some part of their ethnic background/culture with the class (e.g., artifact, souvenir, clothing, jewelry, recipe).
- Teacher may read *Who's In A Family?* to initiate a discussion about where the students and their families originally came from.
- The teacher may work with a parent committee to plan a family night or intercultural celebration.

## Planning Checklist

- Research topic prior to activity
- Provide extended work time
- Reserve space for student work
- Allow student choice
- Invite family and community participation
- Support with reading and writing materials

## Student Activity:

- Listen to *Who's In A Family?* and participate in a discussion of heritage. Discussion may emphasize accomplishments, attitudes, behaviors, customs, and traditional career paths of different cultures.
- Collect family pictures and other items for a classroom display.
- Create an individual family tree illustrated with things unique to their family.
- Share their family tree with the class. All family trees can be assembled to make a big book about families or displayed in a "Family Museum."
- Research their country of origin and pin a family name flag on a world map to locate their family's native country.
- Record activities in their journals.
- Describe some traditional and non-traditional roles of males and females within their culture.



## ***How Learning Experience Supports Standards:***

### **English Language Arts**

- Collect information about family culture and/or ethnic background.
- Record and share information and experiences.
- Recall/retell a sequence of events in a story.
- Design and complete projects.

### **Mathematics, Science, and Technology**

- Chart family characteristics such as oldest, youngest, tallest, from farthest country, etc.
- Identify common themes.
- Describe similarities and differences.

### **Social Studies**

- Research and share family history.
- Collect songs, games, poems from different cultures/ethnic backgrounds.
- Collect information and materials to make a family tree.

### **The Arts**

- Illustrate cultural differences using photographs, drawings, posters, puzzles, pottery, and other artifacts.
- Sing songs and/or perform dances from various ethnic groups.

### **Health, Physical Education, and Home Economics**

- Share foods from various cultures/ethnic groups represented in the class.

### **Career Development & Occupational Studies**

- Describe different occupations and how they benefit others.

### **Languages Other Than English**

- Invite speakers from the target language countries to share stories about their families.
- Identify the countries of family origins on a map and indicate the languages spoken.
- Discuss extended families in target language cultures.

### ***Knowledge Guiding Practice:***

- Self esteem and respect for others is enhanced through sharing information about families.
- Healthy attitudes about people are developed as students discuss and research aspects of different cultures.
- Listening, speaking, reading and writing skills are strengthened through participation in project activities.

### ***Assessment Tools & Evidence:***

- Anecdotal notes of teacher.
- Journal writings about stories read.
- Family Tree display.
- Chart about families.
- Parent input related to family history and careers.
- Student “collections” of items representing their cultures.
- Performances of ethnic songs and dances.

### ***Resources & Materials***

**Poster paper**

**Glue**

**Markers**

**Colored paper**

#### **Books:**

All Kinds of Families, Simon  
Lon Po Po, E. Young  
All the Colors We Are, K. Kissinger  
Are You My Mother?, P.D. Eastman  
Chicken Sunday, P. Polacco

Jamaica Tag-Along, J. Havill  
Moy Moy, L. Politi  
Who's In A Family?, R. Skutch  
Willie's Not the Hugging Kind, J.D. Barret  
The Wednesday Surprise, E. Bunting

# ***Pancakes, Pancakes***

## ***Learning Context:***

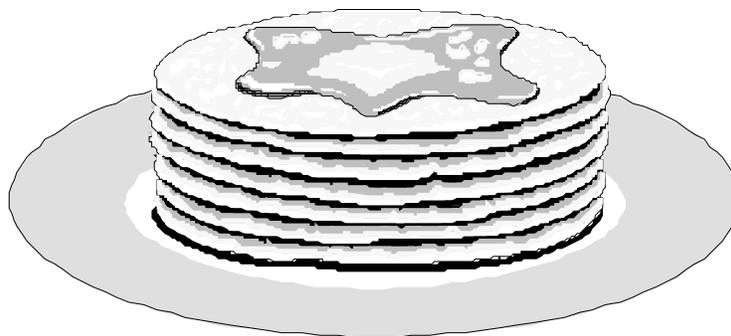
- The teacher prepares students by reading *Pancakes, Pancakes* by Eric Carle. Using a concept map/web, the teacher facilitates a discussion of the story and prepares students for making pancakes.
- The teacher asks children to research various pancake recipes and develop a shopping list of ingredients.
- The teacher arranges a field trip to the grocery store for students to purchase the recipe ingredients.
- The teacher may make and use a recipe poster to familiarize students with steps involved.
- Parents may be invited to participate in shopping, cooking, or taking a trip to a pancake restaurant.

## ***Planning Checklist***

- Research topic prior to activity
- Provide extended work time
- Review health and safety rules
- Allow student choice
- Invite family and community participation
- Support with reading and writing

## ***Student Activity:***

- Listen to *Pancakes, Pancakes* and participate in a discussion of the story using a web or story map.
- Collect pancake recipes from families or cookbooks. Vote on their favorite recipe and design a shopping list using pictures, drawings and labels.
- Participate in a field trip to the grocery store to purchase ingredients. Discuss money and prepare a budget prior to the trip.
- Prepare pancakes; discuss washing hands, preparing the cooking area, safety rules, following a recipe, measuring, counting, mixing, predicting and changes that occur to the ingredients (e.g., solid to liquid).
- Record each aspect of the activity in an experience chart or journal. A videotape may be made.



## ***How Learning Experience Supports Standards:***

### **English Language Arts**

- Collect data from families and reference materials.
- Recall/retell events from a story.
- Follow verbal and written instructions to complete a task.
- Describe a sequence of events.

### **Mathematics, Science & Technology**

- Prepare a budget for purchase of recipe ingredients.
- Assemble and combine ingredients to prepare recipe.
- Measure appropriate amounts of recipe ingredients.
- Describe the changes that occur during cooking (liquid-solid).

### **Social Studies**

- Participate in a voting process to select a pancake recipe to prepare.
- Work cooperatively with a partner or small group.

### **Health, Physical Education, and Home Economics**

- Read a recipe chart with words and symbols for utensils.
- Develop and implement list of safety concerns related to the cooking environment.
- List the skills needed to prepare pancakes.

### **Career Development and Occupational Studies**

- Describe jobs in the community related to food service and nutrition.

### **Languages Other Than English**

- Prepare and eat the equivalent of the target culture's pancake.
- Compare the "new" pancake to the others prepared in class.



### ***Knowledge Guiding Practice:***

- Listening skills are developed as students listen to and retell a story.
- Critical thinking skills are expanded as students compare recipes.
- Problem solving skills are developed through determining recipe ingredients and creating a budget.
- Sequencing and cause and effect relationships may be discovered through preparing and cooking the pancakes.

### ***Assessment Tools & Evidence:***

- Anecdotal notes of teacher.
- Story maps/webs for planning the activity.
- Student response journals.
- Videotape of planning, shopping and cooking.
- Quality of pancakes.

### ***Resources & Materials***

**Journals**  
**Cooking supplies**

**Chart paper**  
**Markers**

**Recipe ingredients**  
**Measuring cups/spoons**

#### **Books:**

Pancakes, Pancakes; E. Carle  
Pancakes for Breakfast, T. DiPaola  
Cookbooks

# *Patterns*

## *Learning Context:*

- The teacher reads books by Tana Hoban, or other appropriate books, to introduce the topic.
- The teacher displays a variety of natural patterns (e.g., leaves, flowers, fruit) and man-made patterns (e.g., geoboards, tangrams, interlocking cubes) for students to explore.
- The teacher leads a discussion about how our five senses help us to be aware of patterns (e.g., rhythmic sounds of a drum).
- The teacher observes and records patterns made or described by students while they are exploring various materials in the learning environment.

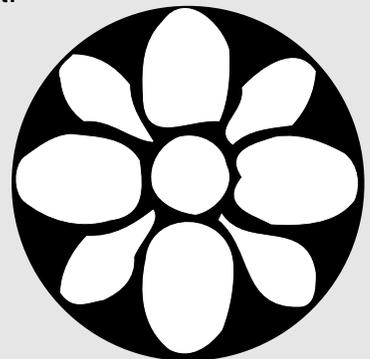


## *Planning Checklist*

- Provide extended work time
- Reserve space for student work
- Arrange student work in pairs or teams
- Invite family and community participation
- Support with reading and writing materials

## *Student Activity:*

- Use all senses to increase awareness of patterns in the environment.
- Arrange a variety of materials into patterns using color, shape, size and texture as criteria.
- Participate in a pattern walk in the school and/or the community to identify and document patterns (e.g., pictures, drawings, tracings, rubbings, audio tapes, paintings, and language books).
- Compare and graph the kinds of patterns found indoors, and those found outdoors.
- Complete documentation of experiences with patterns and share with the class.
- Prepare a scrapbook of well-known business logos and explain how their patterns help to sell products.



## ***How Learning Experience Supports Standards:***

### **English Language Arts**

- Describe patterns found in the environment.
- Identify patterns found in books (e.g., words, illustrations).
- Work with peers to complete projects.

### **Mathematics, Science, and Technology**

- Classify patterns found in nature.
- Collect a variety of data and represent it in a graph.
- Count, compare, sort, and measure patterns.

### **Social Studies**

- Identify similarities and differences among patterns found in the environment.
- Describe how patterns influence human behavior.

### **The Arts**

- Demonstrate body movements in relation to various patterns.
- Reproduce patterns using a variety of media, (e.g., play a simple rhythmic pattern on a musical instrument).

### **Health, Physical Education, and Home Economics**

- Identify and name patterns found in common foods (e.g., a “star” in the cross-section of apples and oranges).
- Identify and name common tools and machines that have patterns (e.g., wheels).

### **Career Development and Occupational Studies**

- Describe a variety of careers that rely on visual patterns (e.g., designers, artists, cartoonists, media specialists).

### **Languages Other Than English**

- Identify similarities among specific patterns in a language other than English.



### ***Knowledge Guiding Practice:***

- Eye-hand coordination is developed as students construct or replicate patterns.
- Listening skills are enhanced as students listen to rhymes and repetitive refrains and hear rhythms in music.
- Observation and discrimination skills are strengthened as children identify patterns in their classroom and community environments.
- The ability to discriminate colors, sizes, shapes and rhythms enhances the ability to identify patterns.

### ***Assessment Tools & Evidence:***

- Teacher observations.
- Web of patterns we experience with our senses.
- Documentation of patterns (individual or group projects).
- Student journal of interviews with persons who design or use patterns.

### ***Resources & Materials***

<b>Magazines</b>	<b>Markers</b>	<b>Paints</b>	<b>Fabrics</b>
<b>Art Works</b>			
<b>Pencils</b>	<b>Crayons</b>	<b>Music</b>	<b>Clay</b>
<b>Children’s clothing</b>		<b>Interlocking cubes</b>	

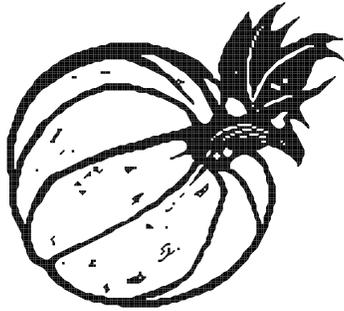
#### **Books:**

Circles, Squares, Triangles, A. Shapiro  
Spirals, Curves, Fanshapes & Lines, T. Hoban  
Look Up, Look Down, T. Hoban

# ***Pumpkin Parts***

## ***Learning Context:***

- Teacher may introduce the topic by sharing stories, poems and fingerplays about pumpkins.
- A variety of books, pictures, real pumpkins, puzzles, games, etc., may be provided in the learning areas of the classroom.
- The teacher may involve parents in gathering resources, going on a trip with the class, and preparing foods from pumpkins, such as bread, pies, cookies, soup, etc.

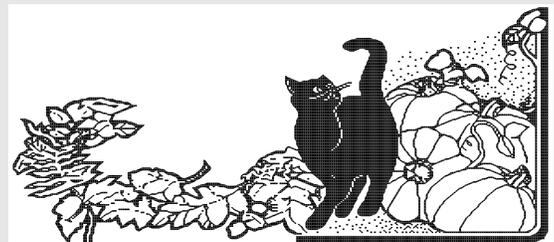


## ***Planning Checklist***

- Provide extended work time
- Reserve space for student work
- Review health and safety rules
- Invite family participation
- Support with reading and writing materials

## ***Student Activity:***

- Explore the parts, properties, and uses of pumpkins.
- Take a field trip to a pumpkin farm or farmer's market to examine and buy pumpkins.
- Weigh and measure pumpkins, and predict whether pumpkins of different sizes will float or sink in a tub of water.
- Identify the parts of a pumpkin and label pictures accordingly.
- Cut open pumpkins (with assistance); examine and describe the inside, count the seeds and scoop out the pulp for cooking.
- Use pumpkin pulp to prepare a recipe; serve to classmates.
- Plant and/or bake pumpkin seeds and record the results.
- Draw or paint pumpkins, or make them from clay, Play-Dough, etc.
- Research what pumpkins are composed of and how they are used.
- Create a class song about pumpkins.
- Interview people who grow or harvest pumpkins.



## ***How Learning Experience Supports Standards:***

### **English Language Arts**

- Develop language experience charts relating field trip experiences, etc.
- Listen and respond to stories, poems, etc.
- Express what they know or think about where pumpkins come from and what they are used for.

### **Mathematics, Science, and Technology**

- Count and sort seeds; make graphs to illustrate sizes and shapes of pumpkins.
- Make predictions about what will happen when seeds are planted in soil.

### **Social Studies**

- Describe different ways pumpkins may be prepared as a food in various cultures.

### **The Arts**

- Draw, paint, use clay, and/or write and sing songs to express what is known about pumpkins.

### **Health, Physical Education, and Home Economics**

- Discuss and follow health and safety rules when exploring pumpkins.
- Make a recipe chart to depict ways to cook the inside of a pumpkin (e.g., cookies).

### **Career Development and Occupational Studies**

- Discuss how pumpkins are grown and harvested.
- List different ways pumpkins are used as a food source.

### **Languages Other Than English**

- Research whether pumpkins are grown and used in the target language culture.
- Describe a pumpkin in a language other than English.
- Count the pumpkin seeds in a language other than English.

## ***Knowledge Guiding Practice:***

- Manipulation of real objects helps students to construct meaning of their environment.
- Students express what they know and understand by using a variety of art media.
- Students use their five senses to make observations, predictions and draw conclusions.

## ***Assessment Tools & Evidence:***

- Charts and graphs showing sizes, shapes and colors.
- Written descriptions of preparing and cooking pumpkins.
- Paintings, clay work, song composition.
- Student interviews of people who grow or harvest pumpkins.
- Teacher observations.
- Parent input regarding student participation.

## ***Resources & Materials***

**Scale      Measuring tape      Plastic Container      Cooking utensils**

### **Books:**

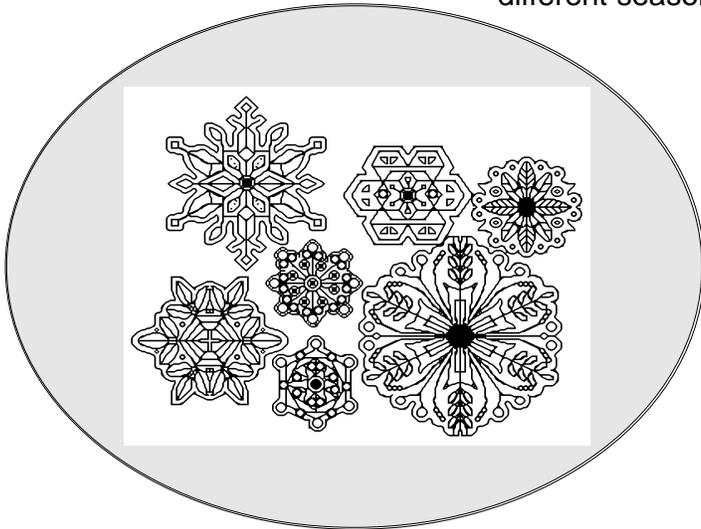
The Biggest Pumpkin Ever, S. Kroll  
Pumpkin, Pumpkin, J. Titheringham  
The Pumpkin People, D & M Cavagnaro  
The Pumpkin Patch, E. King



## ***Weather Watch***

### ***Learning Context:***

- The teacher may introduce the topic by reading *Cloudbook* by Tomie DiPaolo to the class.
- A weather person may visit the classroom.
- Teacher may arrange a field trip to a weather station, or visit the same outdoor area during different seasons.



### ***Planning Checklist***

- Research topic prior to activity
- Provide extended work time
- Review health and safety rules
- Allow student choice
- Support with reading and writing materials
- Invite family and community participation

### ***Student Activity:***

- Study weather and its effects on our lives.
- Watch a weather person on television and discuss with the class what he or she does.
- Take turns giving a daily weather report and the prediction for the following day.
- Chart or graph daily weather results and/or predictions.
- Create a calendar assigning dates for each student to act as weather person.
- Create a web using a weather word as the focus (e.g., precipitation, clouds).
- Use clear plastic containers to collect and label various forms of precipitation (e.g., snow, rain, sleet, hail) and discuss their impact on our behavior.
- Observe and discuss other weather-related occurrences (e.g., fog, clouds, wind, sun) and discuss their effect on our behavior.
- Identify weather conditions associated with different types of clouds.
- Create a weather dictionary.
- Read and interpret simple weather maps.
- Produce a short video on weather.

## ***How Learning Experience Supports Standards:***

### **English Language Arts**

- Define different weather words.
- Write journal entries to express what they know and how they feel.

### **Mathematics, Science, and Technology**

- Predict and verify various forms of weather.
- Investigate how temperature changes affect the form of water.

### **Social Studies**

- Share specific times when an awareness of weather forecasts helps us plan (e.g., outdoor activities such as picnics, games).

### **The Arts**

- Make props and act out the role of a TV weather person.
- Create a video complete with visual expressions of weather and an appropriate sound track.

### **Health, Physical Education, and Home Economics**

- Express what they can do to protect their health during different types of weather.
- Explain how weather effects physical activity (e.g., sports, leisure).

### **Career Development and Occupational Studies**

- Discuss a weather person's job duties.
- Identify careers associated with weather.

### **Languages Other Than English**

- Express weather conditions in a language other than English.
- Investigate and discuss in a language other than English reasons for weather differences.



### ***Knowledge Guiding Practice:***

- Listening skills are developed as students hear and respond to reports from other students.
- Active engagement in concrete experiences help students understand natural occurrences in their environment.
- Self-help skills may be developed during the hands-on application process of a learning experience.

### ***Resources & Materials***

Clear plastic jars  
Markers

Tagboard  
Construction paper  
Weather person name tags

#### **Books:**

Cloudbook, T. DiPaolo  
Water's Way, L. W. Peters  
Weather, G. Jeunesse & P. deBourgoing  
Weather Words and What They Mean, G. Gibbons  
What Will The Weather Be?, L. DeWitt

### ***Assessment Tools & Evidence:***

- Teacher observations of student behavior.
- Results of weather comparisons.
- Charts & graphs showing amounts and types of precipitation.
- Journal entries recording changes in the weather.
- Calendar/dictionary of weather facts, as well as weather terms & their definitions.
- Video production on weather.

