Mathematics Lesson Plan

Lesson: Counting: Pennies, Nickels, and Dimes

Length: Approximately 30 minutes

Age or Grade Level Intended: Second grade (Mathematics)

Academic Standard(s):

- Math 2.1.1 -- Count by ones, twos, fives, and tens to 100.
- Math 2.6.2 -- Use tools such as objects or drawings to model problems.

Performance Objective(s):

- The student will correctly count by pennies (ones) to solve word problems involving money 100% of the time.
- The student will correctly count by nickels (fives) to solve word problems involving money 75% of the time.
- The student will correctly count by dimes (tens) to solve word problems involving money 75% of the time.
- The student will accurately draw representations of the word problems given to them 75% of the time.

Assessment:

Students will be given a worksheet at the end of the lesson to assess whether or not they completely grasp the concept. (Copy of worksheet and answer key have been attached.)

** Because pennies may be easier to count than nickels and dimes, the percentage of problems that the students have to complete to meet the objective has been adjusted.

Advance Preparation by Teacher:

The teacher will need to assemble all the materials in advance—

- Copies of the assessment worksheet (one per student)
- Coin manipulatives (paper/plastic or actual, depending on availability)

Procedure:

Introduction/Motivation: Ask students questions to pique their curiosity in the lesson.

- Has anyone ever had to count change to pay for something in a store? (Bloom: Application)
- Does anyone know how to count by fives and tens? (Bloom: Knowledge)
- Can you show me? (Bloom: Comprehension)
- Why do we need to know how to count by fives and tens to count coins? (Bloom: Analysis)

Step-by-Step Plan:

1. Pass out coins to students and ask them the following questions: (Gardner: Verbal/Linguistic)
    - Which coin is worth one cent? (Penny)
    - Which coin is worth five cents? (Nickel)
    - Which coin is worth ten cents? (Dime)
2. Start practicing word problems using the manipulatives and drawing pictures on the board for visual aids. (Gardner: Verbal/Linguistic, Visual/Spatial, Logical/Mathematical)
    - If I have five nickels, how much money do I have? (twenty five cents)
    - If I have twelve pennies, how much money do I have? (twelve cents)
    - If I have six dimes, how much money do I have? (six dimes)
    - If I have two pennies, three nickels, and four dimes, how much money do I have? (fifty seven cents)
3. Attempt to push students to answer more challenging word problems, still guiding through the problems on the board. (Gardner: Verbal/Linguistic, Visual/Spatial, Logical/Mathematical)
    - If I have nine pennies and my sister has three nickels and five dimes, how much money do we have together? (seventy four cents)
    - If I have three dimes and then find two nickels and six pennies in the couch, how much money will I have? (forty six cents)
    - If I have two dimes and three pennies, and my brother has five nickels and three dimes, how much money will we have all together?(seventy eight cents)
4. Ask students if they have any questions regarding what we have just learned.

Closure:

Mention that the next lesson that we will be doing (given that the students meet the objectives for this lesson) will be building upon this topic. Stress the importance of understanding this topic before moving on, and give students the assessment worksheet to be completed in class.

Adaptations/Enrichment:

- **Student with Learning disability in reading comprehension**: For a student that had this disability, I would allow the worksheet to be read aloud for the student in order to get an accurate result about his comprehension of this math concept.
- **Student with ADHD**: For a student with ADHD, I would give the assessment to them in three parts, as to not overwhelm or bore the student. Between sections of the assessment, I would allow the student to get up (if they are not bothering any other students) and stretch.
- **Student with Gifts and Talents in Creativity**: For students with creative gifts and talents, I would ask them to create their own word problems that I could use for future students (if they had their assessment completed early).

Self-Reflection:

- What did students seem to need extra practice on?
- What could I do to clarify the problems to the student?
- What worked well when communicating with the students during the lesson?
- How could I change this lesson to make it more appealing to all students?
- From the results of the assessment, did the students understand the concept overall, or do I need to rework my lesson plan?

Assessment Worksheet

DIRECTIONS: Read the word problems below, draw pictures representing the word problems, and solve the problems.

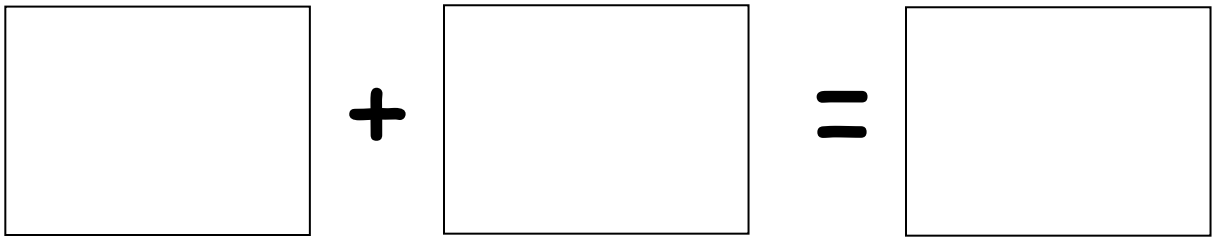
---

1. If Jane has three dimes, and Jesse has nine pennies, how much do Jane and Jesse have all together?

Together, Jane and Jesse have _____ cents.

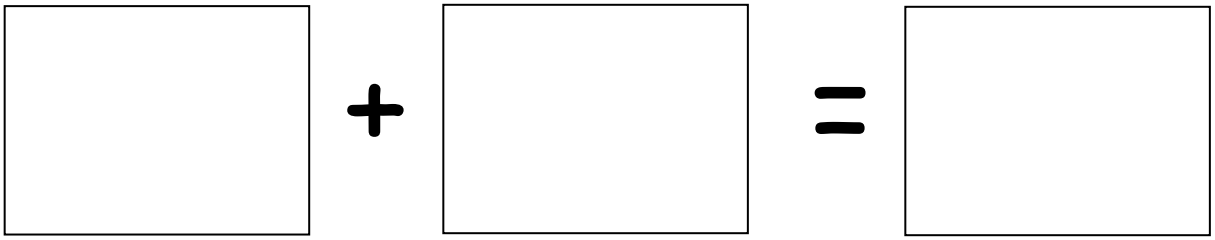
---

2. I have five pennies and two nickels, and then I find four dimes in the couch. How much money do I have all together?



After finding the money in the couch, I have _____ cents.

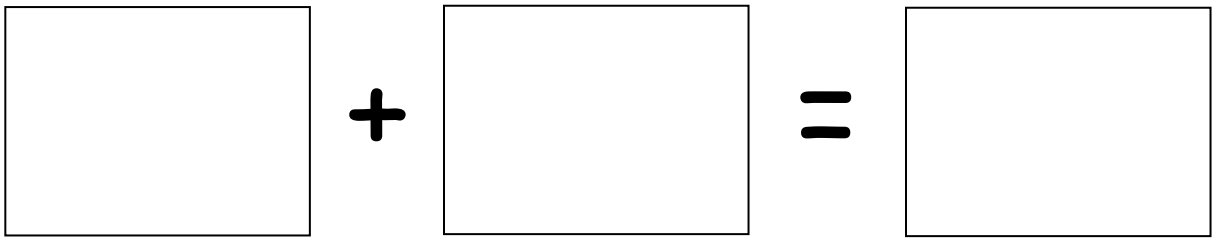
3. Heather's mother gave her four dimes to buy candy, and Julie's mother gave her five nickels. How much money would they have all together to buy candy?



Together, Heather and Julie have _____ cents.

---

4. Your brother has three nickels and two pennies, and you have nine pennies. How much money do you have all together?



You and your brother have _____ cents all together.

Assessment ANSWER KEY

DIRECTIONS: Read the word problems below, draw pictures representing the word problems, and solve the problems.

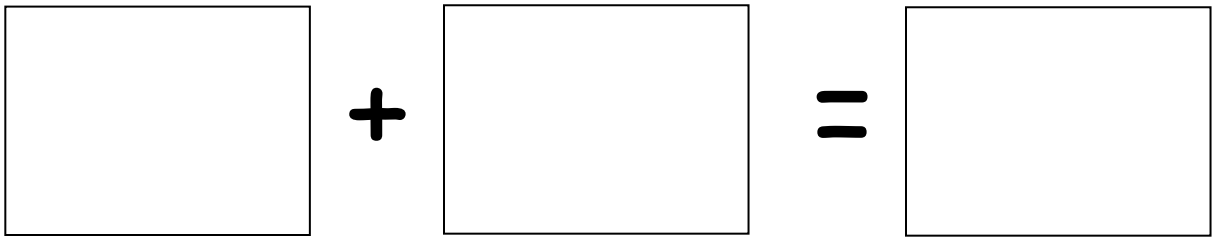
---

1. If Jane has three dimes, and Jesse has nine pennies, how much do Jane and Jesse have all together?

Together, Jane and Jesse have **39** cents.

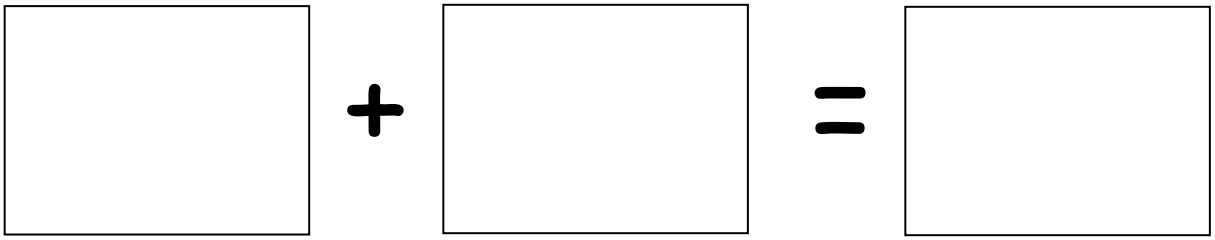
---

2. I have five pennies and two nickels, and then I find four dimes in the couch. How much money do I have all together?



After finding the money in the couch, I have **55** cents.

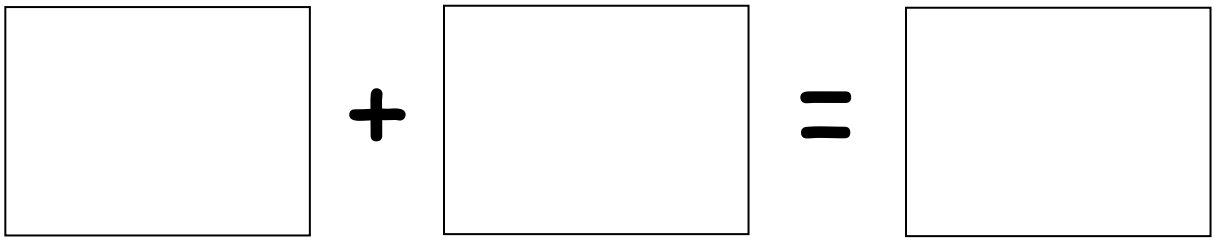
3. Heather's mother gave her four dimes to buy candy, and Julie's mother gave her five nickels. How much money would they have all together to buy candy?



Together, Heather and Julie have **65** cents.

---

4. Your brother has three nickels and two pennies, and you have nine pennies. How much money do you have all together?



You and your brother have **26** cents all together.

DRAWINGS SHOULD ACCURATELY REPRESENT THE PROBLEMS; HOWEVER, DRAWINGS WILL VARY.