



**Count, Compare and Make Change**

**for**

**All Language Learners**

**in the**

**Second Grade**

## Lesson Overview

<b>Grade Level:</b>	Second
<b>Language Level:</b>	All
<b>Content Category:</b>	Math
<b>Content Subcategory:</b>	Number and Operation Problem Solving Connections
<b>Materials Needed:</b>	Computer connected to the Internet
<b>Technology Tool:</b>	See the Lesson Tools section for this lesson in the Teacher Management Area of the K to 8 technology curriculum
<b>Lesson Summary:</b>	This lesson reviews the value of a penny, nickel, dime, and quarter and teaches students how to make change.
<b>Lesson Objectives:</b>	At the end of the lesson, the student will be able to: <ul style="list-style-type: none"><li>• identify a penny, nickel, dime and quarter</li><li>• state the value of each coin</li><li>• make change</li></ul>
<b>Academic Content:</b>	This lesson covers: <ul style="list-style-type: none"><li>• the value of a penny, nickel, dime and quarter</li><li>• how to make change</li></ul>
<b>Technology Skills:</b>	See the following sections of the lesson plan for a detailed list of skills covered in this lesson: <ul style="list-style-type: none"><li>• Standards: NETS - Performance Indicators</li><li>• Activity Instructions &amp; Rubric</li></ul>

# Lesson Plan

## Lesson and Student Activity Details:

1. Begin the lesson by asking students why it is important to be able to count money and make change.
2. Discuss situations where students would use money and receive change.
3. Begin the web lesson.
4. The lesson takes the student through each coin beginning with a penny, followed by nickel, dime and quarter. The lesson shows students what the coin looks like and tells them how much it is worth.
5. Next the lesson compares coins. For example, five pennies equal one nickel; two nickels equal one dime, etc.
6. Students play a word search game with money words.
7. Students solve a money jigsaw puzzle.
8. Then students are given examples of how to make sure they are receiving the correct change when they make a purchase.
9. Students play a game to practice making change.
10. There is an assessment at the end of the lesson.
11. There is an activity at the end of the lesson.

# Lesson Plan

## Extension Activities:

1. Give students real coins to practice counting money and making change.
2. Set up a school store and let students practice purchasing items.

## Multiple Intelligences

- Bodily/Kinesthetic
- Intrapersonal
- Logical/Mathematical
- Verbal/Linguistic
- Visual/Spatial

# Questions & Answers

## Lesson Assessment

How much is a penny worth? (**one cent**)

How much is a nickel worth? (**five cents**)

How much is a dime worth? (**ten cents**)

How much is a quarter worth? (**twenty five cents**)

How many nickels in a dime? (**two**)

How many nickels in a quarter? (**five**)

How many dimes in \$1.00? (**ten**)

How many pennies in a nickel? (**five**)

How many pennies in a dime? (**ten**)

How many pennies in a dollar? (**100**)

# Standards

## NETS - Technology Foundation Standards for Students

(From the International Society for Technology in Education)

### 1. Basic operations and concepts

- Students demonstrate a sound understanding of the nature and operation of technology systems.
- Students are proficient in the use of technology.

### 2. Social, ethical, and human issues

- Students understand the ethical, cultural, and societal issues related to technology.
- Students practice responsible use of technology systems, information, and software.
- Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

### 3. Technology productivity tools

- Students use technology tools to enhance learning, increase productivity, and promote creativity.
- Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.

### 4. Technology communications tools

- Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

### 5. Technology research tools

- Students use technology to locate, evaluate, and collect information from a variety of sources.
- Students use technology tools to process data and report results.
- Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.

# Standards

## 6. Technology problem-solving and decision-making tools

- Students use technology resources for solving problems and making informed decisions.
- Students employ technology in the development of strategies for solving problems in the real world.

# Standards

## NETS - Performance Indicators

(From the International Society for Technology in Education)

### Pre-Kindergarten to Grade 2

1. Use input devices (e.g., mouse, keyboard, remote control) and output devices (e.g., monitor, printer) to successfully operate computers, VCRs, audiotapes, and other technologies. (1)
2. Use a variety of media and technology resources for directed and independent learning activities. (1, 3)
3. Communicate about technology using developmentally appropriate and accurate terminology. (1)
4. Use developmentally appropriate multimedia resources (e.g., interactive books, educational software, elementary multimedia encyclopedias) to support learning. (1)
5. Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom. (2)
6. Demonstrate positive social and ethical behaviors when using technology. (2)
7. Practice responsible use of technology systems and software. (2)
8. Create developmentally appropriate multimedia products with support from teachers, family members, or student partners. (3)
9. Use technology resources (e.g., puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication, and illustration of thoughts, ideas, and stories. (3, 4, 5, 6)
10. Gather information and communicate with others using telecommunications, with support from teachers, family members, or student partners. (4)

# Standards

## Mathematics Standards

(From the National Council of Teachers of Mathematics)

### 1. Number and Operation

Mathematics instructional programs should foster the development of number and operation sense so that all students-

- Understand numbers, ways of representing numbers, relationships among numbers, and number systems;
- Understand the meaning of operations and how they relate to each other;
- Use computational tools and strategies fluently and estimate appropriately.

### 2. Patterns, Functions, and Algebra

Mathematics instructional programs should include attention to patterns, functions, symbols, and models so that all students-

- Understand various types of patterns and functional relationships;
- Use symbolic forms to represent and analyze mathematical situations and structures;
- Use mathematical models and analyze change in both real and abstract contexts.

### 6. Problem Solving

Mathematics instructional programs should focus on solving problems as part of understanding mathematics so that all students-

- Build new mathematical knowledge through their work with problems;
- Develop a disposition to formulate, represent, abstract, and generalize in situations within and outside mathematics;
- Apply a wide variety of strategies to solve problems and adapt the strategies to new situations;

# Standards

- Monitor and reflect on their mathematical thinking in solving problems.

## **8. Communication**

Mathematics instructional programs should use communication to foster understanding of mathematics so that all students-

- Organize and consolidate their mathematical thinking to communicate with others;
- Express mathematical ideas coherently and clearly to peers, teacher, and others;
- Extend their mathematical knowledge by considering the thinking and strategies of others;
- Use the language of mathematics as a precise means of mathematical expression.

## **9. Connections**

Mathematics instructional programs should emphasize connections to foster understanding of mathematics so that all students-

- Recognize and use connections among different mathematical ideas;
- Understand how mathematical ideas build on one another to produce a coherent whole;
- Recognize, use, and learn about mathematics in contexts outside of mathematics.

## **10. Representation**

Mathematics instructional programs should emphasize mathematical representations to foster understanding of mathematics so that all students-

- Create and use representations to organize, record, and communicate mathematical ideas;

# Standards

- Develop a repertoire of mathematical representations that can be used purposefully, flexibly, and appropriately;
- Use representations to model and interpret physical, social, and mathematical phenomena.