

# Apple Logic Puzzle



**Common Core State Standards:** This lesson is correlated to the following CCSS, as well as the Arizona Additions to the CCSS.

- 1. Mathematical Practices (MP):** Problem solving, reasoning and proof, communication, representation, and connections; adaptive reasoning, strategic competence, conceptual understanding, procedural fluency, and productive disposition.

<b>First Grade:</b>	1.MP.1
<b>Second Grade:</b>	2.MP.1
<b>Third Grade:</b>	3.MP.1
<b>Fourth Grade:</b>	4.MP.1
<b>Fifth Grade:</b>	5.MP.1
<b>Sixth Grade:</b>	6.MP.1

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objectives:

1. Locate information from a chart.
2. Use logical thinking to answer questions.

**Materials needed:**

- ✓ Math Lesson 1 Student Worksheet – Apple Logic Puzzle

**Terms:**

- *Produced* - create: grow: cultivate by growing

**Interest Approach:** Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and students situations. Possible interest approaches are listed in the interests approach section of this guide.

**Teaching Strategies:** Instruct the students to apply logical thinking to solve a puzzle. Have the students complete **Math Lesson 1 Student Worksheet- Apple Logic Puzzle**.

**Evaluation:** Focus the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess student achievement of the objectives.

# Apple Math



**Common Core State Standards:** This lesson is correlated to the following CCSS, as well as the Arizona Additions to the CCSS.

**Operations and Algebraic Thinking (OA):** Understand and apply properties of operations and the relationship between addition and subtraction; represent and solve problems involving multiplication and division; solve problems involving the four operations, and identify and explain patterns in arithmetic; gain familiarity with factors and multiples; generate and analyze patterns; write and interpret numerical expressions; and understand ratio concepts and use ratio reasoning to solve problems.

**Number and Operations in Base Ten (NBT):** Understand place value; extend counting sequences; use place value understanding and properties of operations to perform multi-digit arithmetic; and perform operations with multi-digit whole numbers and with decimals to hundredths.

**Mathematical Practices (MP):** Problem solving, reasoning and proof, communication, representation, and connections; adaptive reasoning, strategic competence, conceptual understanding, procedural fluency, and productive disposition.

**Kindergarten:** K.OA.5, K.MP.2, K.MP.7, K.MP.8

**First Grade:** 1.OA.6, 1.MP. 2, 1.MP.7, 1.MP.8

**Second Grade:** 2.OA.2, 2.MP. 2, 2.MP.7, 2.MP.8

**Third Grade:** 3.OA.7, 3.MP. 2, 3.MP.7, 3.MP.8

**Fourth Grade:** 4.NBT.4, 4. NBT.6, 4.MP. 2, 4.MP.3, 4.MP.4,  
4.MP.5, 4.MP.7, 1.MP.8

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objectives:

1. Demonstrate computation skills to answer problems.

## Materials needed:

- ✓ Math Lesson 2 Student Worksheet – Apple Math

## Terms:

- No specific terms were identified for this lesson.

**Interest Approach:** Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situations. Possible interest approaches are listed in the interest approach section of this guide.

**Teaching Strategies:** Have the students complete *Math Lesson #2 Student Worksheet – Apple Math*.

# Apple Word Problems



**Common Core State Standards:** This lesson is correlated to the following CCSS, as well as the Arizona Additions to the CCSS.

**Operations and Algebraic Thinking (OA):** Understand and apply properties of operations and the relationship between addition and subtraction; represent and solve problems involving multiplication and division; solve problems involving the four operations, and identify and explain patterns in arithmetic; gain familiarity with factors and multiples; generate and analyze patterns; write and interpret numerical expressions; and understand ratio concepts and use ratio reasoning to solve problems.

**Mathematical Practices (MP):** Problem solving, reasoning and proof, communication, representation, and connections; adaptive reasoning, strategic competence, conceptual understanding, procedural fluency, and productive disposition.

**Kindergarten:** K.OA.2, K.MP.1, K.MP.2, K.MP.3, K.MP.4, K.MP.5

**First Grade:** 1.OA.1, 1.MP.1, 1.MP.2, 1.MP.3, 1.MP.4, 1.MP.5, 1.MP.8

**Second Grade:** 2.OA.1, 2.MP.2, 2.MP.3, 2.MP.4, 2.MP.5, 2.MP.8

**Third Grade:** 3.OA.3, 3.MP.1, 3.MP.4, 3.MP.7

**Fourth Grade:** 4.OA.4, 4.MP.2, 4.MP.7

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objectives:

1. Students will use grade level appropriate operations to solve word problems.

**Materials needed:** Math Lesson 3 Student Worksheet – Apple Word Problems

**Terms:**

- *Employee*- A person who works for another person or company.

**Teaching Strategies:** Have students complete the Word Problems Worksheet.

**Evaluation:** Focus on the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess the student achievement of the objectives. The post-test will evaluate students' gained knowledge.

# Apple Sorting (Adapted from the U.S Apple Association)



**Common Core State Standards:** This lesson is correlated to the following CCSS, as well as the Arizona Additions to the CCSS.

**Counting and Cardinality (CC):** Know number names and the count sequence, count to tell the number of objects, and compare numbers.

**Mathematical Practices (MP):** Problem solving, reasoning and proof, communication, representation, and connections; adaptive reasoning, strategic competence, conceptual understanding, procedural fluency, and productive disposition.

**Kindergarten:** K.CC.6, K.MP.2, K.MP.7, K.MP.8  
**First Grade:** 1.MP.2, 1.MP.7, 1.MP.8

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objectives:

1. Students will use their senses to sort and categorize a variety of apples.
2. Students will be able to explain their reasoning for each category/group.

**Materials needed:**

- ✓ Math Lesson 4 Student Worksheet – Apple Sorting
- ✓ Several different apples in varying sizes and colors

**Terms:**

**Texture:** the feel of a surface

**Teaching Strategies:** Bring in a variety of apples. Be sure there are different varieties, sizes, and colors. Pass out Student Worksheet- Apple Sorting. Have students work in groups to sort the apples into different groups. Have students use color, size, and whatever else they can come up with for their groups. You may even have students taste the apples and sort them as sweet , sour or tart.

**Evaluation:** Focus on the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess the student achievement of the objectives. The post-test will evaluate students’ gained knowledge.

# Apple of a Different Color



**Common Core State Standards:** This lesson is correlated to the following CCSS, as well as the Arizona Additions to the CCSS.

**Measurement and Data (MD):** Describe and compare measurable attributes; classify objects and count the number of objects in categories; measure and estimate lengths indirectly and by iterating length units; tell and write time; represent and interpret data; work with money; Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects; understand concepts of area and relate area to multiplication and to addition; recognize perimeter as an attribute of plane figures and distinguish between linear and area measures; solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit; and understand concepts of angle and measure angles.

**Mathematical Practices (MP):** Problem solving, reasoning and proof, communication, representation, and connections; adaptive reasoning, strategic competence, conceptual understanding, procedural fluency, and productive disposition.

**First Grade:** 1.MD.4, 1.MP.2, 1.MP.3, 1.MP.4, 1.MP.5, 1.MP.6

**Second Grade:** 2.MD.10, 2.MP.1, 2.MP.2, 2.MP.4, 2.MP.5, 2.MP.6, 2.MP.8

**Third Grade:** 3.MD.3, 3.MP.1, 3.MP.4, 3.MP.4, 3.MP.6, 3.MP.7

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objectives:

1. Students will compile information and create a class graph.

**Materials needed:**

- ✓ Math Lesson 5 Student Worksheet – Apple of a Different Color
- ✓ Pencil
- ✓ Different color apples

**Terms:** No terms were identified for this lesson.

**Teaching Strategies:** This activity can be done individually or as a class. Ask the students what their favorite color is: Red, Yellow, Green, or reddish/yellow. Record how many students like each color of apple. Have students work individually or as a class to create a graph that shows the results of the survey.

**Evaluation:** Focus on the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess the student achievement of the objectives. The post-test will evaluate students' gained knowledge.

## Show What You Know



**Common Core State Standards:** This lesson is correlated to the following CCSS, as well as the Arizona Additions to the CCSS.

- 1. Reading Standards: Foundational Skills (RF):** Students will demonstrate an understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system.
- 2. Reading Standards for Literature (RL):** Students gain adequate exposure to a range of texts and tasks.

<b>Kindergarten:</b>	K.RF.4, K.RL.1
<b>First Grade:</b>	1.RF.4, 1.RL.1
<b>Second Grade:</b>	2.RF.4, 2.RL.1
<b>Third Grade:</b>	3.RF.4, 3.RL.1

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objective:

- 1.** Identify apple terms.
- 2.** Students will use reading strategies to identify information found in the text to answer questions.

### Materials Needed:

- ✓ Illinois Farm Bureau Apple AgMag
- ✓ [www.agintheclassroom.org](http://www.agintheclassroom.org)
- ✓ English Language Arts Lesson 1 Students worksheet –pre and post test for each child.

### Terms

- **Acre** - a unit of measurement for land. Approximately the size of a football field.
- **Cross-Pollination** – The transfer of pollen from the anther of the flower of one plant to the flowers of a different plant.
- **Pollination** - To transfer pollen from an anther to the stigma of a flower. When a male pollen grain is introduced to the female part of the flower, enabling fertilization to take place.
- **Variety** – Different types of apples.

**Teaching Strategies:** Have the students complete ELA Lesson 2 Student Worksheet to ascertain their knowledge of apples. After the worksheet is graded, students will read the Pumpkin AgMag to help them answer the remaining questions.

# Apples-KWL



**Common Core State Standards:** This lesson is correlated to the following CCSS, as well as the Arizona Additions to the CCSS.

1. **Reading Standards for Literature (RL):** Students gain adequate exposure to a range of texts and tasks
2. **Writing (W):** Students should demonstrate an understanding in all aspects of language use; text types and purpose, production and distribution of writing, research to build and present knowledge, and range of writing.

**First Grade:** 1.RL.1, 1.W.2

**Second Grade:** 2.RL.1, 2.W.2

**Third Grade:** 3.RL.1, 3.W.2

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objective:

1. Identify apple terms.
2. Students will use reading strategies to identify information found in the text to answer questions and write a story about how apples grow.

## Materials Needed:

- ✓ Life Cycle of an Apple Tree
- ✓ Vroom Apple Farming for Kids
- ✓ English Language arts Lesson 2 Students worksheet

## Terms

**Blossom:** bloom: produce or yield flowers

**Bushel:** the mass (amount) in which grains are bought and sold on commodity markets or at local grain elevators, and for reports of grain production

**Pollination:** to transfer pollen from an anther to the stigma of a flower. The first step in producing a seed or fruit

**Season:** divisions in the year marked by weather; summer, spring, winter and fall

**Seeds:** mature fertilized plant ovule consisting of an embryo and its food source and having a protective coat; the beginning stage of a plant

**Variety:** kind: a category of things distinguished by some common characteristic or quality

**Teaching Strategies:** Discuss with students how they think apples grow. Have students fill in the *Think You Know* section. Ask the students what they would like to know about the life cycle of apples. Read the Life Cycle of an Apple Tree and/or watch Vroom Apple Farming for Kids and fill in the *Learned* column. After students have finished the KWL Chart, have them write a story about how apples grow.

# The Nutritious Apple



**Common Core State Standards:** This lesson is correlated to the following CCSS, as well as the Arizona Additions to the CCSS.

- 1. Reading Standards for Informational Text (RI):** Students will gain adequate exposure to a range of texts and tasks and demonstrate an understanding in: key ideas and detail, craft and structure, integration of knowledge and ideas, range of reading and level to text complexity.
- 2. Speaking and Listening Standards (SL):** Students will demonstrate an understanding in; comprehension and collaboration, and presentation of knowledge and ideas

<b>Kindergarten:</b>	K.RI.1, K.SL.1
<b>First Grade:</b>	1.RI.1, 1.SL.1
<b>Second Grade:</b>	2.RI.1, 2.SL.1
<b>Third Grade:</b>	3.RI.1, 3.SL.1

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objective:

- 1.** Read and interpret a nutrition label
- 2.** Show knowledge of the nutritional elements of an apple

## Materials Needed:

- ✓ ELA Lesson 3 Student Worksheet
- ✓ Copy of nutrition labels

## Terms:

- No specific terms were identified for this lesson.

**Teaching Strategies:** Depending upon the knowledge of the students, the teacher may have to introduce a nutrition label and discuss some of the information provided on the label. Then assign the reading **ELA Lesson 3 Student Information Sheet** to be done in groups, individually, or as a class. After reading the information, the student will complete the **ELA Lesson 2 Student Worksheet**.

**Evaluation:** Focus the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess student achievement of the objectives.



## Apples through the Seasons



**Common Core State Standards:** This lesson is correlated to the following CCSS, as well as the Arizona Additions to the CCSS.

- 1. Writing (W):** Students should demonstrate an understanding in all aspects of language use; text types and purpose, production and distribution of writing, research to build and present knowledge, and range of writing.

<b>Kindergarten:</b>	K.W.2
<b>First Grade:</b>	1.W.2
<b>Second Grade:</b>	2.W.2

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objective:

- 1.** Students will use writing components and applications to describe what they have learned about apples.

### Materials Needed:

- ✓ Student Apple template
- ✓ Scissors
- ✓ Stapler
- ✓ Crayons/markers
- ✓ pencil

### Terms:

- No specific terms were identified for this lesson.

**Teaching Strategies:** Have the create their own apple journal. Have students color the front of the apple book the same as their favorite color apple. Cut out apple template. Cut out 5 blank apple templates. Align and staple at the edge. Students can write in their book daily. Students may want to create their own apple through the seasons book by reading the Life Cycle of an Apple Tree and using the Apple Wise Guys Coloring Packet for reference.

**Evaluation:** Focus the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess student achievement of the objectives.

# Arizona Apple Variety Matching Game



**Common Core State Standards:** This lesson is correlated to the following CCSS, as well as the Arizona Additions to the CCSS.

1. **Reading Standards for Literature (RL):** Students gain adequate exposure to a range of texts and tasks.
2. **Reading Standards for Informational Text (RI):** Students will gain adequate exposure to a range of texts and tasks and demonstrate an understanding in: key ideas and detail, craft and structure, integration of knowledge and ideas, range of reading and level to text complexity.

<b>Kindergarten:</b>	K.RL.1, K.RI.1
<b>First Grade:</b>	1.RL.1, 1.RI.1
<b>Second Grade:</b>	2.RL.1, 2.RI.1
<b>Third Grade:</b>	3.RL.1, 3.RI.1

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objective:

1. Understand that there are many different varieties of apples.

## Materials Needed:

- ✓ ELA Lesson 5 Student Worksheet
- ✓ Copy of nutrition labels

## Terms:

- No specific terms were identified for this lesson.

**Teaching Strategies:** Depending upon the knowledge of the students, the teacher may have to introduce a nutrition label and discuss some of the information provided on the label. Then assign the reading **ELA Lesson 5 Student Information Sheet** to be done in groups, individually, or as a class. After reading the information, the student will complete the ELA Lesson 2 Student Worksheet.

**Evaluation:** Focus the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess student achievement of the objectives.

# Apples and Oranges



**Common Core State Standards:** This lesson is correlated to the following CCSS, as well as the Arizona Additions to the CCSS.

1. **(L):** Student will demonstrate an understanding in; conventions of Standard English, knowledge of language, and vocabulary acquisition and use.
2. **Writing (W):** Students should demonstrate an understanding in all aspects of language use; text types and purpose, production and distribution of writing, research to build and present knowledge, and range of writing.
3. **Speaking and Listening Standards (SL):** Students will demonstrate an understanding in; comprehension and collaboration, and presentation of knowledge and ideas

<b>Fourth Grade:</b>	4.L.2, 4.W.1, 4.SL.1
<b>Fifth Grade:</b>	5.L.2, 5.W.1, 5.SL.1
<b>Sixth Grade:</b>	6.L.2, 6.W.1, 6.SL.1

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objectives:

1. Students will compile information and create a class venn diagram.
2. Students will write a paragraph stating which fruit they would rather be and why.

## Materials needed:

- ✓ Language Arts Lesson 6 Student Worksheet – Apples and Oranges
- ✓ Apple
- ✓ orange

## Terms:

**Tart:** having a sharp taste, sour

**Texture:** the feel of a surface

**Skin:** the outer surface; protective covering

**Teaching Strategies:** Have an apple and orange for the students to see. Have the students record the similarities and differences of the two items on the student worksheet. You may also cut up the apple and orange and let your students taste the two fruits and record additional similarities and differences. Have the students write a paragraph stating which fruit they would rather be and why.

**Evaluation:** Focus on the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess the student achievement of the objectives. The post-test will evaluate students' gained knowledge

# Arizona Apples and Apples Around the United States



**Arizona State Learning Standards:** This lesson is correlated to the following State Learning Standard.

1. **Geography:** Understand events, trends, individuals and movements shaping the history of the United States and other nations.

**Arizona State Objectives:** This lesson addresses the following objectives: (Strand, Concept, Performance objective)

<b>Kindergarten:</b>	4.2
<b>First Grade:</b>	4.2
<b>Second Grade:</b>	4.2
<b>Third Grade:</b>	4.2

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objective:

1. Learn about apples orchards in the United States and compare them to apple orchards in Arizona.
2. Students will use basic writing skills to describe and list facts about orchards in the United States.
3. Students will work in small groups to prepare facts about different state's apple production to share with the class.

## Materials Needed:

- ✓ Arizona Apple Facts
- ✓ Apple Word Search
- ✓ Apple facts from other states (students locate)
- ✓ Art supplies

## Terms:

- No specific terms were identified in this lesson.

**Teaching Strategies:** Discuss Arizona apple orchard facts with the students. Have the students complete the *Apples around the United States Word search* to identify the other states where apples are produced. Have students work in groups to locate facts about apple production from the other states they identified in the word search. Have students prepare a small presentation on the information they located.

**Evaluation:** Focus the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess student achievement of the objectives.

# A Slice of Soil (Taken from Illinois Ag in the Classroom)



**Arizona State Learning Standards:** This lesson is correlated to the following State Learning Standard.

1. **Geography:** Understanding events, trends, individuals and movements shaping the history of the United State and other nations.

**Arizona State Objectives:** This lesson addresses the following objectives: (Strand, Concept, Performance objective)

<b>Kindergarten:</b>	4.4.3
<b>First Grade:</b>	4.4.2
<b>Second Grade:</b>	4.4.3
<b>Third Grade:</b>	4.4.6

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objective:

1. Learn how much land exists on Earth.
2. Learn how much of the land is usable for growing food and fiber.

## Materials Needed:

- ✓ Globe or Map
- ✓ Apple
- ✓ Knife

## Terms:

- No specific terms were identified in this lesson.

**Teaching Strategies:** Discuss the planet earth. Discuss uses of the land and land that might not be usable. Bring out a globe or map and show water and land. Discuss the need for both. When the students seem to understand go onto the activity.

**Evaluation:** Focus the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess student achievement of the objectives.

# Apples Move West



**Arizona State Learning Standards:** This lesson is correlated to the following State Learning Standard.

1. **Geography:** Understanding events, trends, individuals and movements shaping the history of the United State and other nations.
2. **American History:** students will be able to apply the lessons of American History to their lives as citizens of the United States.

**Arizona State Objectives:** This lesson addresses the following objectives: (Strand, Concept, Performance objective)

<b>Second Grade:</b>	1.5.2, 4.1.5, 4.1.6
<b>Third Grade:</b>	1.1.3, 1.1.4

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objective:

1. Interpret a relief map and identify land masses
2. Correctly identify states on a U.S. Map

## Materials Needed:

- ✓ Relief map of U.S. (not provided)
- ✓ Blank student maps
- ✓ crayons
- ✓ Johnny Appleseed Book
- ✓ Johnny Appleseed Video

## Terms:

- No specific terms were identified in this lesson.

**Teaching Strategies:** Read to the student Johnny Appleseed. Talk about why he and others decided to move West. On a relief map have students locate natural barriers that westward travelers might encounter or want to avoid. Have students work in groups and create the easiest route for Johnny Appleseed to get from Massachusetts to Ohio. Have students tell you why they chose that path. Have the students compare the items that Johnny took with him on his move west to what they think they would need to make that long journey.

**Evaluation:** Focus the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess student achievement of the objectives.

# A Trail of Apples



**Arizona State Learning Standards:** This lesson is correlated to the following State Learning Standard.

1. **Geography:** Understanding events, trends, individuals and movements shaping the history of the United State and other nations.
2. **American History:** students will be able to apply the lessons of American History to their lives as citizens of the United States.

**Arizona State Objectives:** This lesson addresses the following objectives: (Strand, Concept, Performance objective)

<b>Second Grade:</b>	1.5.2, 4.1.5, 4.1.6
<b>Third Grade:</b>	1.1.3, 1.1.4

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objective:

3. Interpret a relief map and identify land masses
4. Correctly identify states on a U.S. Map

## Materials Needed:

- ✓ Blank student maps
- ✓ crayons
- ✓ Johnny Appleseed Book
- ✓ Johnny Appleseed Video

## Terms:

- No specific terms were identified in this lesson.

**Teaching Strategies:** Read to the student Johnny Appleseed. Talk about why he and others decided to move West. Have students color in the states on the map where John Chapman planted trees.

**Evaluation:** Focus the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess student achievement of the objectives.

# Life Cycle of an Apple (Taken from Illinois Ag in the Classroom)



**Arizona State Learning Standards:** This lesson is correlated to the following State Learning Standard.

- 1. Life Science:** Understand the fundamental concepts of principles and interconnections of the life, physical and earth/space sciences.

**Arizona State Objectives:** This lesson addresses the following objectives: (Strand, Concept, Performance objective)

<b>Kindergarten:</b>	4.2
<b>First Grade:</b>	4.2
<b>Second Grade:</b>	4.2
<b>Third Grade:</b>	4.1.1, 4.2.1

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objectives:

- 1.** Understanding the lifecycle of an apple.

## Materials needed:

- ✓ Life Cycle of an Apple Book
- ✓ From Seed to Apple Book
- ✓ Life Cycle of an Apple Teacher Worksheet
- ✓ Sample Apple Chain craft
- ✓ Construction paper parts
- ✓ red paper plates
- ✓ Yarn
- ✓ Scissors
- ✓ Markers (not included in the kit)
- ✓ Stapler (not included in the kit)

## Terms:

**Pollination-** To transfer pollen from an anther to the stigma of a flower. When a Male pollen grain is introduced to the female part of the flower, enabling fertilization to take place.

**Blossom-** bloom: produce or yield flowers.

**Teaching Strategies:** Have the students create the Apple Life Cycle Chain to ascertain their knowledge of pumpkins.

**Evaluation:** Focus on the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess the student achievement of the objectives.



## Parts of an Apple



**Arizona State Learning Standards:** This lesson is correlated to the following State Learning Standard.

1. **Physical Science:** Increase students understanding of the characteristics of objects and materials they encounter daily.
2. **Life Science:** expands students' biological understanding of life by understanding of life by focusing on the characteristics of living things, the diversity of life, and how organisms and populations change over time in terms of biological adaptation and genetics.

**Arizona State Objectives:** This lesson addresses the following objectives: (Strand, Concept, Performance objective)

<b>Kindergarten:</b>	5.1.1, 5.1.2
<b>First Grade:</b>	1.1.1, 5.1.1
<b>Second Grade:</b>	2.2.1, 4.1.1, 4.2.1
<b>Third Grade:</b>	4.1.1, 4.2.1

**Student Learning Objectives:** Instruction in this lesson should result in students achieving the following objectives:

1. Understanding the life cycle of an apple.

**Materials needed:**

- ✓ Student Worksheet
- ✓ Apple Books

**Terms:**

No terms were identified for this lesson.

**Teaching Strategies:** Have a variety of apples available for the students to view. Have students sort apples into groups depending on characteristics. Have students read or read aloud to the class apple books. Cut open the apple and have students identify the parts of the apple.

**Evaluation:** Focus on the evaluation of student achievement on mastery of the objectives as stated in the lesson. A written test can also be used to assess the student achievement of the objectives.