

# Lesson Plan: The Great UNO Deck Appraisal

## Materials Needed

- One standard deck of UNO cards (108 cards)
- Pencil and paper (or a small whiteboard and marker)
- Optional: Calculator for final addition
- Optional: Play money (coins and bills) to make it more tangible

## Learning Objectives

By the end of this lesson, the student will be able to:

- Assign a monetary value to different categories of items.
- Sort objects into groups based on shared attributes (color, number, type).
- Use repeated addition and basic multiplication (e.g., 8 cards worth \$2 is  $8 \times \$2$ ) to find subtotals.
- Add multiple two- and three-digit numbers to find a final sum.
- Explain their mathematical reasoning and problem-solving process.

## Curriculum Standards (Example: 2nd Grade Math)

- **2.OA.C.4:** Use addition to find the total number of objects arranged in groups; write an equation to express the total as a sum of equal addends. (e.g.,  $\$5 + \$5 + \$5 + \$5 = \$20$ )
- **2.NBT.B.5:** Fluently add and subtract within 100 and begin to add multiple numbers together.
- **Mathematical Practices:** Make sense of problems and persevere in solving them; reason abstractly and quantitatively.

## Lesson Procedure

### Part 1: The Set-Up - Becoming an UNO Appraiser (10 minutes)

1. **Introduction:** Announce, "Today, you are a famous appraiser! Your job is to figure out the exact dollar value of this entire deck of UNO cards. But first, we need to decide how much each card is worth."
2. **Assigning Values (Collaborative):** Discuss and decide on a "price list" for the cards. Guide the discussion to create simple, easy-to-add values. Write the agreed-upon list on a piece of paper.

#### Example Price List:

- **Number Cards (0-9):** Face value (a '7' card is worth \$7, a '3' card is worth \$3, a '0' card is worth \$0).
- **Draw 2 Cards:** \$10 each (because they are powerful).
- **Reverse Cards:** \$10 each.
- **Skip Cards:** \$10 each.
- **Wild Cards:** \$15 each (they are very useful!).
- **Wild Draw 4 Cards:** \$20 each (the most powerful card in the deck!).

### Part 2: The Appraisal - Sorting and Counting (20 minutes)

1. **Create a Tally Sheet:** On a piece of paper, create a simple chart for the student to record their findings. It should have columns for Card Type, Price Each, How Many, and Subtotal.
2. **The Big Sort:** Have the student sort the entire deck of cards. The best way is to first sort by type (Numbers, Action Cards, Wild Cards). Then, within the number pile, sort by the actual

number (all the 1s together, all the 2s, etc.).

3. **Count and Record:** Guide the student to take one group at a time (e.g., all the '5' cards). They will count how many there are, write it on the tally sheet, and then calculate the subtotal for that group.

**Example Tally Sheet Entry:**

- **Card Type:** '5' Cards
  - **Price Each:** \$5
  - **How Many:** 8
  - **Subtotal:** \$40 (Student can calculate this by adding  $5+5+5+5+5+5+5+5$ , or you can introduce  $8 \times 5 = 40$ ).
4. Continue this process for all card groups (all numbers 0-9, all Skips, all Reverses, etc.) until every card is accounted for on the tally sheet.

### Part 3: The Final Tally - Calculating the Total Value (15 minutes)

1. **Review the Sheet:** Look at the completed tally sheet. Point to the "Subtotal" column. Say, "You've done the hard work of finding the value of each group. Now for the final step: adding it all up to find the grand total!"
2. **Grand Total Calculation:** Have the student add up all the numbers in the "Subtotal" column. They can do this on paper or, for a focus on the concept rather than tedious calculation, use a calculator. This allows them to see the big final number without getting frustrated by a long addition problem.
3. **The Big Reveal:** Announce the final value. "Congratulations! As our expert appraiser, you have determined that this UNO deck is worth [Grand Total] dollars!"

### Part 4: Conclusion and Discussion (5 minutes)

1. Ask questions to encourage reflection:
  - "Which type of card was worth the most all together? Was it the one with the highest price?" (e.g., the Wild Draw 4s are worth \$20 each, but there are only 4. The '9' cards might be worth more in total because there are 8 of them).
  - "Was it easier to add the values for the number cards or the action cards? Why?"
  - "If you were designing the game, would you make the cards worth more or less?"

## Assessment

- **Formative (Observational):** Observe the student's ability to sort the cards accurately and discuss the values. Listen to their reasoning during the subtotal calculations.
- **Summative (Product-Based):** The completed Tally Sheet serves as the primary assessment tool. Check it for:
  - Correct counts for each card type.
  - Accurate subtotal calculations (showing understanding of repeated addition or multiplication).
  - The final grand total calculation.

## Differentiation and Extension

- **For Extra Support:**
  - Simplify the price list. Make all action cards worth \$5 and all Wilds worth \$10.
  - Use play money. For each '7' card, have the student count out 7 dollar coins. They can make piles of money for each card type and then combine them all at the end to count.
  - Work in smaller chunks. Appraise only the red and blue cards today, and the yellow and green cards tomorrow.
- **For an Extra Challenge:**
  - Ask predictive questions before you start: "Which color do you think will be worth the

most? Why?" (Answer: They are all equal).

- Calculate the \*average\* value of a card in the deck (Grand Total divided by 108). This introduces a division concept.
- Create a new appraisal. "What if we appraised the deck based on how many points they are worth in the game? A '5' is 5 points, a Draw 2 is 20 points, a Wild is 50 points. Would the total value be higher or lower?"