

Amplifying Instructional Task – Kindergarten Example

Original Task:

Use comparative language to describe two numbers, up to 20, presented as written numerals. K(2)(H)

Students are shown the following two cards and asked to make a comparative statement describing the relationship between the two numbers.

19

17

Amplifying Instructional Task – Kindergarten Example

Amplified Task:

Materials:

- Teddy bear counters (yellow bears, blue bears, red bears, and green bears)
- Paper bags – 1 per group of students
- 4 large index cards

Task A (Amplified Task):

Preparation: Distribute the teddy bear counters among the total number of paper bags needed for the class. Bags do not need to contain the same number of each color bear.

- Prompt students to work with their partners to sort the bears by color.
- Once students have sorted the bears, prompt students to take turns making comparative statements that describe the relationships between the different colored bears in their sets, such as the following:
 - There are more red bears than blue bears.
 - There are fewer red bears than green bears.
 - There is the same number of red and yellow bears.
- Prompt student to find the total number of bears for each color and record each number on a separate index card.
- Prompt students to take their four index cards and pair up with another group of students. Prompt students to make comparative statements about the numbers on the index cards that describe the relationships between the different color bears, such as the following:
 - There are more red bears than blue bears.
 - There are fewer red bears than green bears.
 - There is the same number of red and yellow bears.
- Prompt students to justify their thinking by counting forwards or backwards. Consider the following example:
 - There are fewer yellow bears than red bears. I can count up, 16, 17, 18, 19, 20 to show more red bears.

Amplifying Instructional Task – Kindergarten Example

Task B (Scaffolded Task):

Materials:

Double Ten Frame (4 copies per group)

Prompt students to place each color of the counting bears on a different Double Ten Frame.

Double Ten Frame

- Once students have placed the bears on the Double Ten Frame, prompt them to take turns making comparative statements that describe the relationships between the different colored bears in their set, such as the following:
 - There are more red bears than blue bears.
 - There are fewer red bears than green bears.
 - There is the same number of red and yellow bears.

Amplifying Instructional Task – Kindergarten Example

Task C (Scaffolded Task):

Materials:

Word cards – MORE, LESS, EQUAL

Counting Strip numbered 1-20

- Prompt students to complete the sentence frames as you read them aloud. Show word cards as students use the correct vocabulary. Consider the following example:
 - There are _____ red bears than blue bears. (MORE, LESS, or EQUAL)
 - There are _____ red bears than green bears. (MORE, LESS, or EQUAL)
- Prompt students to use a counting strip while counting up and counting back to justify his or her thinking. Encourage students to touch each number as they count.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

Task D (Enriched Task):

Materials:

6 Large index cards (with the numbers 19, 17, 12, 14, 10 and 20 written on them – one number per card and several blank index cards)

- Prompt students to form groups of two. Distribute a set of numbered index cards to each group of students.
- Prompt students to place the cards face down on the table. Then prompt each student in the group to turn over one card from his or her stack.
- Prompt students to work together to make a comparative statement using the numbers on the cards, such as the following:

“17 is less than 20, and 20 is more than 17.”
- Prompt students to generate a number between the two numbers on the index cards.
- Prompt students to record the number generated on a blank index card.
- Prompt students to work together to make a comparative statement about the relationship between the new numbers and the original numbers, such as the following:

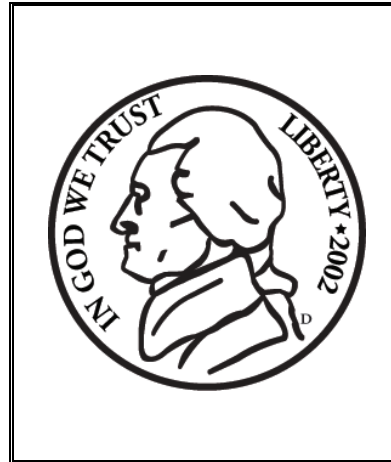
“18 is more than 17 and 18 is less than 20.”

Amplifying Instructional Task – Grade 1 Example

Original Task:

Identify U.S. coins, including pennies, nickels, dimes, and quarters, by value and describe the relationships among them. 1(4)(A)

Students are shown the following two cards and asked to make a comparative statement describing the relationship between the values of the two coins.



Amplifying Instructional Task – Grade 1 Example

Amplified Task

Task A (Amplified Task):

Materials:

- Picture cards (penny, nickel, dime) – 1 of each type of coin
- Coins (pennies, nickels, and dimes)
- Piggy Bank
- Chart paper and marker
- Plastic sandwich bags – 1 per group of students
- Play money (20 pennies, 20 nickels, and 20 dimes)
- Index cards – 1 per group of students
- White boards and markers

Preparation:

- Put a random collection of coins in a piggy bank.

OR

The week before the lesson, place a piggy bank in the room visible to all the students and randomly place change in the bank during the week before the task is introduced.

- Distribute the play money coins among the total number of plastic sandwich bags needed for the class. Bags do not need to contain the same number of coins; however, use all 60 coins.
- Display picture cards one at a time. Prompt students to identify the coin, and its value.
- Prompt students to make comparative statements that describe the relationships between the different coins. Record the comparative statements using words and symbols, such as the following:
 - The value of a nickel, 5 cents, is more than the value of a penny, 1 cent. $5\text{¢} > 1\text{¢}$
 - The value of a dime, 10 cents, is more than the value of a nickel, 5 cents. $10\text{¢} > 5\text{¢}$
 - The value of a penny, 1 cent, is less than the value of a dime, 10 cents. $1\text{¢} < 10\text{¢}$
- Once students have identified all the coins, present the class with the following problem situation:

Ms./Mr. Green has saved all of her/his change for one week and placed it in the piggy bank.
- Ask the following questions:
 - What does it mean to save money?
 - How much money do you think he/she has saved?
 - How could we determine the amount of money saved?
- Open up the piggy bank and sort the coins by type: pennies, nickels, dimes, and quarters. Record your results on chart paper using a table, as shown. Prompt students to use skip counting to complete the total value of each coin type. (Note: the picture cards could be used as column headings.)

Number of Dimes	Number of Nickels	Number of Pennies
3	2	4
Value of Dimes: 30¢	Value of Nickels: 10¢	Value of Pennies: 4¢

- Distribute a sandwich bag containing coins to each group of students.



Amplifying Instructional Task – Grade 1 Example

- Prompt students to use skip-counting to find the total amount of money in the bag, and record the total amount of money in their bags on index cards using the cent symbol.
- Once students have completed the activity, collect the index cards, and distribute whiteboards and markers to each student.
- Select two index cards, and prompt students to write comparative statements using symbols that describe the relationship between the different amounts. Repeat for several pairs of money amounts.

Amplifying Instructional Task – Grade 1 Example

Task B (Scaffolded Task):

Materials:

Money Mat– 1 per group of students

- Distribute the Money Mat to students. Prompt students to use the Money Mat to sort the coins in their sandwich bags.
- Prompt students to use skip counting to find the value of the Dimes column, and then continue to the Nickels column as the skip counting continues.

Consider the following example: A set of coins containing 2 dimes, 3 nickels, and 4 pennies would be counted this way: 10¢, 20¢, 25¢, 30¢, 35¢, 36¢, 37¢, 38¢, 39¢. The value of the collection would be 39¢.

Money Mat

Dimes 10¢	Nickels 5¢	Pennies 1¢
Total Value of Collection _____		

Amplifying Instructional Task – Grade 1 Example

Task C (Scaffolded Task):

Materials:

Word Cards (Less than, Greater than, Equal to) – posted on the word wall

Examples:

Less Than
<

Greater Than
>

Equal to
=

Prompt students to complete the sentence frames as you read them aloud. Show word cards as students use the correct vocabulary. Consider the following examples:

- When you compare 13¢ to 21¢, 13¢ is _____ 21¢. (Less Than)
- When you compare 31¢ to 24¢, 31¢ is _____ 24¢. (Greater Than)
- When you compare 15¢ to 15¢, 15¢ is _____ 15¢. (EQUAL to)

Amplifying Instructional Task – Grade 1 Example

Task D (Enriched Task):

Materials:

Bag of play money coins (dimes, nickels, and pennies only)

Present students with the following problem situation:

The value of the dimes, nickels, and pennies in Miss Smith's coin purse is 57ϕ . Is the value of the coins in your bag equal to, less than, or equal to the value of Miss Smith's coins?

- Show the students a possible representation of Miss Smith's coins, for example, 5 dimes, 1 nickel, and two pennies.
- Prompt students to use the play money coins to show a different way to represent the total value of Miss Smith's coins.
- Ask the following questions:
 - What is another way to represent 10ϕ ?
 - What is one way you could increase the value of your set by 10ϕ ?
 - What is another way to represent 5ϕ ?
 - What is one way you could increase the value of your set by 5ϕ ?
- Prompt students to record the value of the set of dimes, the set of nickels, and the set of pennies.

Amplifying Instructional Task – Grade 2 Example

Original Task:

Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms 2(4)(C)

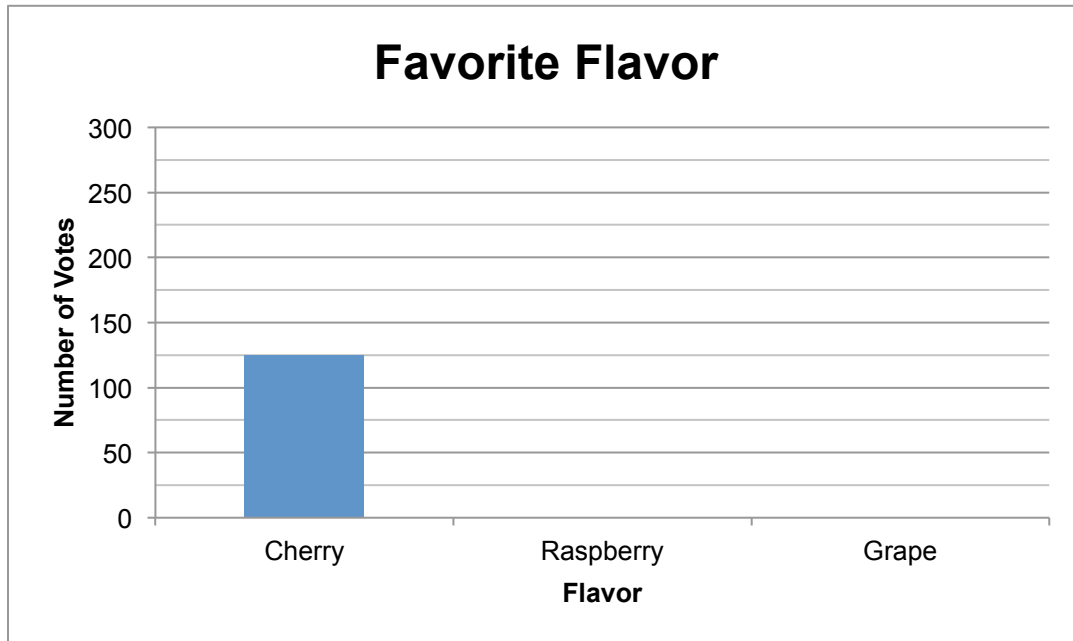
A candy company asked students to vote for their favorite flavor of snow cone. Of the students polled, 275 voted for raspberry. The number of students who voted for cherry was 120 more than the number of students who voted for raspberry. How many students voted for cherry?

Amplified Tasks:

Task A (Amplified Task):

A candy company asked 450 students to vote for their favorite flavor of snow cone.

- 125 students voted for cherry.
- 150 more students voted for raspberry than voted for cherry.
- The rest of the students voted for grape.



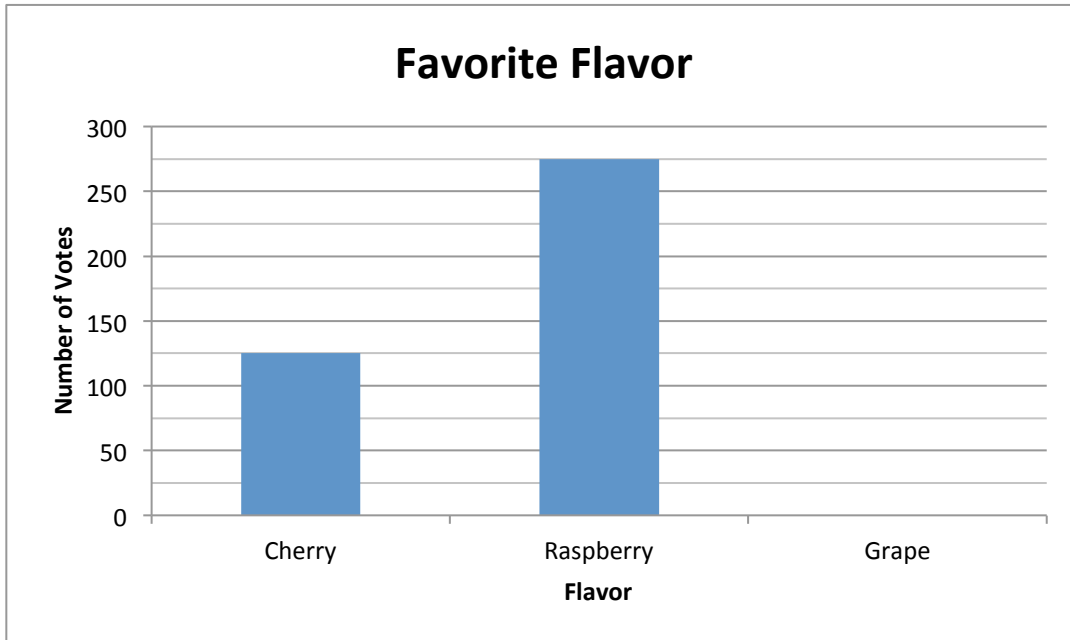
- Complete the bar graph to show the number of students who voted for raspberry and grape.
- Write three true statements about the data on the bar graph.
- Write three questions that you could answer using the data from the bar graph.
- Trade papers with a partner and ask him or her to find the answers to your questions about the graph.

Amplifying Instructional Task – Grade 2 Example

Task B (Scaffolded Task):

A candy company asked 450 students to vote for their favorite flavor of snow cone.

- 125 students voted for cherry.
- 150 more students voted for raspberry than voted for cherry.
- The rest of the students voted for grape.



- Complete the bar graph to show the number of students who voted for grape.
- Use the phrase bank to help you complete the following:
 - Write three true statements about the data on the bar graph.
 - Write three questions that you could answer using the data from the bar graph.
- Trade papers with a partner and ask him or her to find the answers to your questions about the graph.

Phrase Bank

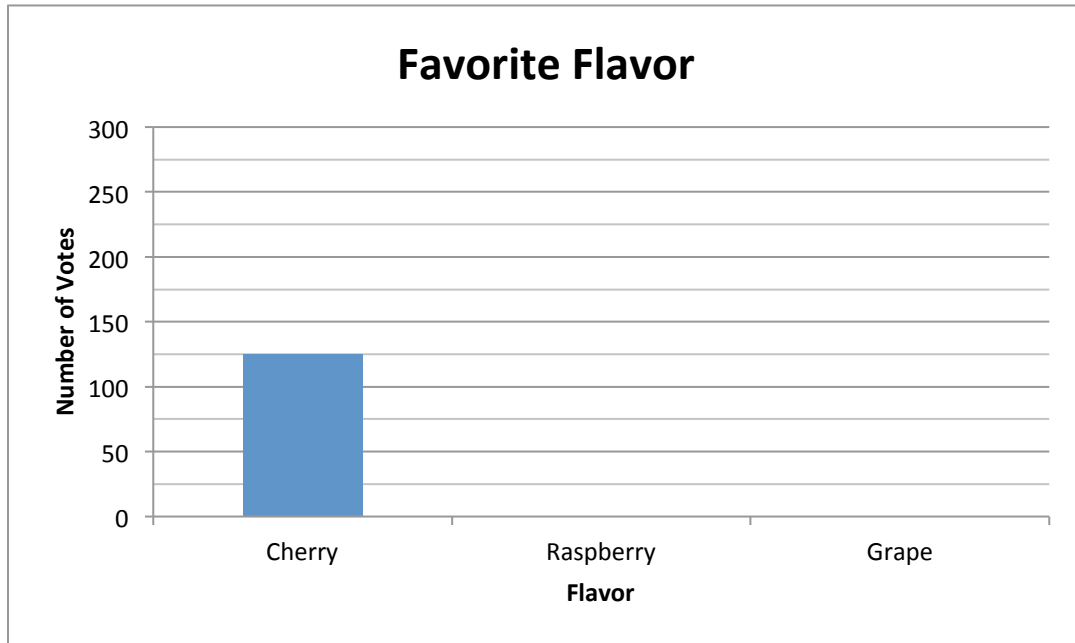
how many more
how many fewer
how many total
which flavor
at least
combined

Amplifying Instructional Task – Grade 2 Example

Task C (Scaffolded Task):

A candy company asked 450 students to vote for their favorite flavor of snow cone.

- 125 students voted for cherry.
- 150 more students voted for raspberry than voted for cherry.
- The rest of the students voted for grape.



- Complete the bar graph to show the number of students who voted for raspberry and grape.
- Complete the following to create three true statements about the data on the bar graph:
I know that more students voted for _____ than _____.
I know that fewer students chose _____ than _____.
I know that at least _____ students chose _____.
- Complete the following to create three questions that could be answered using the data from the bar graph:
How many more students chose _____ than _____?
How many total students chose _____ and _____?
Which two flavors had at least _____ votes?
- Trade papers with a partner and ask him or her to find the answers to your questions about the graph.

Amplifying Instructional Task – Grade 2 Example

Task D (Enriched Task):

You are going to make up a set of data about the students voting for their favorite flavor of snow cone. You must use the given facts to create your data.

- Your set of data should include four answer choices and the number of votes for each.
 - The total number of votes should be 350.
 - Two of the choices should total 225 votes.
 - Two of the choices should have a difference of 75 votes.
- Use the table below to organize your thinking.

Flavors	Votes

- Complete the bar graph below to show the number of people who voted for each choice.
- Write three true statements about the data on the bar graph.
- Write three questions that you could answer using the data from the bar graph.
- Trade papers with a partner and ask him or her to find the answers to your questions about the graph.

