

2

NATIONAL LEARNING CAMP

Mathematics

Enhancement Camp

Lesson Plans



Government Property
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Enhancement Learning Camp

Lesson Plans

Mathematics Grade 2

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Mathematics Grade 2 Lesson Plan 1

Giving the Place Value and Finding the Value of a Digit in Three-Digit Numbers

Key Idea

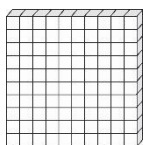
Give the place value and find the value of a digit in 3-digit numbers.

Lesson Component 1 (Lesson Short Review)

Time: 10 minutes

Directions

1. Tell the number represented by each of the figures using Base Ten Blocks.



A

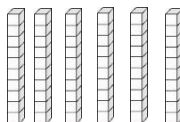
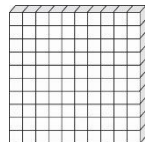
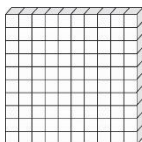


B



C

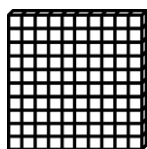
2. Can you still recall how each of these figures is called?
3. If you combine 3 flats, 8 longs, and 5 unit blocks, what number will be formed?
4. Write the number represented by the Base Ten Block figures and supply the digits in the Place Value Chart.



Hundreds	Tens	Ones

Answers

- 1.



$$A = 100$$



$$B = 10$$



$$C = 1$$

2. **Figure A** is called a **flat**, **Figure B** is called a **long**, while **Figure C** is called **unit block**.
3. **385**

- 4.

Hundreds	Tens	Ones
2	6	7

Lesson Component 2 (Lesson Purpose/Intention)Time: **5** minutes

Teacher states:

We can use what we learned about representing numbers using the Base Ten Blocks. Today, we will use the Place Value Chart and Trading Board to give the place value and find the value of a digit in 3-digit numbers.

Lesson Component 3 (Lesson Language Practice)Time: **10** minutes

Key words/terms are:

- Digit
- Number
- Place Value
- Place Value Chart
- Trading Board
- Value




Lesson Component 4 (Lesson Activity)Time: **30** minutes**Part 4A****Stem for Items 1 and 2**

1. Let the pupils give the largest 3-digit number that can be formed using the digits **4, 8, and 5**. Guide them in forming a number using the digits. Then, call someone to write each digit in the correct column/ place value using the Place Value Chart.

Hundreds	Tens	Ones
8	5	4

Questions:

- a. What number can be formed?
 - b. Which digit is in the hundreds place? tens? ones?
 - c. Ask the pupils to give the smallest number that can be formed using the same digits.
 - d. Inquire also about the place value of each digit.
 - e. If the pupils can already state the place value of the digits, proceed in relating how to get the values of the digits using the Trading Board.
2. Show the pupils how the Trading Board works. The Trading Board looks like the Place Value Chart. The only difference is that we plot chips on the board instead of writing numbers directly. Let them remember that there are three chip colors namely blue, red, and white. Each **blue chip represents 100**, each **red chip stands for 10** and each **white chip is equal to 1**.

Hundreds	Tens	Ones
		

Questions:

- How many blue chips are there?
- If there are 8 blue chips and each chip represents 100, what is its value?
- How many red chips are there?
- If there are 5 red chips and each chip represents 10, what is its value?
- How many white chips are there?
- If there are 4 white chips and each chip represents 1, what is its value?
- Ask the pupils to give value of the digits in the smallest number that can be formed using the same digits.
- Inquire also about the value of each digit.

Part 4B

Item 1

Questions

- Using the digits 1, 9, and 6, give the largest 3-digit number that can be formed.
- Write the digits in the Place Value Chart.
- Give the place value of each digit.

Answers to Item 1

- 961

-

Hundreds	Tens	Ones
9	6	1

- The digit 9 is in the hundreds place, 6 in the tens and 1 in the ones.

Part 4C

Item 2

Questions

- What is the smallest number that can be formed using the same digits?

2. Plot the corresponding chips on the Trading Board.
3. Find the value of each digit.

Answers to Item 2

1. 169

2.

Hundreds	Tens	Ones
○	○ ○ ○ ○ ○ ○	○ ○ ○ ○ ○ ○ ○ ○ ○ ○

3. The digit 1 has a value of 100, the digit 6 has a value of 60 and the digit 9 has a value of 9.

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: 5 minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 2

Reading and Writing Numbers up to 1000 in Symbols and in Words

Key Idea

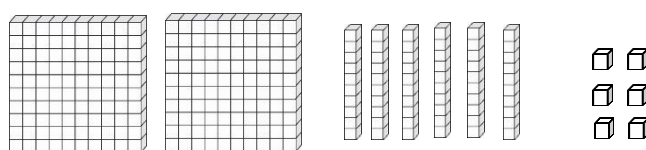
Read and write numbers up to 1000 in symbols and in words.

Lesson Component 1 (Lesson Short Review)

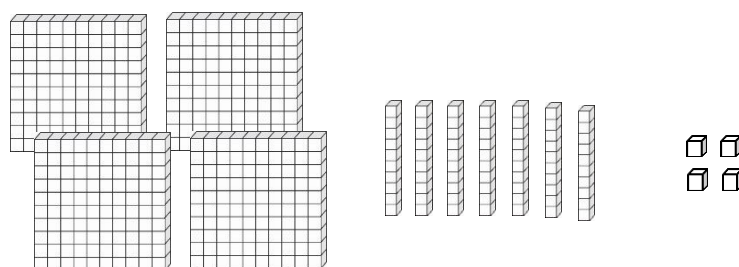
Time: 10 minutes

Directions

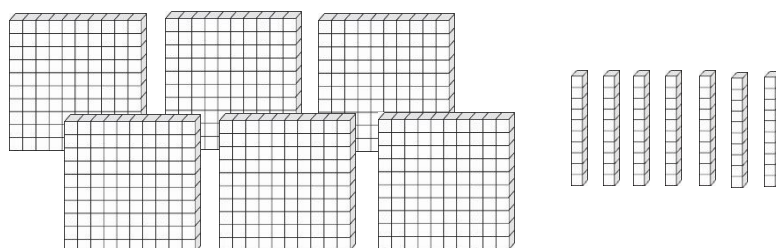
Tell the number represented by all of the figures in Base Ten Blocks.



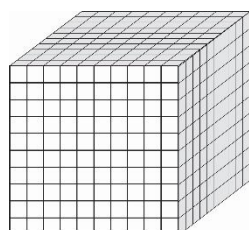
2. Write the number that can be formed by combining the figures below.



3. Give the number that comes up when all the figures below are grouped together.



4. What number is represented by this figure?



Answers

1. 256
2. 474
3. 660
4. 1 000

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

Using the Base Ten Blocks, we were able to write numbers. Today, we will use the Place Value Chart and Stack-It-Up Flashcards to be able to read write numbers up to 1 000 in symbols and in words.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Base Ten Blocks
- Number Chart
- Numerals/ Symbols
- Number Words
- Place Value Chart
- Stack-It-Up Flashcards

Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A

Stem for Items 1 and 2

1. Present the Number Charts to the class.

Symbol	Word
1	one
2	two
3	three
4	four
5	five
6	six
7	seven
8	eight
9	nine

Symbol	Word
10	ten
20	twenty
30	thirty
40	forty
50	fifty
60	sixty
70	seventy
80	eighty
90	ninety

Symbol	Word
10	ten
11	eleven
12	twelve
13	thirteen
14	fourteen
15	fifteen
16	sixteen
17	seventeen
18	eighteen
19	nineteen

Symbol	Word
100	one hundred
200	two hundred
300	three hundred
400	four hundred
500	five hundred
600	six hundred
700	seven hundred
800	eight hundred
900	nine hundred

Symbol	Word
1 000	one thousand

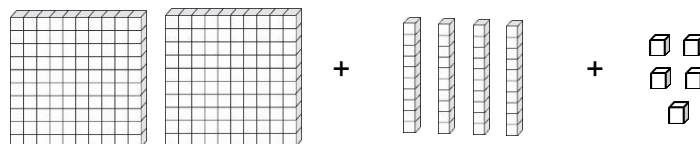
Questions:

- What are the two ways of writing numbers?
- How is 784 read?
- How do you write it as number words?
- How are the numbers in the Place Value Chart read?

Thousands	Hundreds	Tens	Ones
	7	0	8
	9	2	0
1	0	0	0

- Demonstrate to the pupils how to play Stack-It-Up using Flashcards by following these steps:

- The teacher will use the Base Ten Blocks to represent numbers to be shown to the pupils.



- Let the pupils find the flashcards that contains the numbers that represent the set of figures by value.

200

40

5

- Stack up the three numbers.

200
40
5

- Let the pupils read the number.

245

- Ask somebody to write the number in words.
- Provide as many examples as possible for the pupils to master reading and writing numbers.

Questions:

- Did you enjoy the activity?
- Were you able to read the number after stacking them up?
- Did you write the number word correctly?
- What are the two ways of writing numbers?

Part 4B**Item 1****Questions**

1. How are the numbers in the Place Value Chart read?

Given	Thousands	Hundreds	Tens	Ones
A	1	0	0	0
B		8	0	8
C		7	1	9
D		3	6	0
E		4	0	2

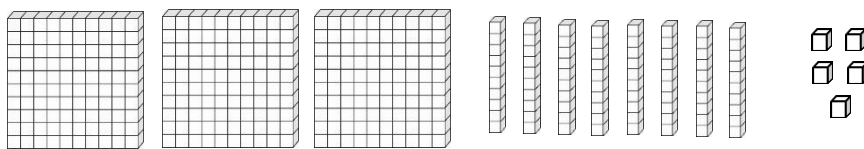
Answers to Item 1

1. Each number in the Place Value Chart will be read by the pupils as:

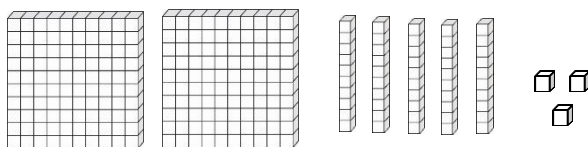
- A. one thousand
- B. eight hundred eight
- C. seven hundred nineteen
- D. three hundred sixty
- E. four hundred two

Part 4C**Item 2****Questions**

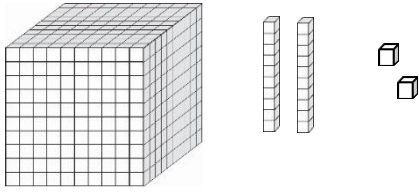
1. Write the numeral represented by the group of Base Ten Blocks shown.



2. Write the numeral represented by the group of Base Ten Blocks shown.



3. Write the numeral represented by the group of Base Ten Blocks shown.



Answers to Item 2

1. 385
2. 253
3. 1 022

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: 5 minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 3

Visualizing and Writing Three-Digit Numbers in Expanded Form

Key Idea

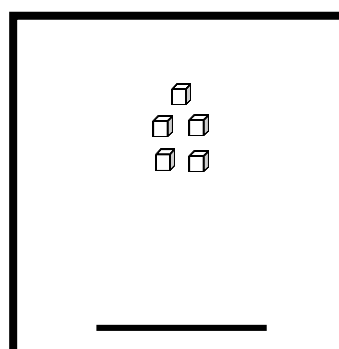
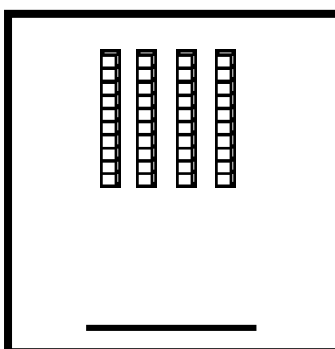
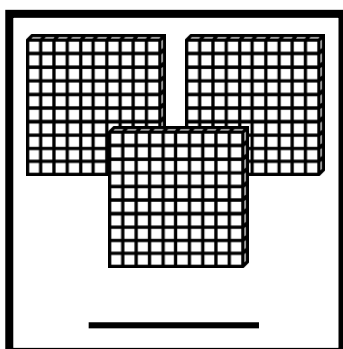
Visualize and write three-digit numbers in expanded form.

Lesson Component 1 (Lesson Short Review)

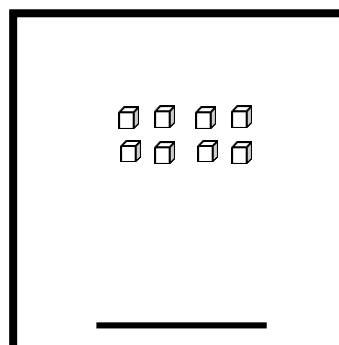
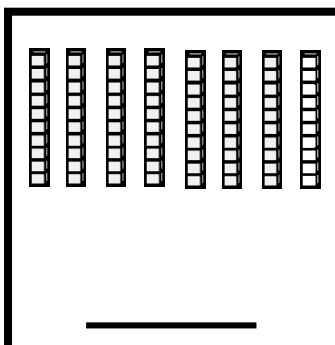
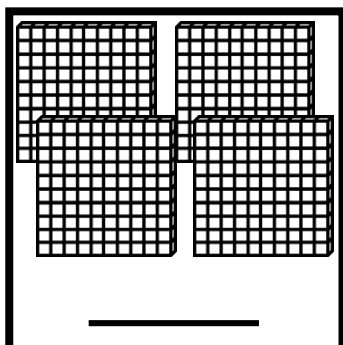
Time: 10 minutes

Directions

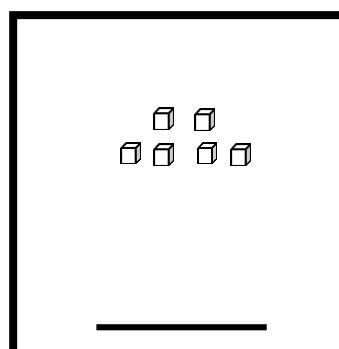
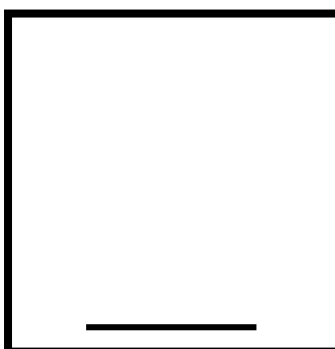
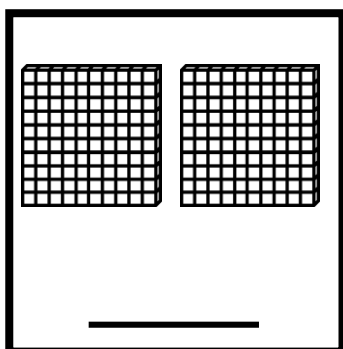
1. Write the number represented by each of the group of figures using Base Ten Blocks.



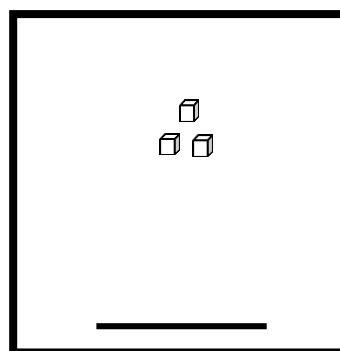
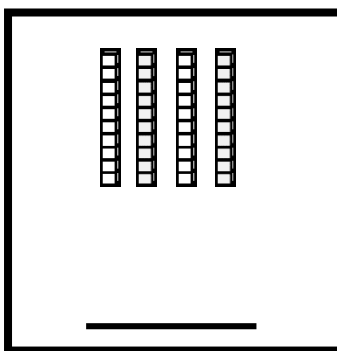
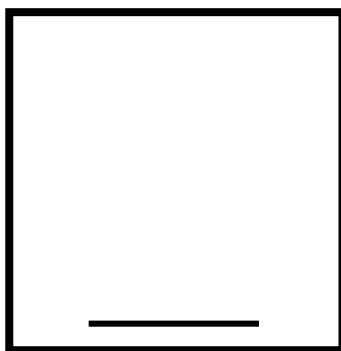
2. Give the number illustrated by each of the group of figures.



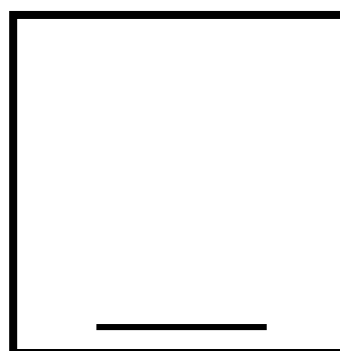
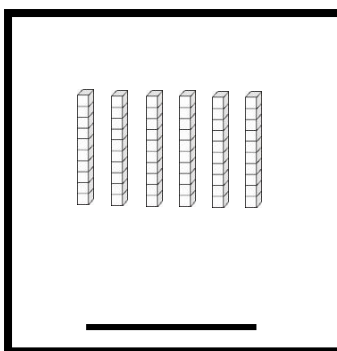
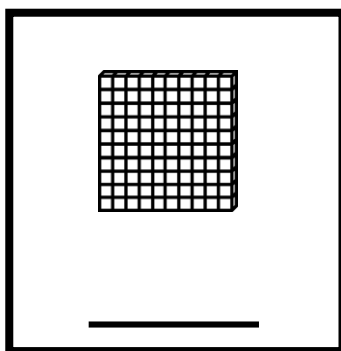
3. Tell the number represented by each of the group of blocks.



4. Write the number represented by each of the group of figures using Base Ten Blocks.

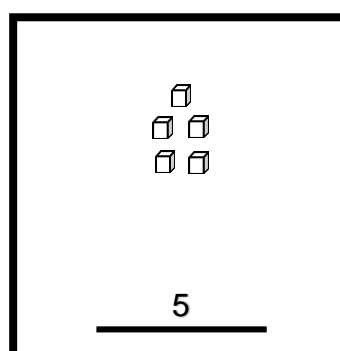
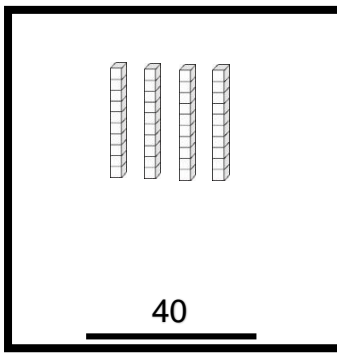
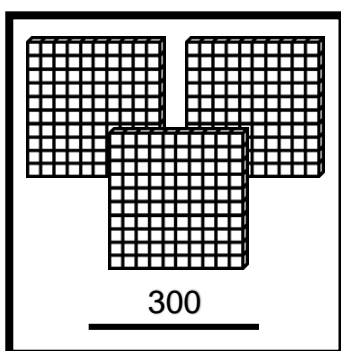


5. Give the number illustrated by each of the group of figures.

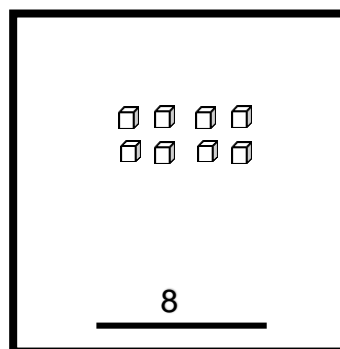
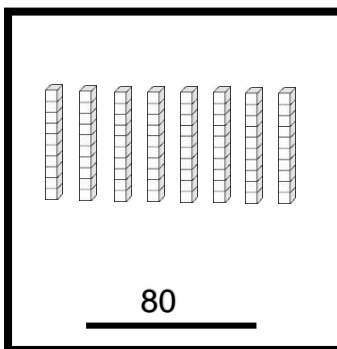
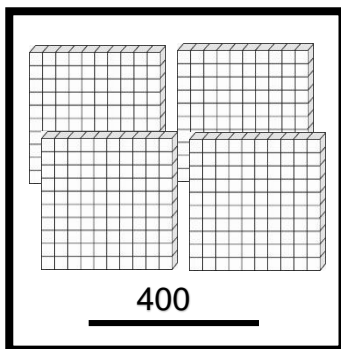


Answers

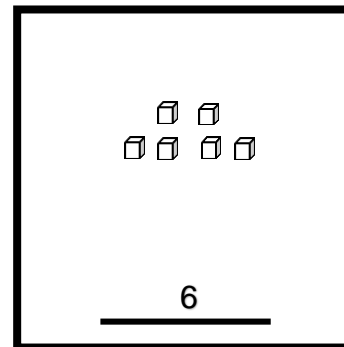
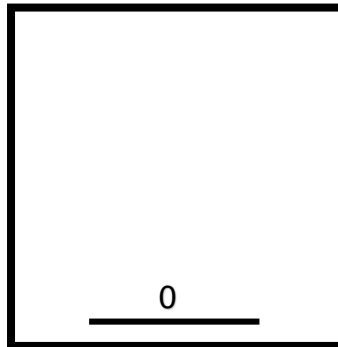
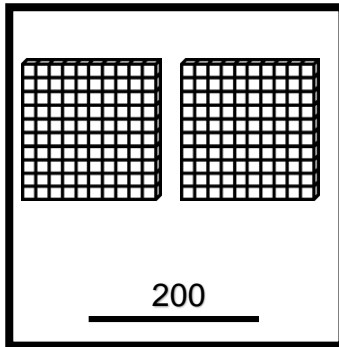
1.



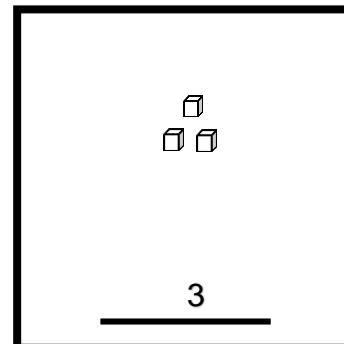
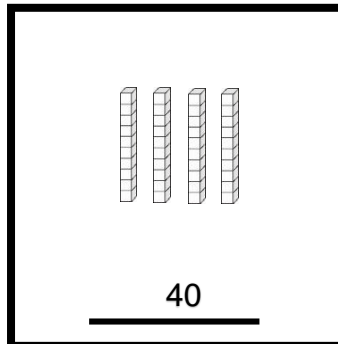
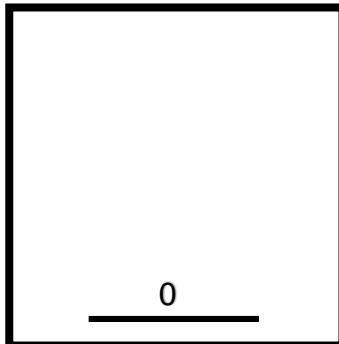
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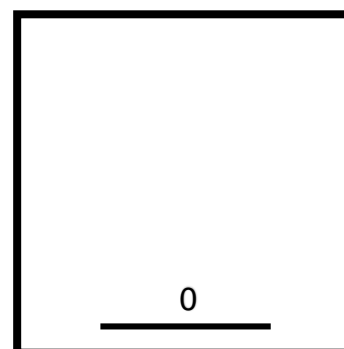
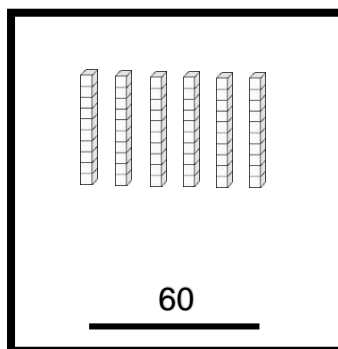
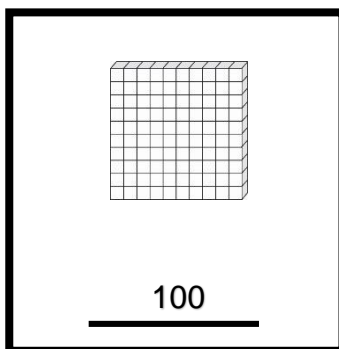
3.



4.



5.



Lesson Component 2 (Lesson Purpose/Intention)

Time: 5 minutes

Teacher states:

Using the Base Ten Blocks, we were able to represent numbers grouped by place values. Today, we will use counters and Place Value Chart to visualize and write three-digit numbers in expanded form.

Lesson Component 3 (Lesson Language Practice)

Time: 10 minutes

Key words/terms are:

- Counters
- Expanded Form
- Standard Form

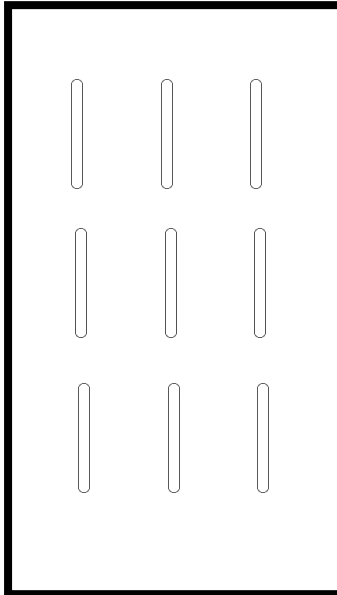
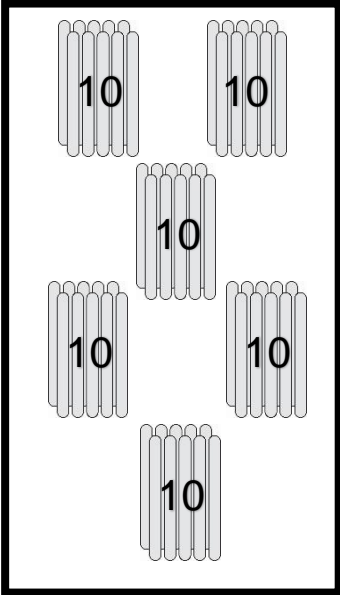
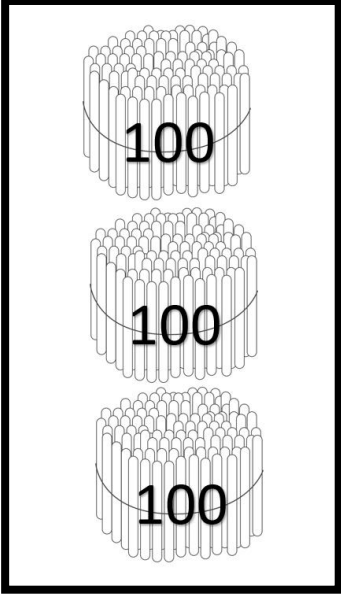
Lesson Component 4 (Lesson Activity)

Time: 30 minutes

Part 4A

Stem for Items 1 and 2

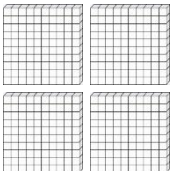
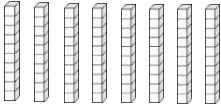

1. Present these popsicle sticks counters.



+ +

Questions:

- How many groups of 100 popsicle sticks are there in the first box?
 - How many groups of 10 popsicle sticks are there in the second box?
 - How about the number of popsicle sticks in the third box?
 - Write the number of popsicle sticks in each box as the sum to come up with the expanded form.
 - Provide other examples and use other counters.
2. Give the expanded form of the given number by showing the figures using the Base Ten Blocks in the Place Value Chart.

Standard Form	Hundreds	Tens	Ones
488			

Questions:

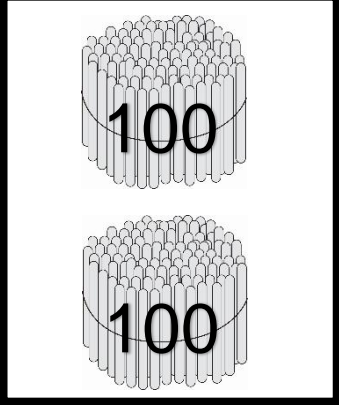
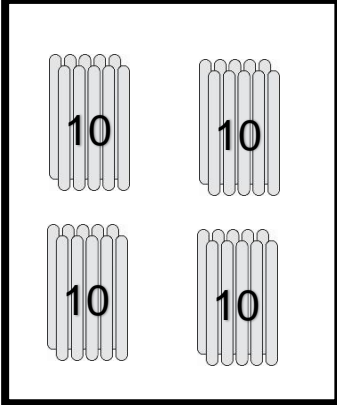
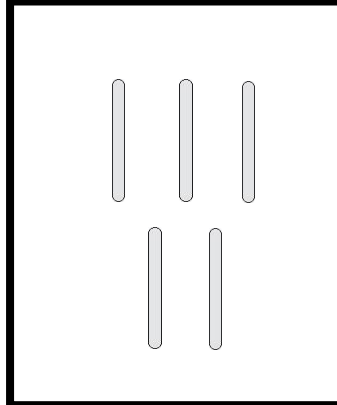
- What is the given number?
- How many flats are there in the hundreds column?
- How many longs do you see?
- How many unit blocks are there?
- Write the value as the sum to show the expanded form of the given number.
- Provide other given numbers that pupils may work for them to master visualizing and writing the expanded form of numbers.

Part 4B

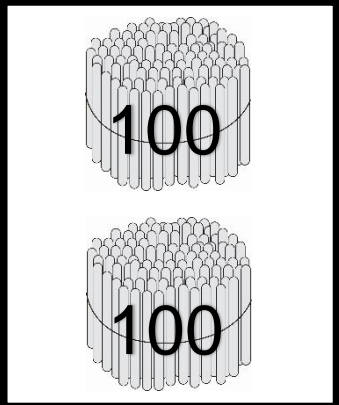
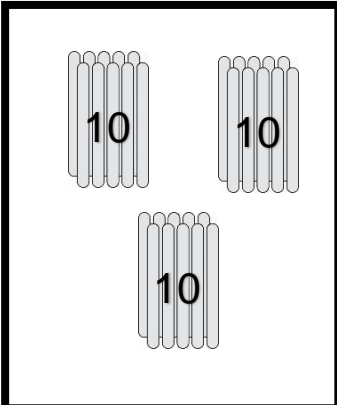
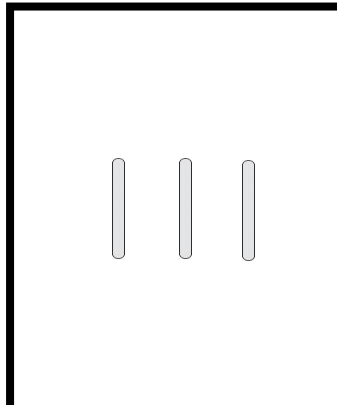
Item 1

Directions

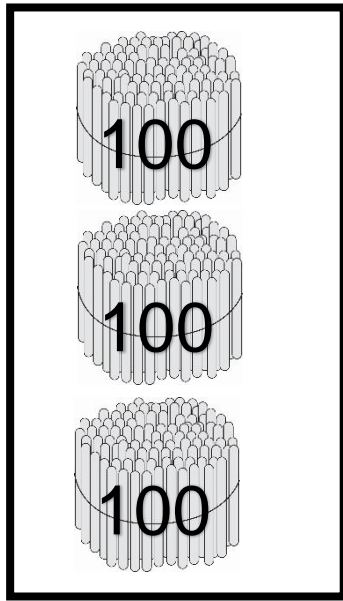
- Write the expanded form by supplying the value of figures in the box below each illustration.

				
<input type="text"/>	+	<input type="text"/>	+	<input type="text"/>

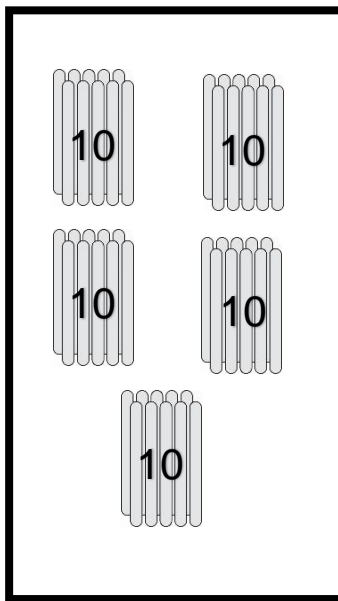
- Write the value of figures in the box below each illustration to come up with the expanded form.

				
<input type="text"/>	+	<input type="text"/>	+	<input type="text"/>

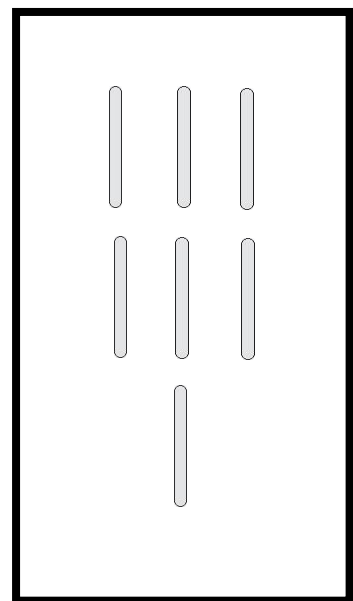
3. Write the expanded form by supplying the value of figures in the box below each illustration.



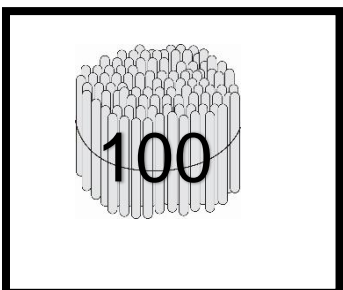
+



+



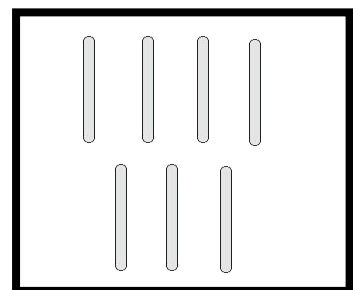
4. Write the value of figures in the box below each illustration to come up with the expanded form.



+



+



Answers to Item 1

1. $200 + 40 + 5$


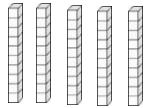
2. $200 + 30 + 3$

3. $300 + 50 + 6$

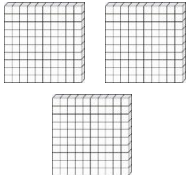

4. $100 + 0 + 7$ or $100 + 7$

Part 4C**Item 2****Directions**

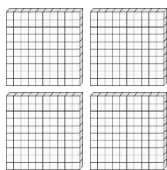
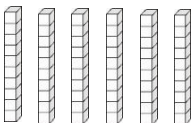

1. Write the expanded form of the given numbers. Use the illustration in the Place Value Chart as your guide.

Standard Form	Hundreds	Tens	Ones
150			

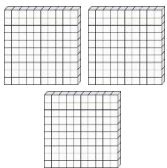
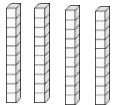

2. Write the expanded form of the blocks shown in the Place Value Chart.

Standard Form	Hundreds	Tens	Ones
308			

3. Write the expanded form of the given numbers. Use the illustration in the Place Value Chart as your guide.

Standard Form	Hundreds	Tens	Ones
463			

4. Write the expanded form of the given numbers. Use the illustration in the Place Value Chart as your guide.

Standard Form	Hundreds	Tens	Ones
342			

Answers to Item 2

1. $100 + 50 + 0$ or $100 + 50$
2. $300 + 0 + 8$ or $300 + 8$
3. $400 + 60 + 3$
4. $300 + 40 + 2$

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 4

Comparing Numbers Using Relation Symbols and Ordering Numbers Up to 1 000 in Increasing or Decreasing Order

Key Idea

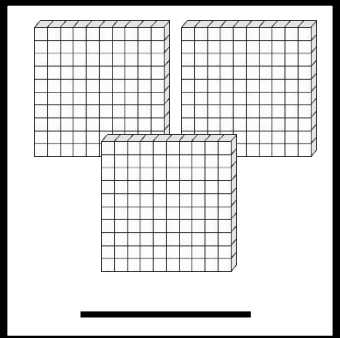
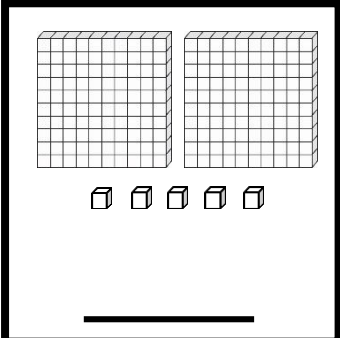
Compare numbers using relation symbols and orders numbers up to 1 000 in increasing or decreasing order

Lesson Component 1 (Lesson Short Review)

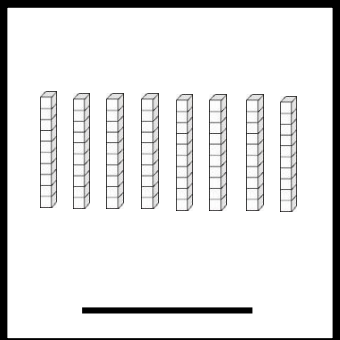
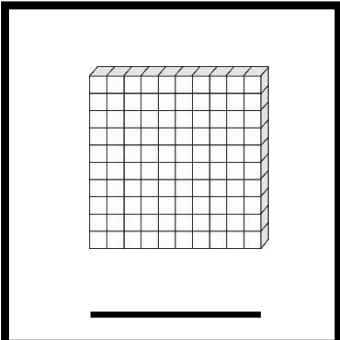
Time: 10 minutes

Questions

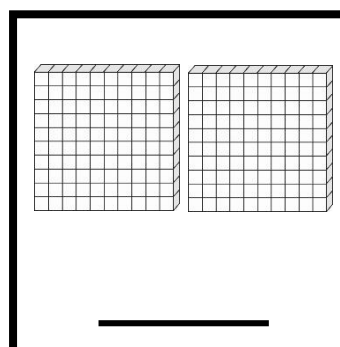
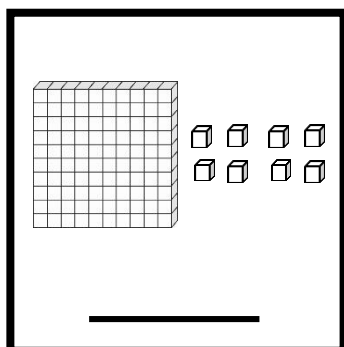
1. Count the blocks in each set. Write the number it represents on the line provided below.
Then, compare using $>$, $<$ or $=$ symbols. Which symbol fits the box?

 _____	<div style="border: 2px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	 _____
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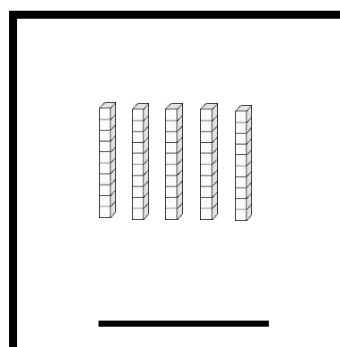
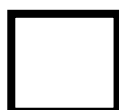
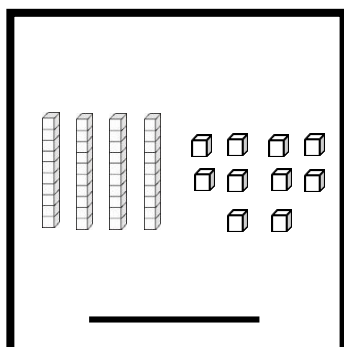
2. Count the blocks in each set. Write the number it represents on the line provided below.
Then, compare using $>$, $<$ or $=$ symbols. Which symbol fits the box?

 _____	<div style="border: 2px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	 _____
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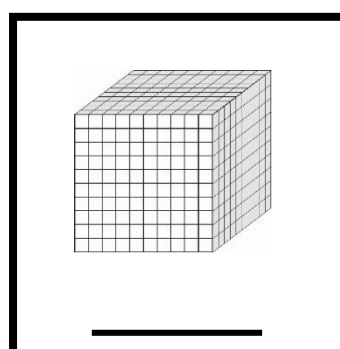
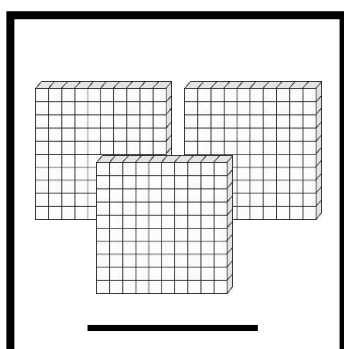
3. Count the blocks in each set. Write the number it represents on the line provided below.
Then, compare using $>$, $<$ or $=$ symbols. Which symbol fits the box?



4. Count the blocks in each set. Write the number it represents on the line provided below.
Then, compare using $>$, $<$ or $=$ symbols. Which symbol fits the box?

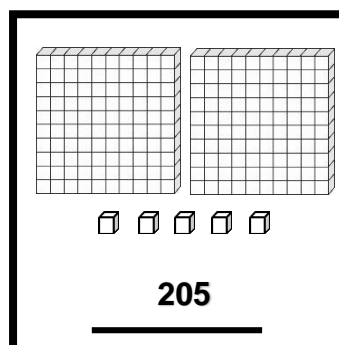
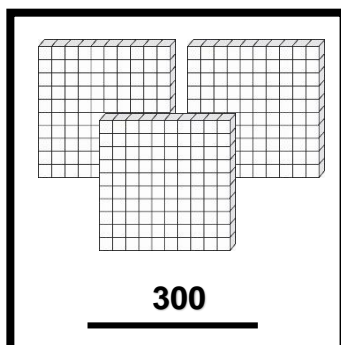


5. Count the blocks in each set. Write the number it represents on the line provided below.
Then, compare using $>$, $<$ or $=$ symbols. Which symbol fits the box?

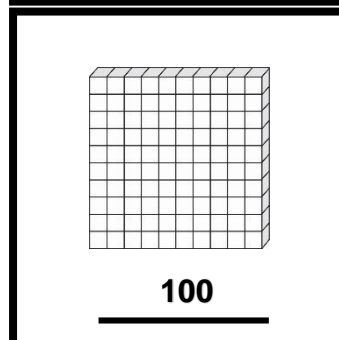
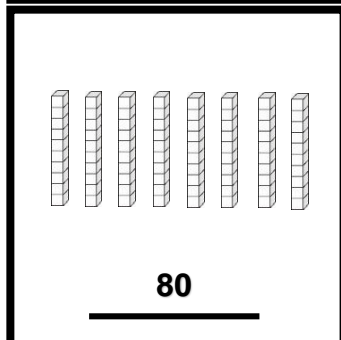


Answers

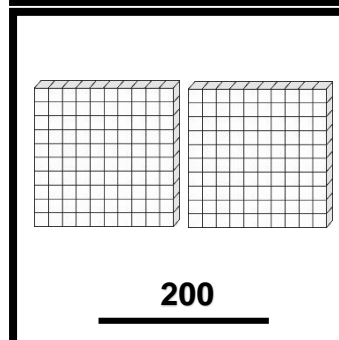
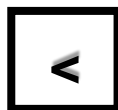
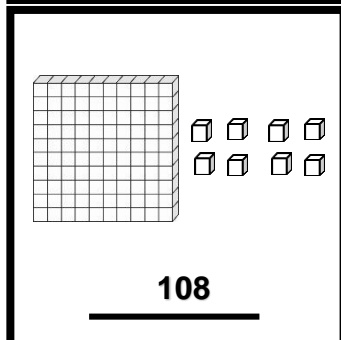
1.



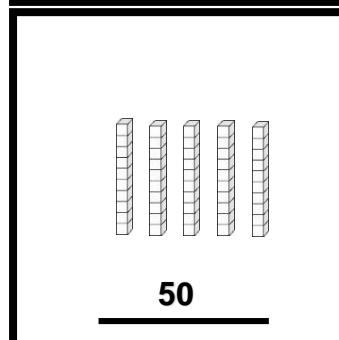
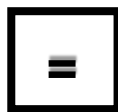
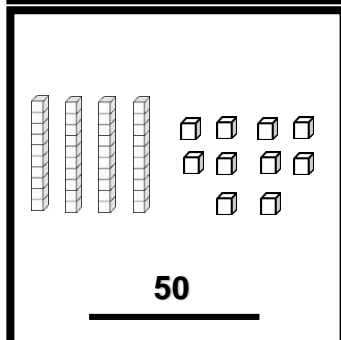
2.



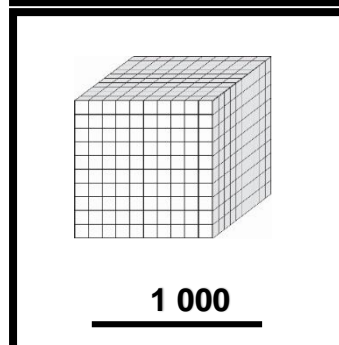
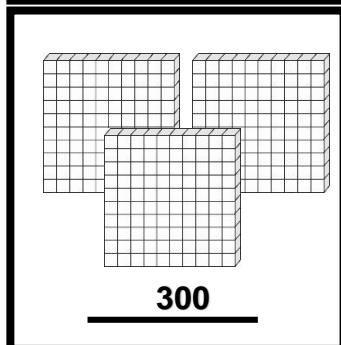
3.



4.



5.



Lesson Component 2 (Lesson Purpose/Intention)Time: **5** minutes

Teacher states:

To represent numbers, we used Base Ten Blocks. Numbers formed were compared using >, <, or = symbols. Today, we will use the Trading Board both to compare and arrange numbers up to 1 000 in increasing and decreasing order.

Lesson Component 3 (Lesson Language Practice)Time: **10** minutes

Key words/terms are:

- Decreasing Order
- Increasing Order
- Ordering Numbers
- Relation Symbols

Lesson Component 4 (Lesson Activity)Time: **30** minutes**Part 4A****Stem for Items 1 and 2**

1. Present the Trading Board and let the pupils plot the corresponding chips to represent the given numbers as shown below. Once the chips are plotted, ask them to compare the numbers. Put emphasis on comparing the number of chips starting from the highest place value to the least.

Given Number	Thousands	Hundreds	Tens	Ones
168		○	○ ○ ○ ○ ○ ○	○ ○ ○ ○ ○ ○ ○ ○
208		○ ○		○ ○ ○ ○ ○ ○ ○ ○

168

<

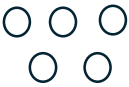








208

Questions:

- a. In the given number 168, how many blue chips are plotted on the Trading Board?
- b. In the given number 208, how many blue chips are plotted?
- c. Which is more, 1 blue chip which is equal to 100 or 2 blue chips which is equals to 200?

- d. Write the correct relation symbol to compare the given numbers. Is it $>$, $<$, or $=$ symbol?
 e. Provide another set of numbers to be compared.

2. Applying what you discovered in comparing numbers, arrange the given numbers in increasing order.

Given Number	Thousands	Hundreds	Tens	Ones
566				
267				
355				

267

355

566

Questions:

- In the given number 566, how many blue chips are plotted on the Trading Board?
- In the given number 267, how many blue chips are plotted?
- In the given number 355, how many blue chips are on the board?
- Since we are to arrange the numbers in increasing order, we are going to list from the least to greatest pattern. In what number is the least number of blue chips plotted?
- Which number has more blue chips than 267?
- How will you write the numbers from least to greatest?
- Provide another set of numbers to be compared but this time in decreasing order.

Part 4B**Item 1****Questions**

1. Study the given numbers listed on the Trading Board. Plot the corresponding chips. Compare them. Which relation symbol fits in the box?

Given Number	Thousands	Hundreds	Tens	Ones
845				
854				

845		854
-----	--	-----



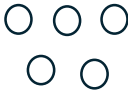



2. Study the given numbers listed on the Trading Board. Plot the corresponding chips. Compare them. Which relation symbol fits in the box?

Given Number	Thousands	Hundreds	Tens	Ones
990				
1 000				

990		1 000
-----	--	-------




Answers to Item 1

1. Study the given numbers listed on the Trading Board. Plot the corresponding chips. Compare them. Which relation symbol fits in the box?

Given Number	Thousands	Hundreds	Tens	Ones
845				
854				

845	<	854
-----	---	-----

2. Study the given numbers listed on the Trading Board. Plot the corresponding chips. Compare them. Which relation symbol fits in the box?

Given Number	Thousands	Hundreds	Tens	Ones
990				
1 000				

990	<	1 000
-----	---	-------

Part 4C**Item 2****Directions**

1. Applying what you discovered in comparing numbers, arrange the given numbers in increasing order.










Given Number	Thousands	Hundreds	Tens	Ones
345				
354				
355				

2. Applying what you discovered in comparing numbers, arrange the given numbers in decreasing order.

Given Number	Thousands	Hundreds	Tens	Ones
102				
120				
112				

Answers to Item 2

1.

Given Number	Thousands	Hundreds	Tens	Ones
345				
354				
355				

345

354

355

2.

Given Number	Thousands	Hundreds	Tens	Ones
102				
120				
112				

120

112

102

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: 5 minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?

- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 5

Determining Missing Term/s in a Given Continuous Pattern using Two Attributes

Key Idea

Determine missing term/s in a given continuous pattern using two attributes

Lesson Component 1 (Lesson Short Review)

Time: 10 minutes

Questions

1. Examine the set of numbers below. What will be the next number to continue the pattern?

1, 2, 3, 4, 5, 6, 7, _____

2. . Study the set below. What will be the next term to continue the pattern?

10, 9, 8, 7, 6, 5, _____

3. Study the set of numbers below. What will be the next number to continue the pattern?

0, 5, 10, 15, 20, _____

4. Study the set of numbers below. What will be the next number to continue the pattern?

2, 4, 6, 8, 10, 12, _____

Answers

1. 8
2. 4
3. 25
4. 14

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

A number pattern is the repeated arrangement of numbers in each set. By finding the pattern, we can determine the missing term/ s in a given continuous pattern using two attributes.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Continuous Pattern
- Decreasing
- Increasing
- Number Pattern
- Term

Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A

Stem for Items 1 and 2

1. Look closely to the numbers in the set.

4, 7, 10, 13, 16, 19, _____

Questions:

- a. What is the first term in the set of numbers?
- b. What is the second term?
- c. How about the third? Fourth? Fifth? Sixth? Seventh?
- d. Do you see any pattern?
- e. Are the numbers increasing? By how many?
- f. What should be the seventh term to continue the pattern?
- g. Provide another set of numbers for pupils to analyze the pattern which leads them in

determining the missing term.

2. Examine closely the numbers in the set.

40, 35, 30, 25, ____, 15, ____

Questions:

- What is the first term in the set of numbers?
- What is the second term?
- How about the third? Fourth? Fifth? Sixth?
- Do you see any pattern?
- Are the numbers decreasing? By how many?
- What should be the fifth term to continue the pattern?
- Provide another set of numbers for pupils to analyze the pattern which leads them in determining the missing term.

Part 4B

Item 1

Questions

Find the pattern and supply the missing term.

1. 70, 60, 50, 40, ____, 20

2. 25, 30, 35, 40, ____, 50

3. 200, 180, 160, ____, 120

Answers to Item 1

1. 30
2. 45
3. 140

Part 4C

Item 2

Questions

Find the pattern then supply the missing terms.

1. **13, 20, 27, 34, __, 48, __**

2. **105, 90, 75, __, 45, __**

3. **150, 120, 90, __, 30, __**

4. **3, 4, 6, 8, 9, 12, __, 16, 15**

Answers to Item 2

1. 41 and 55
2. 60 and 30
3. 60 and 0
4. 12

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 6

Determining the Missing Terms using One Attribute in a Given Continuous Pattern and in a Given Repeating Pattern

Key Idea

Determine the missing terms using one attribute in a given continuous pattern and in a given repeating pattern

Lesson Component 1 (Lesson Short Review)

Time: 10 minutes

Questions

1. Examine the set of numbers below. What will be the next number to continue the pattern?

1, 2, 3, 1, 2, 3, 1, ____

2. . Study the set below. What will be the next term to continue the pattern?

10, 9, 10, 9, 10, ____

3. Examine the set of numbers below. What will be the next number to complete the pattern?

5, 5, 10, 5, 5, ____

4. Study the set of numbers below. What will be the next number to continue the pattern?

2, 4, 2, 4, 2, 4, 2, ____

Answers

1. 2
2. 9
3. 10
4. 4

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

A number pattern is the repeated arrangement of numbers in each set. By finding the pattern, we can determine the missing term/ s in a given continuous and repeating pattern using one attribute.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Continuous Pattern
- Number Pattern
- Repeating Pattern
- Sequence
- Term

Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A

Stem for Items 1 and 2

1. Look closely to the numbers in the set.

2, 4, 6, 2, 4, 6, __, 4, __

Questions:

- a. What is the first term in the set of numbers?
- b. What is the second term?
- c. How about the third?
- d. What is the fourth term? Fifth? Sixth?
- e. Do you find any pattern?
- f. Are the numbers increasing? By how many?
- g. What should be the seventh term to follow the pattern?

h. Provide another set of numbers for pupils to analyze the pattern which leads them in determining the missing term.

2. Examine closely the numbers in the set.

40, 35, 40, 30, ____, 25, ____

Questions:

- What is the first term in the set of numbers?
- What is the second term?
- How about the third? Fourth? Fifth? Sixth?
- Do you see any pattern?
- Are the numbers decreasing? By how many?
- What should be the fifth term to follow the pattern?
- What should be the seventh term?
- Provide another set of numbers for pupils to analyze the pattern which leads them in determining the missing term.

Part 4B

Item 1

Questions

Find the pattern and supply the missing term.

1. 7, 6, 5, 7, 6, 5, ____, 6, ____

2. 12, 15, 12, 15, ____, 15, ____

3. 4, 8, 12, 16, ____, 24, ____

Answers to Item 1

1. 7 and 5
2. 12 and 12
3. 20 and 28

Part 4C

Item 2

Questions

Find the pattern then supply the missing terms.

1.

2, 12, 2, 22, 2, 32, __, __, 2, 52

2.

7, 14, 10, 14, 13, 14, __, __, 19

3.

20, 25, 30, 35, 40, __, 50, __

4.

100, 88, 76, 64, 52, __, 28, __

5.

20, 40, 60, 80, 20, 40, __, 80, __

Answers to Item 2

1. 2 and 42
2. 16 and 14
3. 45 and 55
4. 40 and 16
5. 60 and 20

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 7

Visualizing and Counting Numbers by 10s, 50s, 100s

Key Idea

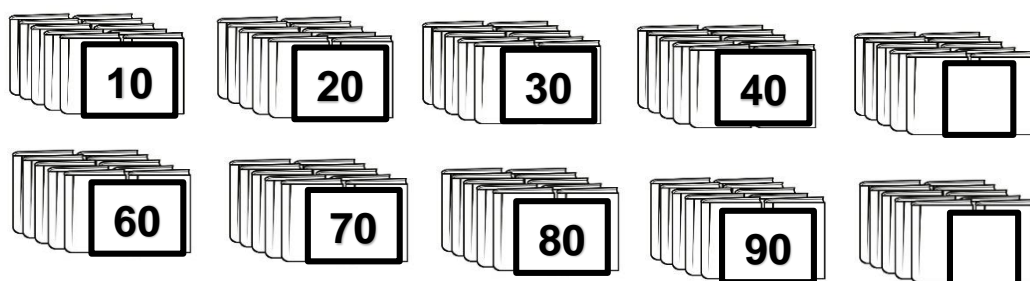
Visualize and count numbers by 10s, 50s, 100s

Lesson Component 1 (Lesson Short Review)

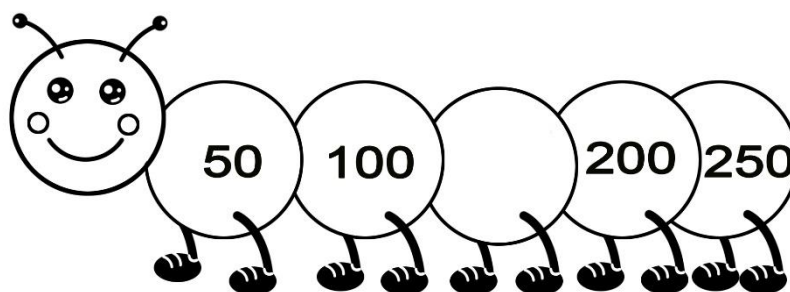
Time: 10 minutes

Directions

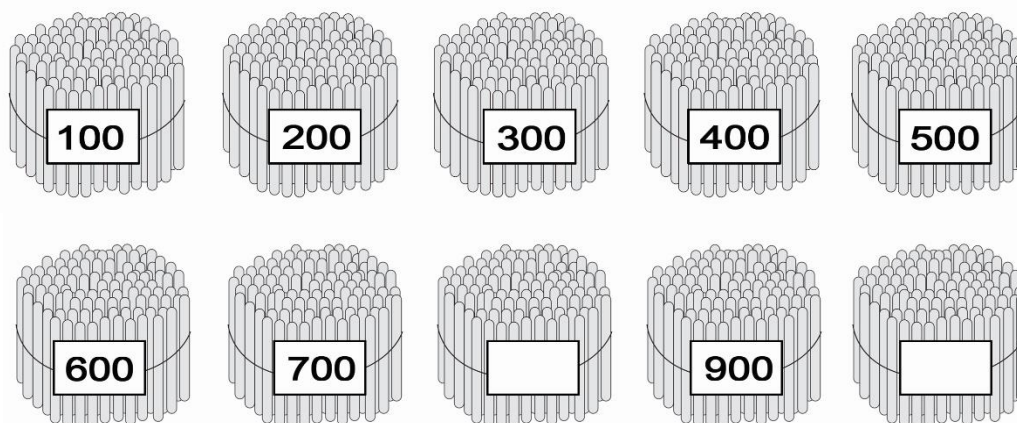
1. Fill in the boxes with the missing numbers.



2. What is the missing number that will complete the pattern?



3. Fill in the boxes with the missing numbers.



Answers

1. 50 and 100
2. 150
3. 800 and 1 000

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

Number pattern is the series of numbers in a set that follow a rule from one number to another. Skip counting using number charts and figures made visualizing and counting by 10s, 50s, and 100s.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Number Pattern/ Sequence
- Skip Counting

Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A

Stem for Items 1 and 2

1. Study the given charts.

SKIP COUNTING BY 10

10 20 30 40 50
60 70 80 90 100

SKIP COUNTING BY 50

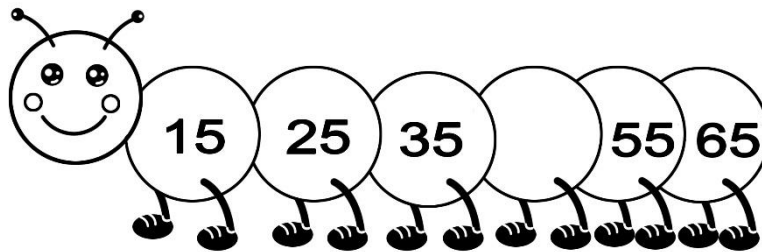
50 100 150 200 250
300 350 400 450 500

SKIP COUNTING BY 100

100 200 300 400 500
600 700 800 900 1000

Questions:

- What do you notice on the first chart?
 - What is the first given number?
 - How many are added from the first given number to come up with the second number?
Second to third? Third to fourth?
 - Is the same number added from the previous number to the number to the next?
 - Ask the same set of questions to the second and third charts.
2. Look closely to the figures in the set.



Questions:

- What is the first given number? Second?
- How many are added from the first given number to come up with the second number?
Second to third?
- Is the same number added from the previous number to the number to the next?
- How many should be added to 35 to come up with the missing number?
- Ask the same set of questions to the second and third chart.

Part 4B

Item 1

Questions

1. Count by 10s to complete the given set of numbers.

70, 80, 90, 100, 110, 120, ____

2. Count by 50s to complete the given set of numbers.

150, 200, 250, 300, 350, ____

3. Count by 100s to complete the given set of numbers.

400, 500, 600, 700, 800, _____

Answers to Item 1

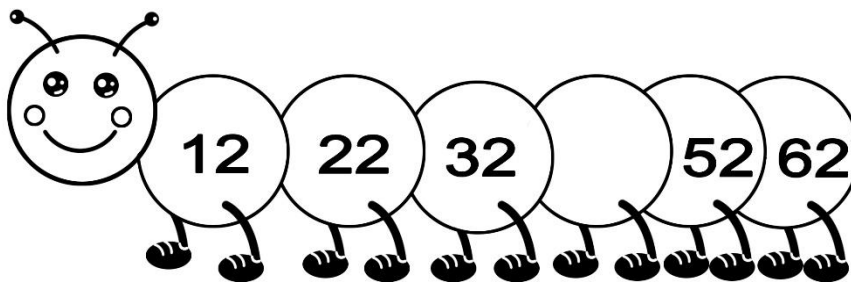
1. 130
2. 400
3. 900

Part 4C

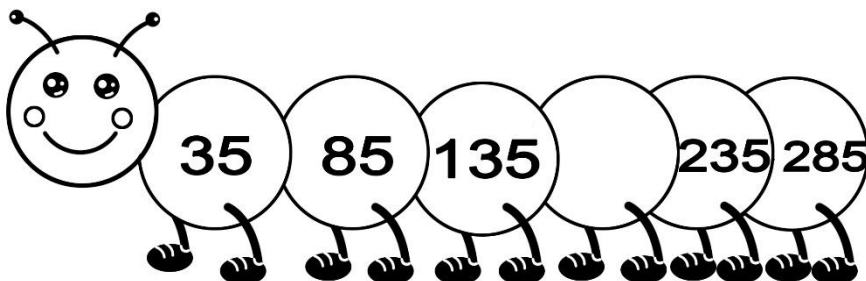
Item 2

Questions

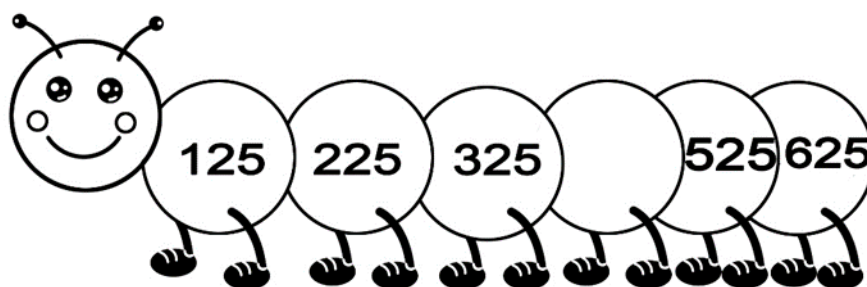
1. Count by 10s to complete the given set of numbers.



2. Count by 50s to complete the given set of numbers.



3. Count by 100s to complete the given set of numbers.



Answers to Item 2

1. 42
2. 185
3. 425

Lesson Component 5 (Lesson Conclusion – Reflection/Metacognition on Pupil Goals)

Time: 5 minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 8

Comparing Using Relational Symbol and Arranging in Increasing or Decreasing Order the Unit Fractions

Key Idea

Compare using relational symbol and arrange in increasing or decreasing order the unit fractions

Lesson Component 1 (Lesson Short Review)

Time: 10 minutes

Questions

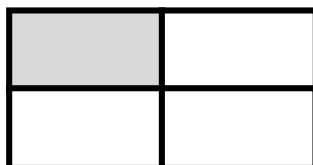
1. What part of the whole is shaded blue?



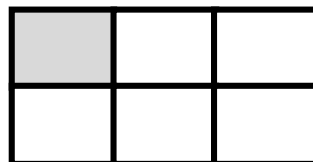
2. What part of the whole is shaded blue?



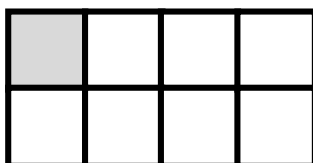
3. What part of the whole is shaded blue?



4. What part of the whole is shaded blue?



5. What part of the whole is shaded blue?



Answers

1. $\frac{1}{2}$
2. $\frac{1}{3}$
3. $\frac{1}{4}$
4. $\frac{1}{6}$
5. $\frac{1}{8}$

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

In the previous activity, we recalled the unit fractions. Today, we will learn to compare the unit fractions using relational symbol represented by Alligator Al. We will also arrange them in increasing and decreasing order using cut-outs.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

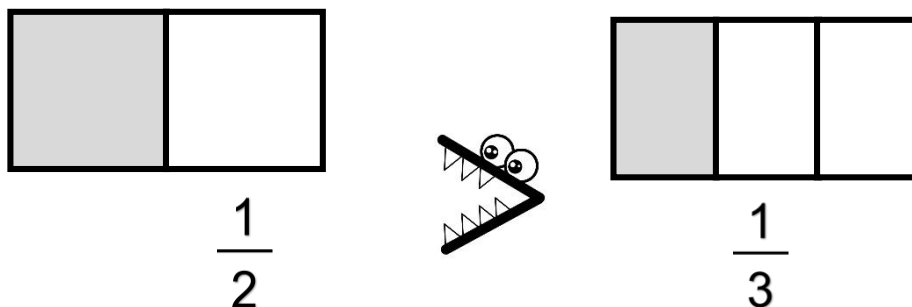
- Alligator Al
- Decreasing Order
- Increasing Order
- Unit Fraction

Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A**Stem for Items 1 and 2**

1. Compare the unit fractions below using Alligator Al.

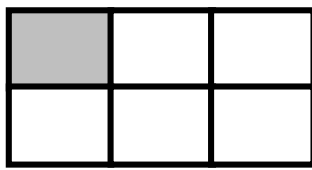
**Questions:**

- a. What part of the whole is shaded blue in the figure at the left?
- b. What part of the whole is shaded blue in the figure at the right?
- c. Compare the shaded regions of the figures?

d. Which is bigger?

e. What relation symbol should be used if the first given fraction is bigger than the other?

f. Let us have another example. Look closely at the figures below.



$$\frac{1}{6}$$



$$\frac{1}{4}$$

g. What part of the whole is shaded blue in the figure at the left?

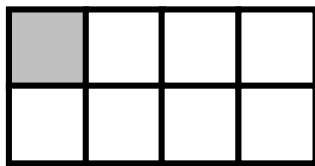
h. What part of the whole is shaded blue in the figure at the right?

i. Compare the shaded regions of the figures?

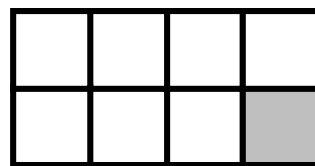
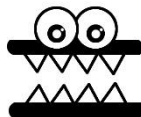
j. Which is bigger?

k. What relation symbol should be used if the first given fraction is smaller than the other?

l. Let us have another example. Look closely at the figures below.



$$\frac{1}{8}$$



$$\frac{1}{8}$$

m. What part of the whole is shaded blue in the figure at the left?

n. What part of the whole is shaded blue in the figure at the right?

o. Compare the shaded regions of the figures?

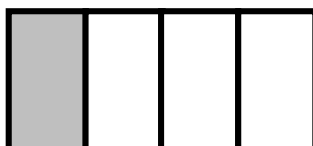
p. Which is bigger?

q. What relation symbol should be used if the fractions are the same?

2. After completing the tasks for comparing 2 unit fractions, let us level up by adding another fraction. This time we are to arrange fractions in increasing order.



$$\frac{1}{2}$$



$$\frac{1}{4}$$



$$\frac{1}{3}$$

Questions:

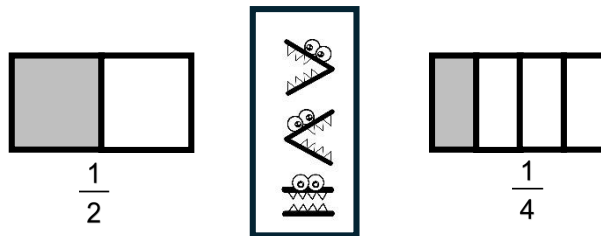
- What part of the whole is shaded blue in the leftmost figure?
- What part of the whole is shaded blue in the figure at the middle?
- What part of the whole is shaded blue in the rightmost figure?
- Focusing on the blue regions, which is smallest?
- If $\frac{1}{2}$ is the smallest, what is the biggest?
- How should the fractions be listed from smallest to biggest?

Part 4B

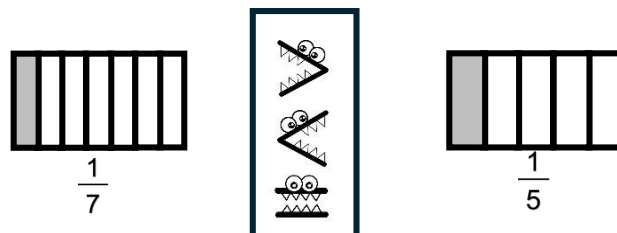
Item 1

Questions

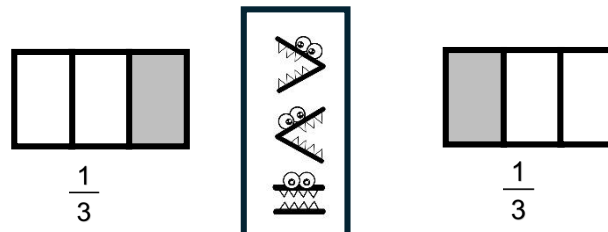
- Compare the unit fractions below by encircling the correct Alligator AI symbol in the middle box.



- Encircle the best Alligator AI symbol to be used to compare the given unit fractions.



- Which Alligator AI symbol in the middle box fits in comparing the unit fractions below?

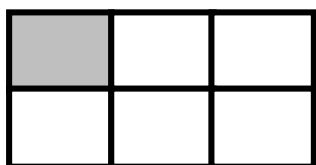


Answers to Item 1

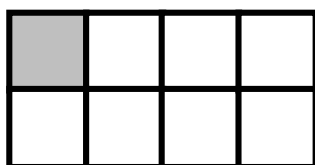
- 1.
 - 2.
 - 3.
-
- Answers 1, 2, and 3 correspond to the large, medium, and small Alligator AI symbols respectively, as shown in the figure.

Part 4C**Item 2****Questions**

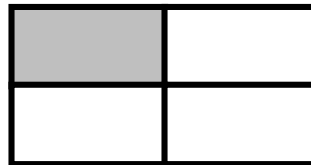
1. Arrange the following fractions in increasing order. Rewrite the fraction symbols in the box below the given fractions.



$$\frac{1}{6}$$



$$\frac{1}{8}$$



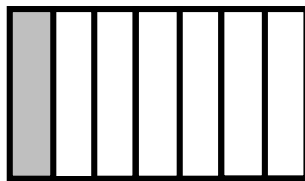
$$\frac{1}{4}$$

Answer: _____, _____, _____

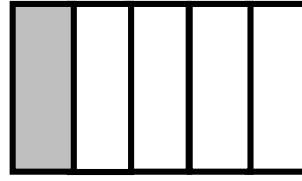
2. Arrange the following fractions in decreasing order. Rewrite the fraction symbols in the box below the given fractions.



$$\frac{1}{4}$$



$$\frac{1}{7}$$



$$\frac{1}{5}$$

Answer: _____, _____, _____

Answers to Item 2

1. $\frac{1}{8}$ $\frac{1}{6}$ $\frac{1}{4}$

2. $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{7}$

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: 5 minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 9

Visualizing, Representing, and Adding Two-Digit by Three-Digit and Three-Digit by Three-Digit Numbers with Sums up to 1000 without and with Regrouping

Key Idea

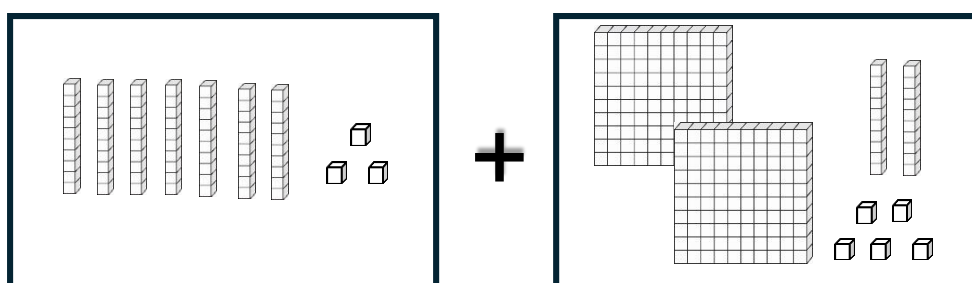
Visualize, represent, and add 2-digit by 3-digit and 3-digit by 3-digit numbers with sums up to 1000 without and with regrouping

Lesson Component 1 (Lesson Short Review)

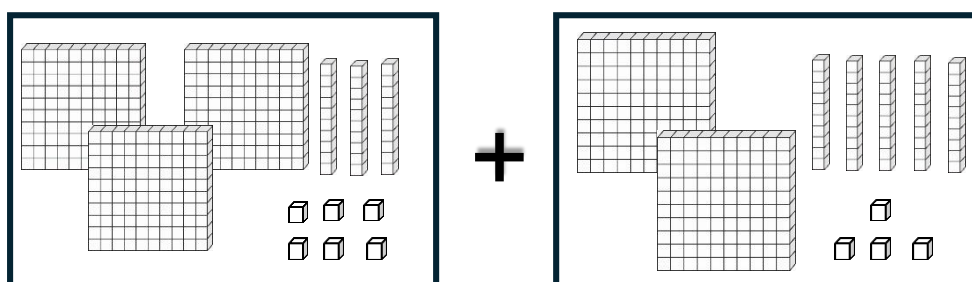
Time: 10 minutes

Questions

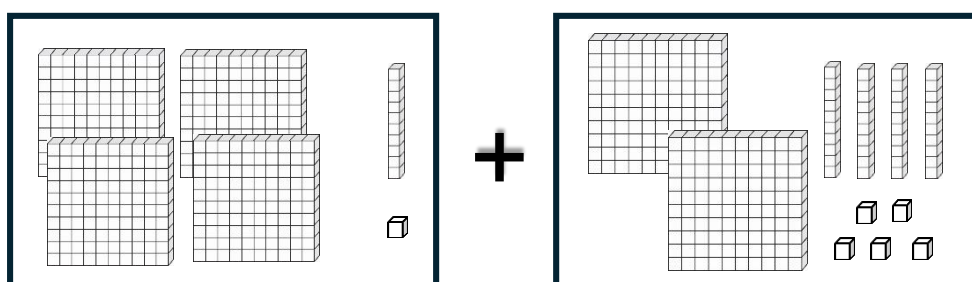
1. What is the sum of the two sets?



2. Find the sum of the two sets.



3. Add the two sets of blocks.



Answers

1. 298
2. 590
3. 656

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

We learned about using Base Ten Blocks, illustrations, and counters to represent numbers. Today, we will use the Trading Board Game to help you visualize addition of numbers with sums up to 1 000 without and with regrouping.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:






- Addends
- Addition
- Addition With Regrouping
- Addition Without Regrouping
- Colored Chips (Yellow, Blue, Red, and White)
- Sum

Lesson Component 4 (Lesson Activity)

Time: **30** minutes







Part 4A**Stem for Items 1 and 2**

1. Bring out the Trading Board. Show it to the class. Ask a pupil to give the highest 3-digit number that can be formed using the digits 1, 4, and 5. Write and plot the corresponding chips on the first row of the Trading Board. Then, ask another pupil to give the least 2-digit that can be formed using the same digits. Plot the corresponding chips on the second row of the Trading Board. Ask the pupils to get the sum of the formed numbers.

Given Number	Thousands	Hundreds	Tens	Ones
541				
14				
TOTAL				

Questions:

- a. Let us count the chips by column. In the ones column, there is 1 white chip on the first row and 4 white chips on the second row, how many white chips are there in all? Write the answer on the third row.
- b. In the tens column, there are 4 red chips on the first row and 1 red chip on the second row, how many red chips are there in all? Write the answer on the third row.
- c. In the hundreds column, there are 5 blue chips on the first row and no blue chip on the second row, how many blue chips are there in all? Write the answer in the third row.
- d. What is the sum of the numbers?
- e. Provide another set of 3-digit addends and let the pupil add without regrouping using the Trading Board.
2. Read the given numbers and plot the corresponding chips.

Given Number	Thousands	Hundreds	Tens	Ones
246				
439				
TOTAL				

Questions:

- a. Let us count the chips by column. In the ones column, there are 6 white chips on the first row and 9 white chips on the second row, how many white chips are there in all? Write the answer on the third row. Since the answer is more than ten, trade the ten chips into a red chip. Put the red chip on the tens column and count the remaining white chips and write on the third row.
- b. In the tens column, there are 4 red chips on the first row and 3 red chips also on the second row, how many red chips are there in all? Do not forget to add the other red chip that we regrouped. Write the answer on the third row.
- c. In the hundreds column, there are 2 blue chips on the first row and 4 blue chips on the second row, how many blue chips are there in all? Write the answer in the third row.
- d. What is the sum of the numbers?
- e. Provide another set of 2-digit and 3-digit addends and let the pupil add with regrouping using the Trading Board.

Part 4B**Item 1****Questions**

1. Using the Trading Board, solve for the sum of 154 and 735.

Given Number	Thousands	Hundreds	Tens	Ones
154		○	○ ○ ○ ○ ○	○ ○ ○ ○
735		○ ○ ○ ○ ○ ○ ○	○ ○ ○	○ ○ ○ ○ ○
TOTAL				

2. What is the sum of 625 and 374? Plot the corresponding chips on the Trading Board to represent the addends and get the answer.

Given Number	Thousands	Hundreds	Tens	Ones
625		○ ○ ○ ○ ○ ○	○ ○	○ ○ ○ ○ ○
374		○ ○ ○	○ ○ ○ ○ ○ ○ ○	○ ○ ○ ○
TOTAL				

3. In the equation $416 + 82 = N$, find the value of N using the Trading Board.

Given Number	Thousands	Hundreds	Tens	Ones
416		○ ○ ○ ○	○	○ ○ ○ ○ ○ ○
282			○ ○ ○ ○ ○ ○ ○ ○	○ ○
TOTAL				

Answers to Item 1

- 889
- 999
- 498

Part 4C**Item 2****Questions**

1. In the equation $506 + 89 = N$, find the value of N using the Trading Board.
2. Using the Trading Board, solve for the sum of 275 and 673.
3. What is the sum of 565 and 435? Plot the corresponding chips on the Trading Board to represent the addends and get the answer.

Answers to Item 2

1. 595
2. 948
3. 1 000

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: 5 minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 10

Solving Routine and Non-routine Problems Involving Addition of Whole Numbers Including Money with Sums up to 1000 Using Appropriate Problem-solving Strategies and Tools

Key Idea

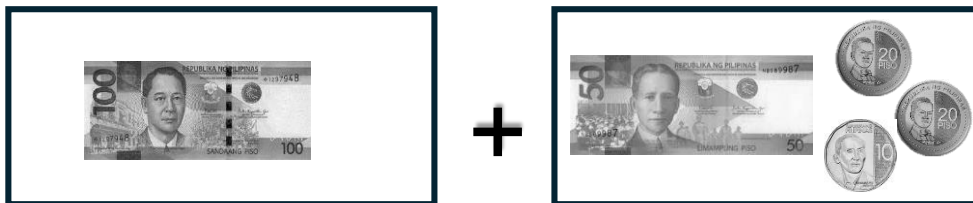
Solve routine and non-routine problems involving addition of whole numbers including money with sums up to 1000 using appropriate problem-solving strategies and tools

Lesson Component 1 (Lesson Short Review)

Time: 10 minutes

Questions

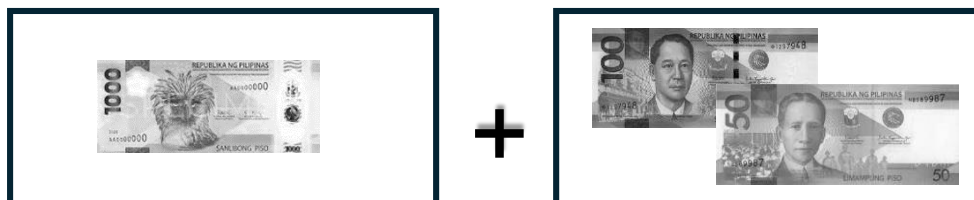
1. Can you give the total amount of Philippine money in the two boxes?



2. How much money will you get if you combine the Philippine bills and coins in the two boxes below?



3. What is the total amount of money in the boxes?



Answers

1. ₱200
2. ₱915
3. ₱1 150

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

We learned about using varied strategies and tools in representing and adding numbers. Today, we will use Polya's Method to solve routine problems, and Philippine money to solve non-routine problems involving addition of whole numbers including money with sums up to 1 000.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Non-routine Problems
- Philippine Money (Bills and Coins)
- Polya's Method
- Routine Problems

Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A**Stem for Items 1 and 2**

1. Read the problem carefully.

Jhada's mom went to the mall and bought her a new set of clothes. She bought a new jeans worth ₱575 and a new shirt worth ₱235. How much did her mother spend for her clothes?

Questions:

- a. Who went to the mall to buy clothes?
- b. What kind of clothes did Jhada's mother buy?
- c. How much were the jeans?
- d. How about the shirt?
- e. We can solve this problem using Polya's Method. Since the first step is to understand it, find out what is asked. Then, tell what are the given numbers?
- f. If second step is to plan, identify the operation to be used and write a number sentence that can solve the problem.
- g. Now that we are on the third step, who can go to the board and solve?
- h. Finally, check and look back. How much did Jhada's mom spend on her new clothes?
- i. Provide another routine problem to be solved using Polya's Method.

2. Read the problem carefully.

Tantan saves ₱200 on January, ₱300 on February, and ₱500 on March.
How much does he save in three months?



Questions:

- Using the Philippine bills and coins, can you show me the amount Tantan saves on January?
- Can anyone show me how much he saves in February?
- Which bill represents his savings in March?
- How will we find his total savings in three months?
- Is it easier to solve the problem using real/ play money?
- Provide another non-routine problem to be solved using real/ play money.

Part 4B

Item 1

Read the problem carefully then answer the questions that follow.

There were 372 boys and 426 girls in studying in Masaya Elementary School. What is the total number of pupils studying there?

Questions:

- Understand
 - What is asked in the problem? _____
 - What are given? _____
- Plan
 - What operation will be used to solve the problem? _____
 - Write the Number Sentence. _____
- Solve
- Check and Look Back

Answers to Item 1

1. Understand

- a. The total number of pupils studying in Masaya Elementary School
- b. 372 boys and 426 girls

2. Plan

- c. Addition
- d. $372 + 426 = N$

3. Solve

$$\begin{array}{r} 372 \\ + 426 \\ \hline 798 \end{array}$$

4. There is a total of 798 pupils studying in Masaya Elementary School.

Part 4C

Item 2

Questions

Bring out your play money to answer the following problems.

- 1. Nellie spent ₱150 on Monday and ₱355 on Tuesday. How much did she spend in 2 days?
- 2. Marie saved money weekly as shown below. How much does she save in three weeks?



- 3. Mother gave Nina 455 for her food allowance and another 545 for her transportation allowance. How much did Mother give Nina for her food and transportation allowances?

Answers to Item 2

- 1. ₱500
- 2. ₱370
- 3. ₱1 000

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 11

Visualizing, Representing, and Subtracting 2 to 3-Digit Numbers with Minuends up to 999 Without and With Regrouping

Key Idea

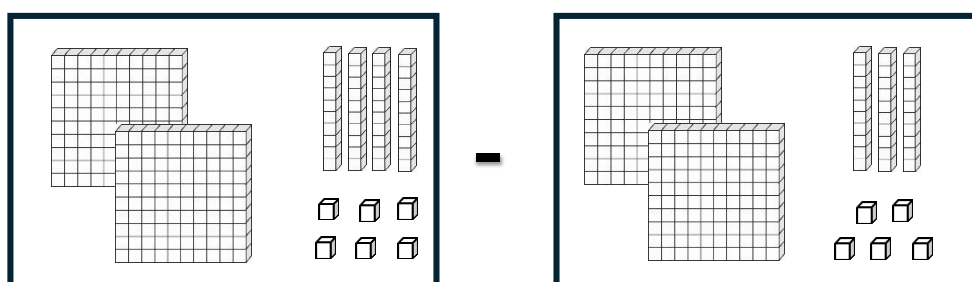
Visualize, represent, and subtract 2- to 3- digit numbers with minuends up to 999 without and with regrouping

Lesson Component 1 (Lesson Short Review)

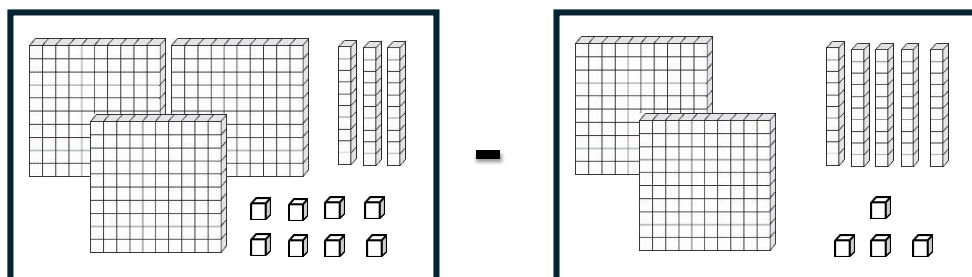
Time: 7 minutes

Questions

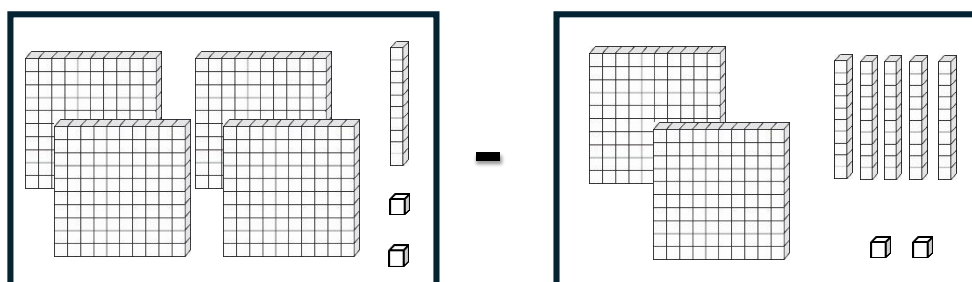
1. What is the difference of the two sets?



2. Find the difference of the two sets.



3. Subtract the two sets of blocks.



Answers

1. 11
2. 84
3. 170

Lesson Component 2 (Lesson Purpose/Intention)Time: **5** minutes

Teacher states:

We learned about using Base Ten Blocks, illustrations, and counters to represent numbers. Today, we will use the Trading Board Game to help you visualize subtraction of numbers with minuends up to 999 without and with regrouping.











Lesson Component 3 (Lesson Language Practice)Time: **10** minutes

Key words/terms are:

- Colored Chips (Yellow, Blue, Red, and White)
- Minuend
- Subtraction
- Subtraction With Regrouping
- Subtraction Without Regrouping
- Subtrahend

Lesson Component 4 (Lesson Activity)Time: **30** minutes**Part 4A****Stem for Items 1 and 2**

1. Get the Trading Board and chips. Show it to the class. Ask a pupil to give the highest 3-digit number that can be formed using the digits 7, 5, and 6. Write and plot the corresponding chips on the first row of the Trading Board. Then, ask another pupil to give the least 3-digit that can be formed using the digits 4, 0, and 2. Plot the corresponding chips on the second row of the Trading Board. Ask the pupils to get the sum of the formed numbers.







Given Number	Thousands	Hundreds	Tens	Ones
765		 	 	 
204		 		 
Difference				

Questions:

- a. Let us count the chips by column. In the ones column, there are 5 white chips on the first row and 4 white chips on the second row, can you subtract? Write the answer on the third row.

- b. In the tens column, there are 6 red chips on the first row and 0 red chip on the second row, can you subtract? Write the answer on the third row.
- c. In the hundreds column, there are 7 blue chips on the first row and 2 blue chips on the second row, can you subtract? Write the answer in the third row.
- d. What is the difference of the numbers?
- e. Provide another set of 2 to 3-digit minuends and let the pupil subtract without regrouping using the Trading Board.

2. Read the given numbers and plot the corresponding chips.

Given Number	Thousands	Hundreds	Tens	Ones
428				
219				
Difference				

Questions:

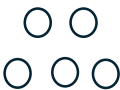




- a. Let us count the chips by column. In the ones column, there are 8 white chips on the first row and 9 white chips on the second row, can you subtract? Since you can't, trade 1 of the red chips to 10 white chips. The 2 red chips now become 1 while the 8 white chips become 18. Can you already subtract 9 from 18?
- b. In the tens column, there is only 1 red chip on the first row and 1 red chip also on the second row, will there be any red chip left? Write the answer on the third row.
- c. In the hundreds column, there are 4 blue chips on the first row and 2 blue chips on the second row, can you subtract? Write the answer in the third row.
- d. What is the difference of the numbers?
- e. Provide another set of 2-digit and 3-digit minuends and let the pupils subtract with regrouping using the Trading Board.

Part 4B







Item 1

Questions



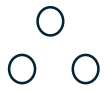
1. Using the Trading Board, solve for the difference of 523 and 110.

Given Number	Thousands	Hundreds	Tens	Ones
523				
110				
Difference				

2. What is the difference of 453 and 122? Plot the corresponding chips on the Trading Board to represent the given and get the answer.

Given Number	Thousands	Hundreds	Tens	Ones
453				
122				
Difference				

3. In the equation $400 - 63 = N$, find the value of N using the Trading Board.







Given Number	Thousands	Hundreds	Tens	Ones
350				
300				
Difference				

Answers to Item 1







- 413
- 331
- 50

Part 4C**Item 2****Questions**


1. Using the Trading Board, solve for difference of 724 and 135.

Given Number	Thousands	Hundreds	Tens	Ones
724				
135				
Difference				

2. What is the difference of 621 and 464? Plot the corresponding chips on the Trading Board to represent the given and get the answer.

Given Number	Thousands	Hundreds	Tens	Ones
621				
464				
Difference				

3. In the equation $400 - 63 = N$, find the value of N using the Trading Board.

Given Number	Thousands	Hundreds	Tens	Ones
400				
63				
Difference				

Answers to Item 1

1. 589
2. 157
3. 337

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 12

Solving Routine and Non-routine Problems Involving Subtraction of Whole Numbers Including Money with Minuends up to 1000 Using Appropriate Problem-solving Strategies and Tools

Key Idea

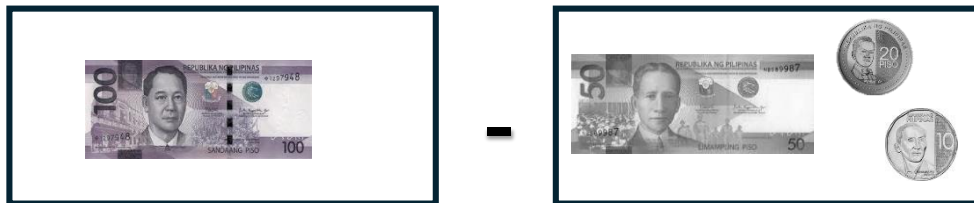
Solve routine and non-routine problems involving subtraction of whole numbers including money with minuends up to 1000 using appropriate problem-solving strategies and tools

Lesson Component 1 (Lesson Short Review)

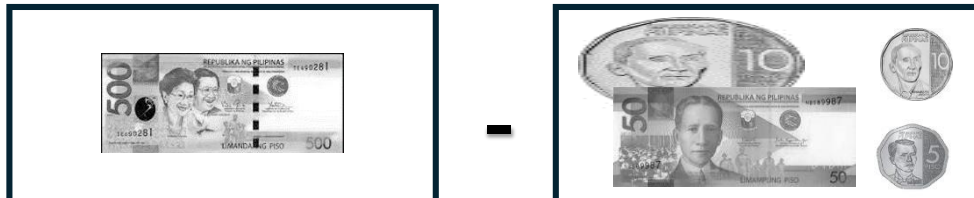
Time: 10 minutes

Questions

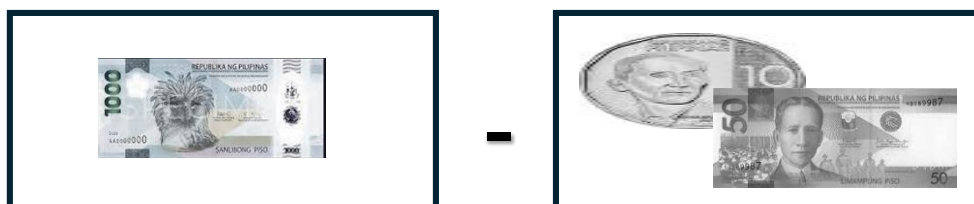
1. Find the difference of the amount of Philippine money in the two boxes.



2. How much money will you get if you deduct the Philippine bills and coins in the second box to that of the bills in the first box?



3. What is the difference of the amount of money between the boxes?



Answers

1. ₱20
2. ₱235
3. ₱750

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

We learned about using varied strategies and tools in representing and subtracting numbers. Today, we will use Polya's Method to solve routine problems, and illustration to solve non-routine problems involving subtraction of whole numbers including money with minuends up to 1 000.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Change
- Illustration Method
- Polya's Method
- Savings
- Withdrawal

Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A**Stem for Items 1 and 2**

1. Read the problem carefully.

Jhayniel goes to the market to buy a kilo of chicken worth ₱215. How much will his change be if he will give the seller a five-hundred-peso bill?

Questions:

- a. Who goes to the market?
- b. What did he buy there?
- c. How much does a kilo of chicken cost?
- d. How much money does he give the seller to pay for the chicken?
- e. We can solve this problem using Polya's Method. Since the first step is to understand it, find out what is asked. Then, tell me what are the given numbers?
- f. If second step is to plan, identify the operation to be used and write a number sentence that can solve the problem.
- g. Now that we are on the third step, who can go to the board and solve?
- h. Finally, check and look back. How much change will Jhayniel receive?
- i. Provide another routine problem to be solved using Polya's Method.

2. Read the problem carefully.

Jhaydel had a total savings of ₱1000 in his bank account. He withdrew ₱300 to buy a bouquet of flower for his mother as a Mother's Day presents. How much will be left in his bank account?



Questions:

- Using the Philippine bills and coins, can you show me the amount Jhaydel saved on his bank account?
- Using play/ real money, can anyone show me how much he withdrew?
- How will we find the amount left in his bank account?
- Is it easier to solve the problem using real/ play money?
- Provide another non-routine problem to be solved using illustration.

Part 4B

Item 1

Read the problem carefully then answer the questions that follow.

Teacher Mhae bought 1 000 pencils as her Christmas gift to the Kinder and Grade 1 pupils in their school. If there were 528 pupils in Kinder, how many pencils will be left to be given to the Grade 1 pupils?

Questions:

- Understand
 - What is asked in the problem? _____
 - What are given? _____
- Plan
 - What operation will be used to solve the problem? _____
 - Write the Number Sentence. _____
- Solve
- Check and Look Back

Answers to Item 1

1. Understand

a. The number of pencils left to be given to the Grade 1 pupils

b. 1 000 pencils, 528 pupils in Kinder

2. Plan

c. Subtraction

d. $1\,000 - 528 = N$

3. Solve

$$\begin{array}{r} \\ 1000 \\ - 528 \\ \hline 472 \end{array}$$

4. The number of pencils left to be given to the Grade 1 pupils is 472.

Part 4C

Item 2

Questions

Use play money or illustration to answer the following problems.

1. Leonie bought a guitar worth ₱725. If she paid the cashier ₱1000, how much will her change be?
2. Manong Jesus harvested 300 sacks of rice. If he sold 250 sacks to the market, how many sacks of rice would be left unsold?
3. Teacher Mhel bought 150 pieces of lollipop as her prize for her Grade Two pupils. If there were 125 pupils in Grade Two, would there be any lollipop left? How many?

Answers to Item 2

1. ₱275

2. 50 sacks of rice

3. 25 lollipops

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: 5 minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?

- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 13

Illustrating and Writing a Related Equation for Each Type of Multiplication: Repeated Addition, Array, Counting by Multiples, and Equal Jumps on the Number Line.

Key Idea

Illustrate and write a related equation for each type of multiplication: repeated addition, array, counting by multiples, and equal jumps on the number line.

Lesson Component 1 (Lesson Short Review)

Time: 10 minutes

Questions



1. Using the illustration above, how many stars are there in each column? How many stars are there in each row?
2. Write the repeated addition based on the number of stars on each row and column.
3. Group the stars into five equal parts. How many stars are there in each group?
4. Write the repeated addition if the stars are grouped as illustrated below.



5. If you multiply the number of stars in each group to the total number of groups, what will be the multiplication equation?

Answers

1. 10, 2
2. $10 + 10$, $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$
3. 4 stars in each group



4. $4 + 4 + 4 + 4$

5. $4 \times 5 = 20$

Lesson Component 2 (Lesson Purpose/Intention)

Time: 5 minutes

Teacher states:

Today, we will use shapes, objects, figures, or symbols to illustrate and write related equations for each type of multiplication as repeated addition, array, counting by multiples, and equal jumps on the number line.

Lesson Component 3 (Lesson Language Practice)

Time: 10 minutes

Key words/terms are:

- Array
- Illustration
- Multiplication Equation
- Multiples
- Number Line
- Repeated Addition

Lesson Component 4 (Lesson Activity)

Time: 30 minutes

Part 4A

Stem for Items 1 and 2

1. Bring out three glasses and popsicle sticks. Let the pupils manipulate the popsicle sticks. Ask them to take out 30 pieces of popsicle sticks.



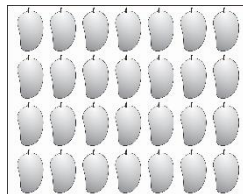
Questions:

- a. Form three groups of popsicle sticks. Put it inside the glasses. How many pieces of popsicle sticks are there in each glass?
- b. Do glasses have the same number of popsicle sticks?
- b. Write the repeated addition that represents the number of popsicle sticks in each glass.
- c. What will be the multiplication equation of the repeated addition formed?

Using a chart, ask the pupils to analyze the illustrations.



A



B

Questions:

a. Write the multiplication equation to show the total number of ₱1 coin as illustrated in figure A.

b. Show the multiplication equation 5×3 as repeated addition.

$$5 \times 3 = \underline{\hspace{2cm}}$$

c. What is the multiplication equation that can be derived in figure B showing the total number of mangoes?

b. Show the multiplication equation 7×4 as repeated addition.

$$7 \times 4 = \underline{\hspace{2cm}}$$

2. Use the number grid to show multiplication in counting by multiples.

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35

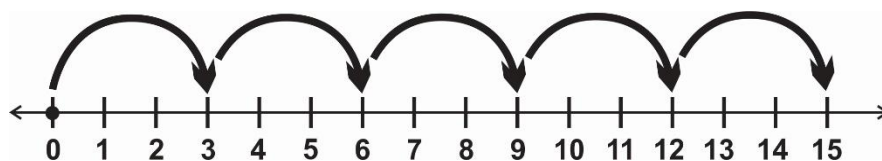
Questions:

a. Count by 3s and color the squares red.

b. How many numbers are shaded red?

c. Is it right to say that $3 \times 11 = 33$ is the multiplication equation that represents the shaded squares?

Study the number line below.



Questions:

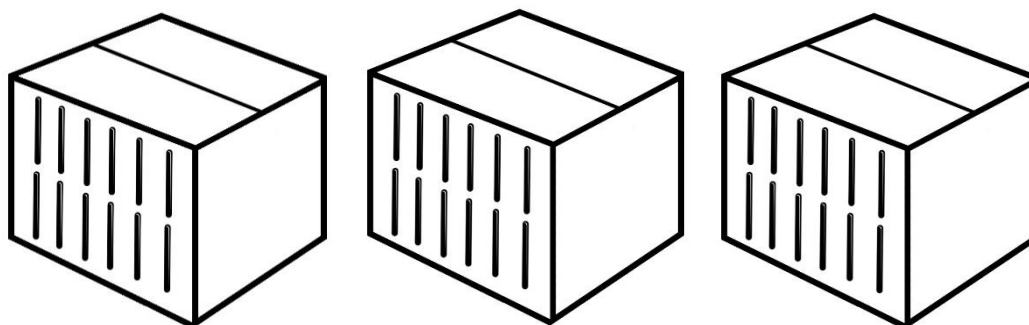
- How many jumps are shown in the number line?
- How many units are there in every jump?
- Write the multiplication equation illustrated in the number line showing the total number of units.

Part 4B

Item 1

Questions

- The illustration shows 3 boxes with 12 popsicle sticks each. What is the repeated addition for this?



- Write the mathematical equation of the illustration above.
- Below illustrates a set of Philippine Peso Bill. What is the multiplication equation for this? Supply the missing number in the equation $3 \times \square = 12$ to make the multiplication equation correct?



Answers to Item 1

- $12 + 12 + 12$
- $3 \times 12 = 36$
- 4

Part 4C

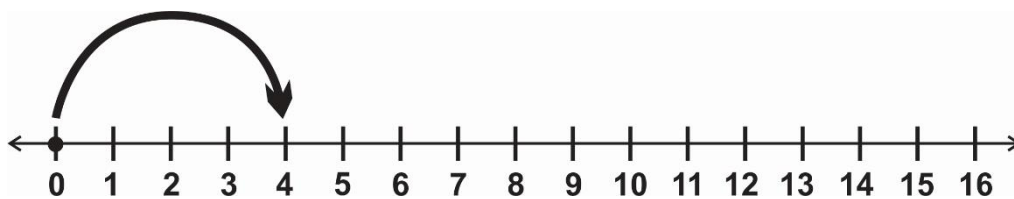
Item 2

Questions

1. Show the mathematical equation $4 \times 4 = 16$ by shading green the first four multiples of 4 in the number grid below.

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

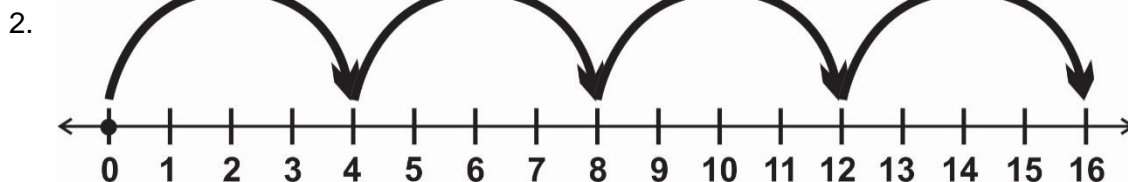
2. Complete the arrow showing equal jumps in a number line below to illustrate the mathematical equation $4 \times 4 = 16$.



Answers to Item 2

1.

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



Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: 5 minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 14

Illustrating the following Properties of Multiplication and Applying each in Relevant Situation: (a) Identity, (b) Zero, and (c) Commutative

Key Idea

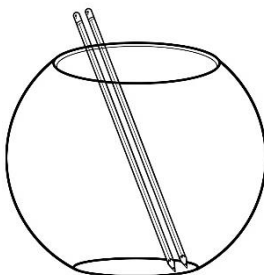
Illustrate the following properties of multiplication and apply each in relevant situations: (a) identity, (b) zero, and (c) commutative.

Lesson Component 1 (Lesson Short Review)

Time: 10 minutes

Questions

1. Count the number of pencils inside the fish bowls. Which of the following multiplication equation below represents the illustration?

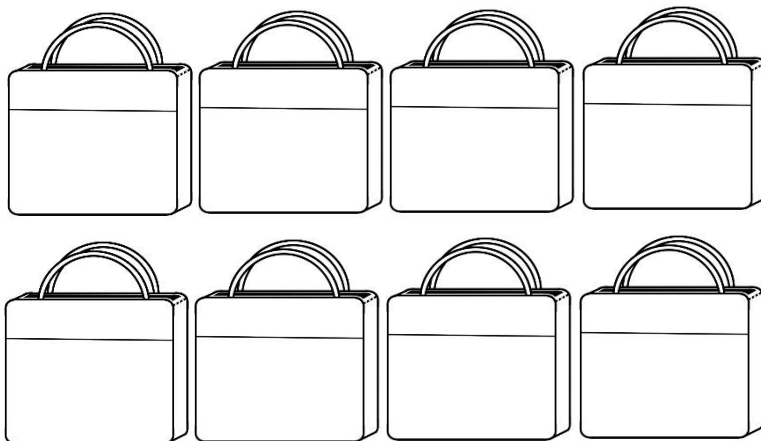


A. $4 \times 2 = 8$

B. $2 \times 1 = 2$

C. $4 \times 0 = 0$

2. Based on the illustration below, how many crayons are there in the eight bags?



A. 8

B. 4

C. 0

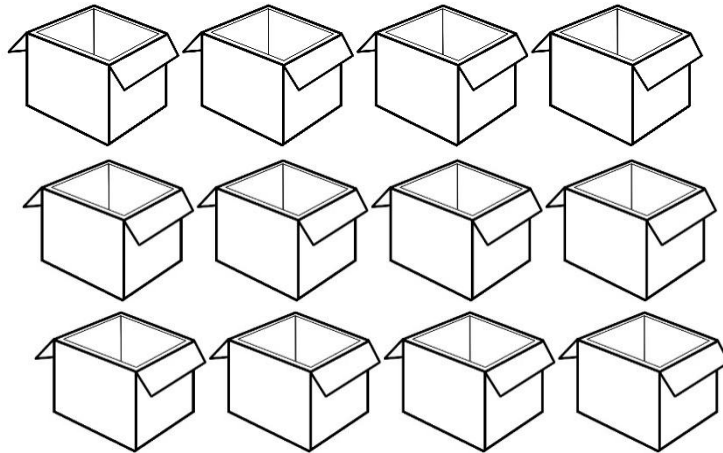
3. What multiplication equation can be derived in the illustration above?

A. $8 \times 8 = 64$

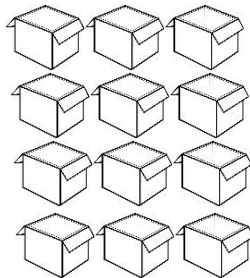
B. $8 \times 1 = 8$

C. $8 \times 0 = 0$

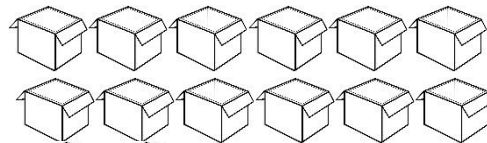
4. How will you rearrange the boxes below if you switch the number of boxes in a row and the number of boxes in a column?



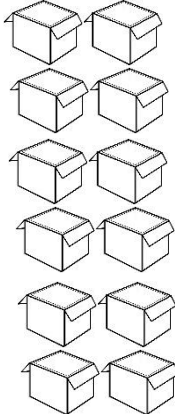
A.



B.



C.



5. As illustrated in item four, there are 12 boxes arranged in 3 by 4. How many boxes are left after switching it to 4 by 3?

A. 3

B. 4

C. 12

6. After the rearrangement, do the numbers of boxes stay the same?

A. Yes

B. No

C. Maybe

Answers

1. B
2. C
3. C
4. A
5. C
6. A

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

In the previous task, we recalled the three properties of multiplication. Today, we will illustrate the properties of multiplication and apply each in relevant situations: (a) identity, (b) zero, and (c) commutative using shapes, objects, figures, or symbols.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Commutative Property of Multiplication
- Identity Property of Multiplication
- Illustration
- Multiplication Equation
- Properties of Multiplication
- Zero Property of Multiplication

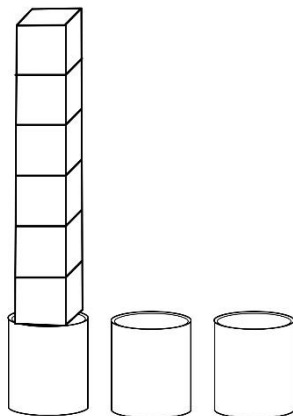
Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A

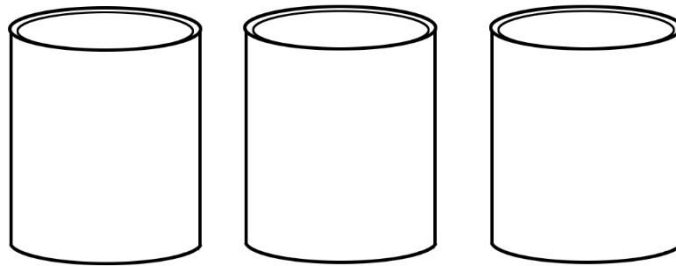
Stem for Items 1 and 2

1. Stack seven blocks on top of the can.

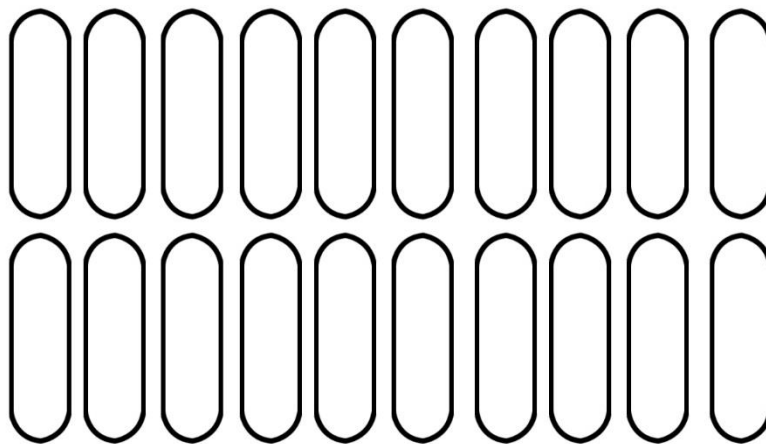


Questions:

- a. How many blocks are stacked on top of the can?
- b. How many cans have stack of blocks?
- c. What multiplication equation best represents the illustration above?
- d. What do you call to the property of multiplication wherein when you multiply a number and 1, the product is that number?
- e. Examine the illustration below. Write the multiplication equation if the stack of blocks is removed in the can.



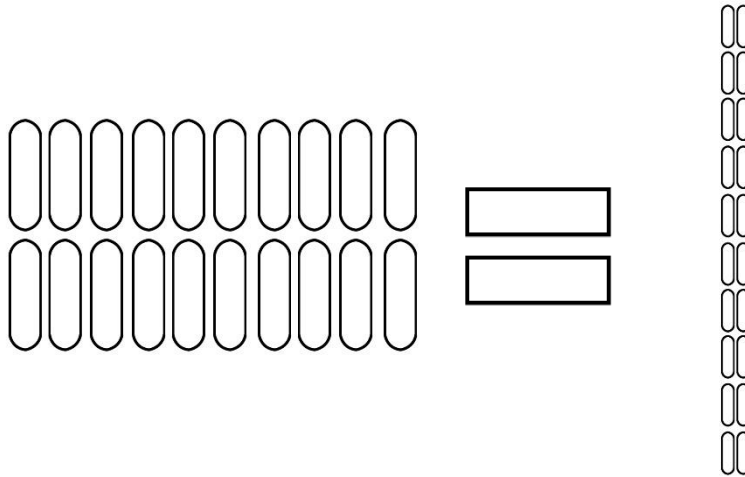
- f. What do you call the property of multiplication that when you multiply a number and a zero, the product is zero?
 - g. If you add two more cans, is the multiplication equation $5 \times 0 = 0$, right?
2. Get 20 popsicles sticks. Arrange them as reflected in the illustration.



Questions:

- a. How many columns of popsicles are there?
- b. How many rows of popsicle sticks are there?
- c. Count again the number of popsicle sticks, how many popsicles sticks are there in all?
- d. Write a multiplication equation showing the product of the number of popsicle sticks in a column and row.

- e. If you interchange the number of popsicle sticks in columns and rows, how will it look like? Illustrate.
- f. Is the number of popsicle sticks still the same after interchanging the number of columns and rows?
- g. If the number of popsicle sticks remains the same, is the illustration below, correct?



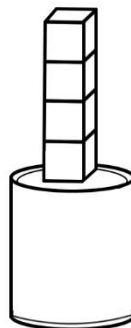
- h. Write a multiplication equation to the illustration above in relation to the number of columns and rows.
- i. What do you call the property of multiplication that when you multiply the factors in any order, the product stays the same?

Part 4B

Item 1

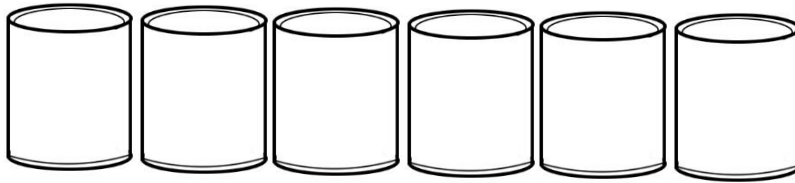
Questions

1. Study the illustration. What is the product when the number of blocks in a stack is multiplied to the number of cans?



2. Write the multiplication equation of the illustration above showing the product of the number of blocks and can?

3. What do you call the property of multiplication that when you multiply a number and 1, the product is that number?
4. If the stack of blocks is removed and five more cans are added as shown below, what will be the new multiplication equation?



5. What property of multiplication is involved in the equation $6 \times 0 = 0$?

Answers to Item 1

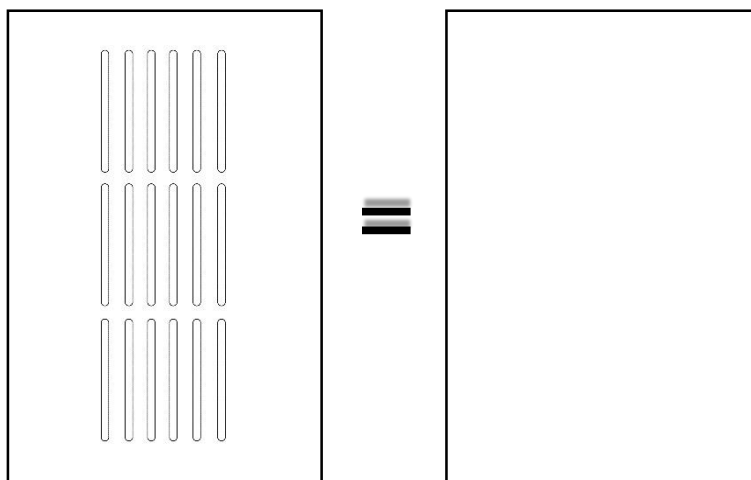
1. 4
2. $4 \times 1 = 4$
3. Identity Property
4. $6 \times 0 = 0$
5. Zero Property

Part 4C

Item 2

Questions

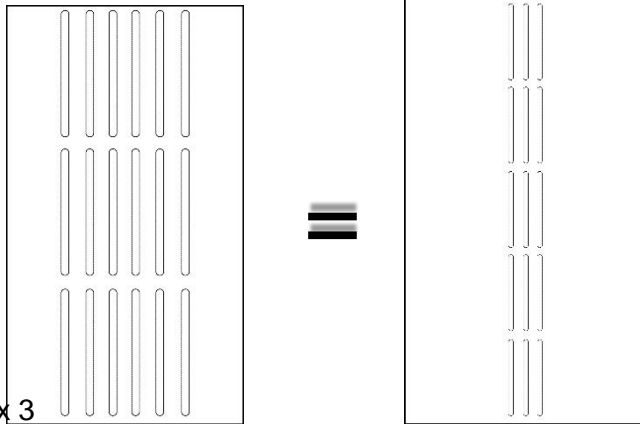
1. Illustrate the commutative property of multiplication using the number of popsicles sticks below.



2. Write the multiplication equation of the illustration above showing the commutative property of multiplication.

Answers to Item 2

1.



2. $3 \times 6 = 6 \times 3$

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: 5 minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 15

Visualizing Multiplication of Numbers 1 to 10 by 2, 3, 4, 5 and 10

Key Idea

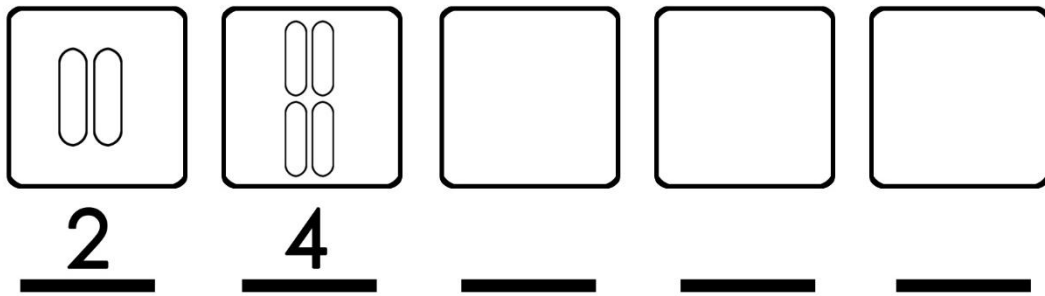
Visualize multiplication of numbers 1 to 10 by 2, 3, 4, 5 and 10.

Lesson Component 1 (Lesson Short Review)

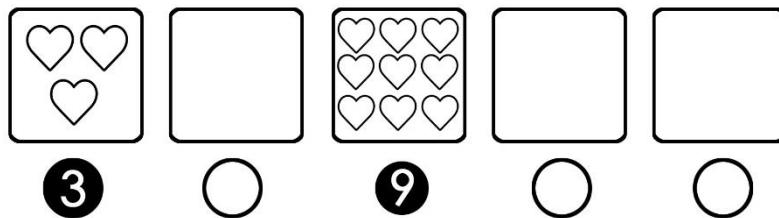
Time: 10 minutes

Questions

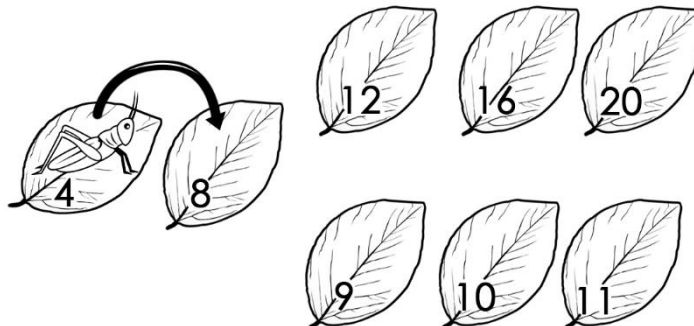
1. How many popsicle sticks will be drawn inside the box if you are asked to give the next three multiples of 2? Illustrate.



2. The illustration below shows multiples of 3. Supply the missing numbers to complete the list of multiples.

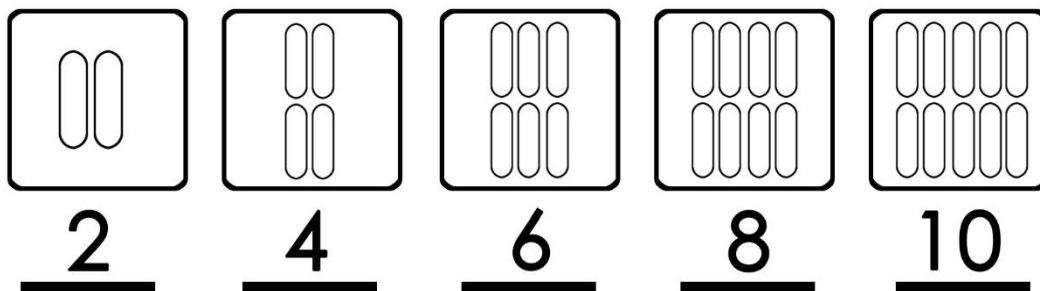


3. Mr. Grasshopper hops five times. Draw an arrow to the numbered leaves Mr. Grasshopper should land on for his last three hops.

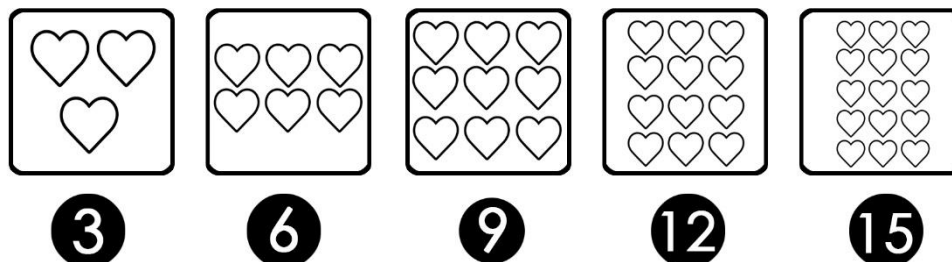


Answers

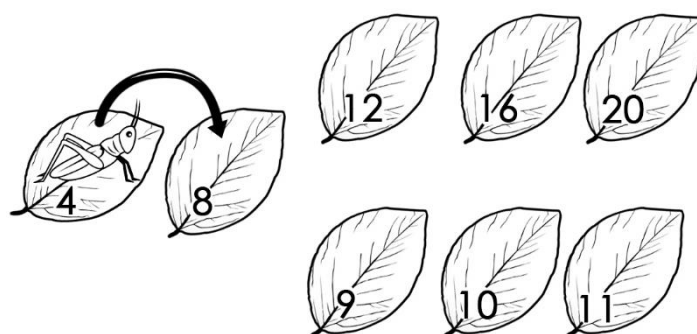
1.



2.



3.



Lesson Component 2 (Lesson Purpose/Intention)

Time: 5 minutes

Teacher states:

In the previous task, we recalled skip counting or multiples. Today, we will visualize multiplication of numbers 1 to 10 by 2, 3, 4, 5 and 10 using shapes, objects, symbols, or figures.

Lesson Component 3 (Lesson Language Practice)

Time: 10 minutes

Key words/terms are:

- Group
- Multiplication of Numbers
- Visualization of Multiplication
- Set

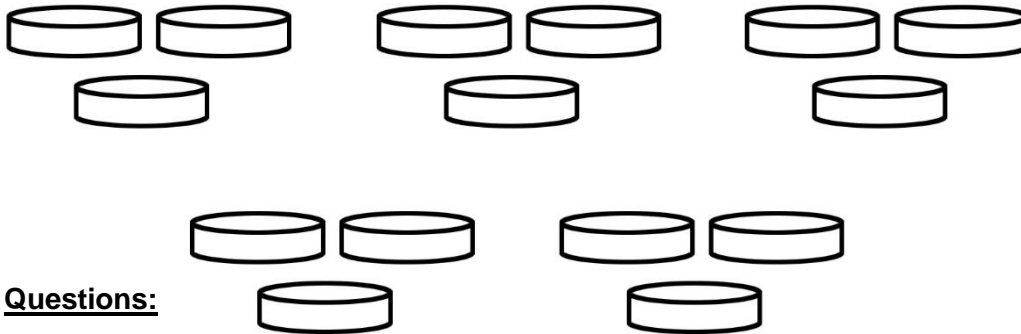
Lesson Component 4 (Lesson Activity)

Time: 30 minutes

Part 4A

Stem for Items 1 and 2

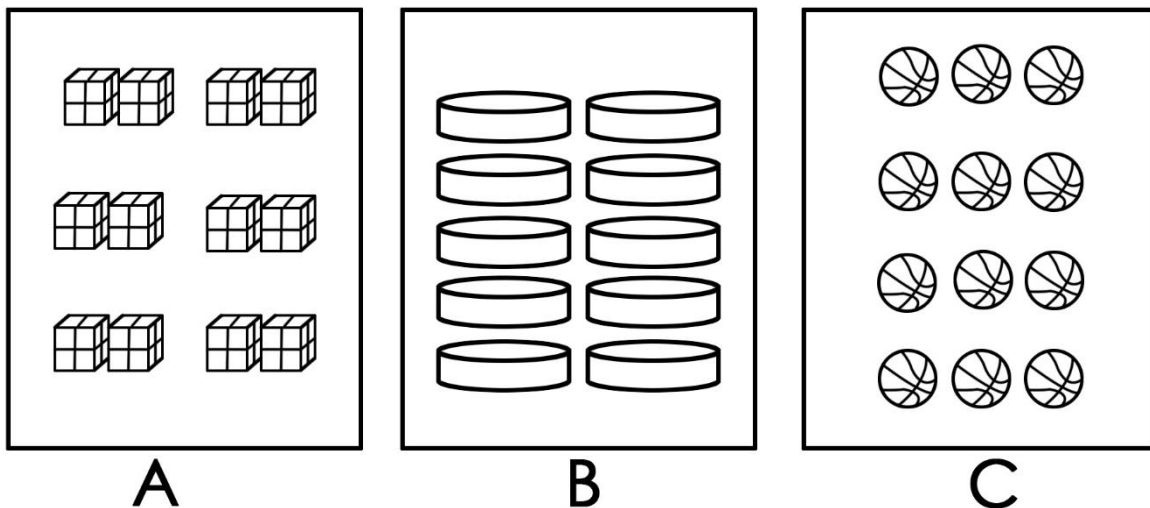
1. Examine the group of chips in the illustration below.



Questions:

- How many groups of chips are there in the illustration?
- Write the mathematical statement representing the number of chips above.
- How many chips are there in all? Write the multiplication equation showing the total number of chips.
- If two more sets of 3s are added, how many sets are there in all? Draw your answer.
- What will be the new multiplication equation showing the total number of chips if two more sets of 3s have been added?

2. Study the illustration below.



Questions:

- Which of the illustrations above shows 4 sets of 3s?

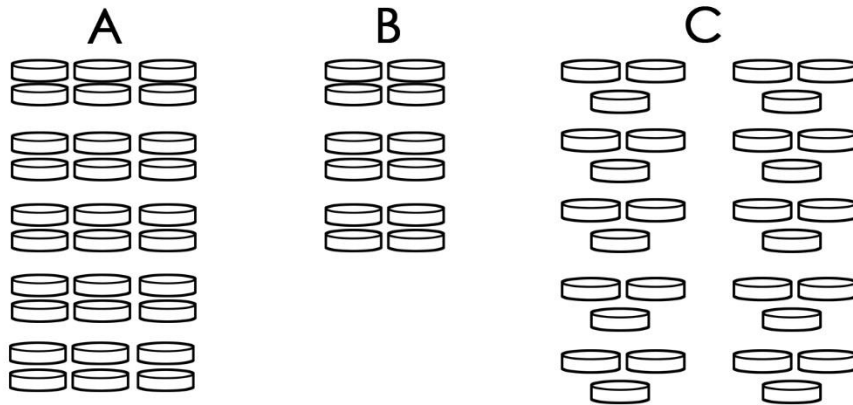
- b. What will be the product if the total number sets and the number of objects per set is multiplied as shown in illustration C?
- c. Which of the illustrations above shows 6 sets of 2s?
- d. What multiplication equation can be derived in illustration A?
- e. Which of the illustrations above shows 2 sets of 5s?
- f. Write the multiplication equation of 2 sets of 5s.

Part 4B

Item 1

Questions

1. Study the sets of chips in illustrations A, B and C. What multiplication equation can be derived in illustration A?



2. Which of the illustrations has 3 sets of 4s?
3. Write the multiplication equation of 3 sets of 4s.
4. What mathematical statement can you derive from illustration C?
5. In illustration C, what will be the product if you multiply the total number sets and the number of chips in each set? Show your answer.

Answers to Item 1

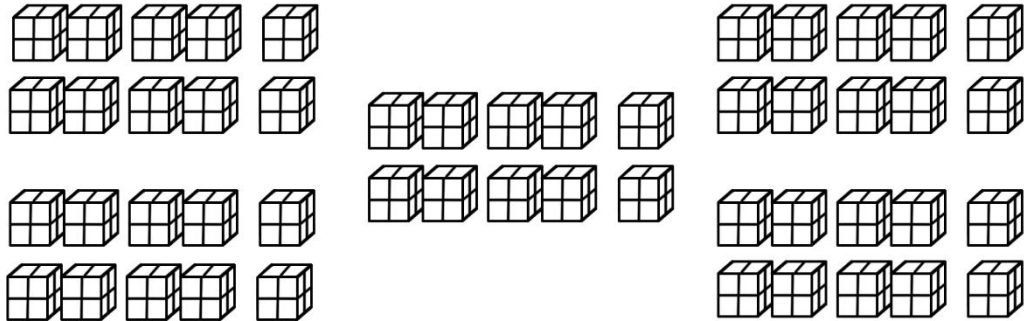
1. $5 \times 3 = 15$
2. B
3. $3 \times 4 = 12$
4. 10 sets of 3s
5. $10 \times 3 = 30$

Part 4C

Item 2

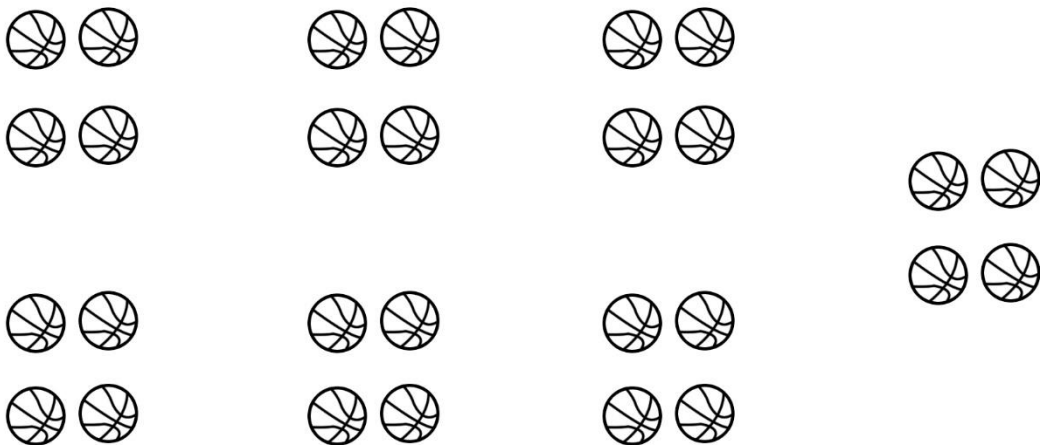
Questions

1. How many blocks are there in the illustration below?



2. Write the multiplication equation to show the total number blocks in the illustration above.

3. Write the mathematical statement of the illustration below.



4. What is the multiplication equation of 7 sets of 4s?

Answers to Item 2

1. 50

2. $5 \times 10 = 50$

3. 4 sets of 7s

4. $7 \times 4 = 28$

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 16

Visualizing and Representing Division and Writing a Related Equation for each Type of Situation: Equal Sharing, Repeated Subtraction, Equal Jumps on the Number Line, and Formation of Equal Groups of Objects

Key Idea

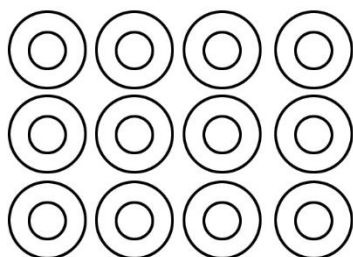
Visualize and represent division and write a related equation for each type of situation: equal sharing, repeated subtraction, equal jumps on the number line, and formation of equal groups of objects.

Lesson Component 1 (Lesson Short Review)

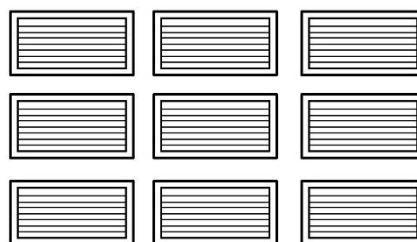
Time: **10** minutes

Questions

Directions: Study the illustrations below and answer the questions that follow.



A



B

1. Which group of objects can make 3 sets of 4s?
2. Which group of objects can make 3 sets of 3s?
3. Which group of objects can make 2 sets of 6s?

Answers

1. A
2. B
3. A

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

In the previous task we learned about separating sets into equal parts. Today, we will visualize and represent division, and write a related equation for each type of situation: equal sharing, repeated subtraction, equal jumps on the number line, and formation of equal groups of objects.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Equal Groups
- Equal Jumps
- Equal Sharing
- Repeated Subtraction
- Visualization
- Writing Related Equation

Lesson Component 4 (Lesson Activity)

Time: **30** minutes

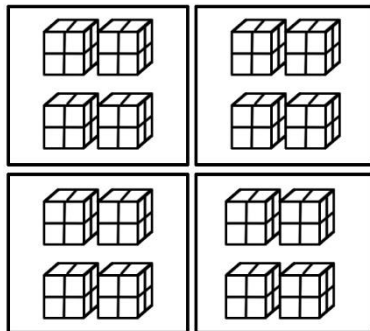
Part 4A

Stem for Items 1 and 2

1.a. Draw objects and show the division of objects as equal sharing. Write a division equation for each situation. An example is shown below.

Example:

- The sixteen pieces of Rubik's Cube are divided into 4 individuals.

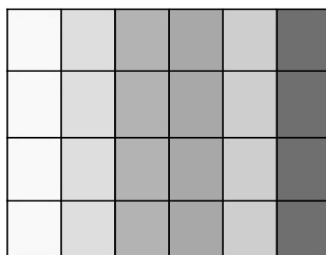


Division: **$16 \div 4 = 4$**

Questions:

- Separate 8 candies for 2 kids.
- Twelve balls are shared equally for three boys.
- 16 stars are divided for 4 girls.

1.b. Study the shaded grid. Divide the number of squares using repeated subtraction.

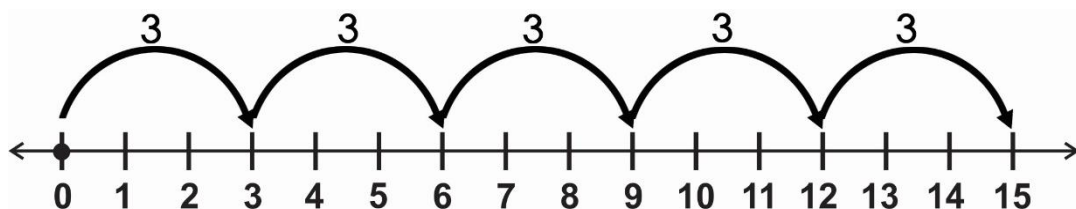


Questions:

- a. Count the total number of squares. How many squares will be left if the blue shaded region cut? Write the subtraction equation for this.
- b. How many squares will be left if the yellow shaded region of the remaining squares is cut? Write the subtraction equation for this.
- c. How many squares will be left if the red shaded region of the remaining squares is cut? Write the subtraction equation for this.
- d. How many squares will be left if the green shaded region of the remaining squares is cut? Write the subtraction equation for this.
- e. How many squares will be left if the gray shaded region of the remaining squares is cut? Write the subtraction equation for this.
- f. How many squares will be left if the brown shaded region of the remaining squares is removed? Write the subtraction equation for this.
- g. How many cuts have been made?
- h. Write the division equation to show the total number cuts by dividing the total number of squares by the number of squares to each shaded cuts.

- 2.a. Using a number line, Show the division of different situations and write its corresponding division equation. An example is done for you.

Example: Divide 15 by 3.



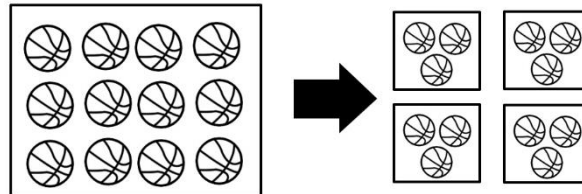
Division Equation: $15 \div 3 = 5$

Questions:

- a. Divide 6 by 2
- b. Divide 12 by 4
- c. Divide 18 by 3
- d. Divide 20 by 5
- e. Divide 30 by 10

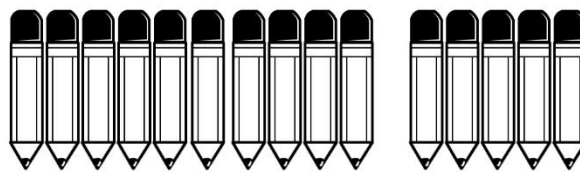
2.b. Represent division in a situation as formation of equal group of objects. An example below will serve as your guide.

Example: Divide the ball into 4 groups.



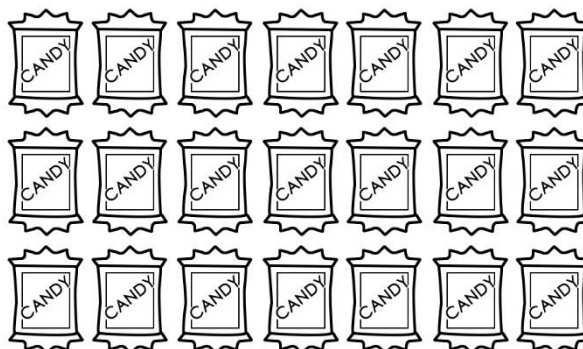
Questions:

a. Group the pencil into 3 groups.



b. How many pencils are there in each group?

c. Group the group into 7 groups.



d. How many pencils are there in each group?

Part 4B

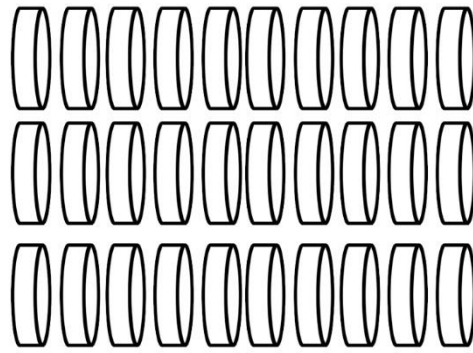
Item 1

Questions

A. Directions: Visualize division as equal sharing by drawing objects based on the given situation.

1. 9 cones divided equally by 3 kids
2. 20 eggs are distributed to 5 feeding beneficiaries.
3. Divide 35 pencils for 7 pupils.

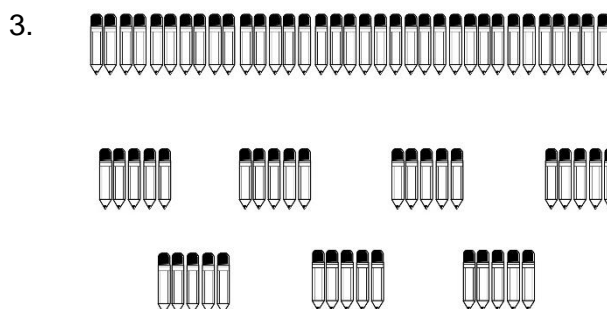
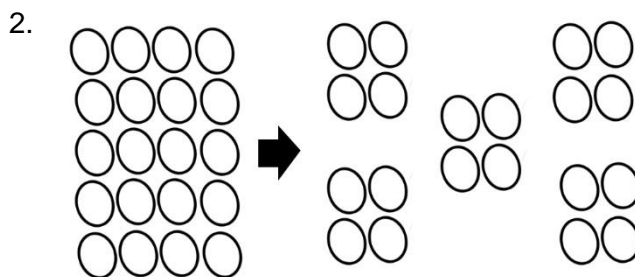
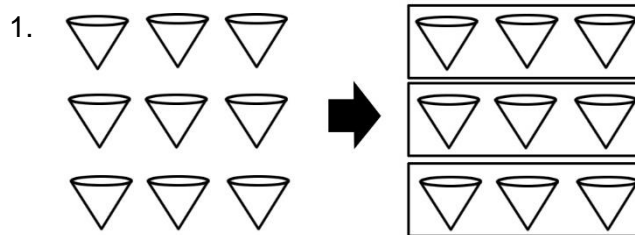
B. Directions: Use the repeated subtraction of chips to show division.



1. What will be the first subtraction equation if the blue chips are crossed out?
2. If the green chips are crossed out in remaining chips, what will be the second subtraction equation?
3. If the remaining yellow chips are crossed out, are there any chips left? Show the subtraction equation.
4. How many times did you cross out so that no chips would be left?

Answers to Item 1

A.



B.

1. $30 - 10 = 20$
2. $20 - 10 = 10$
3. $10 - 10 = 0$
4. 3

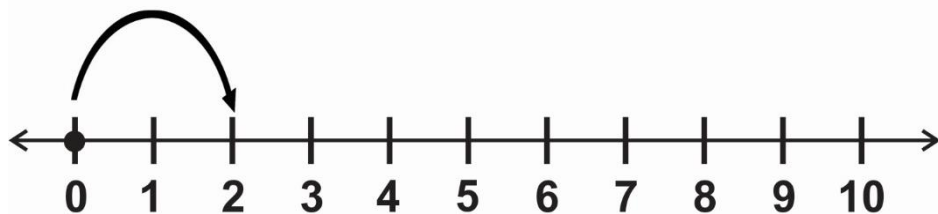
Part 4C

Item 2

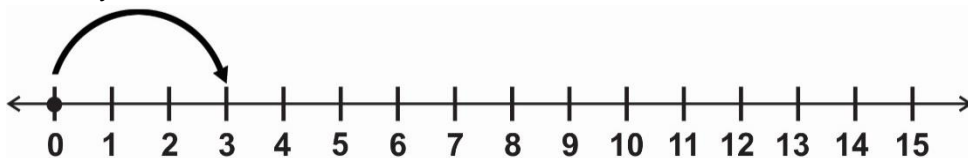
Questions

A. Directions: Show division to situation below using a number line. Draw an arrow to finish the representations.

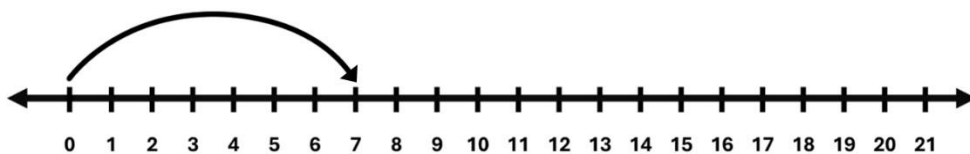
1. Divide 10 by 2



2. Divide 15 by 3

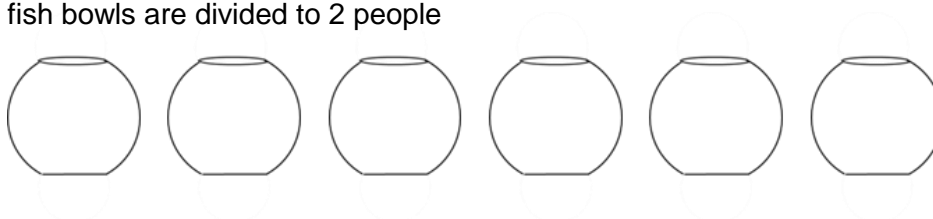


3. Divide 21 by 7

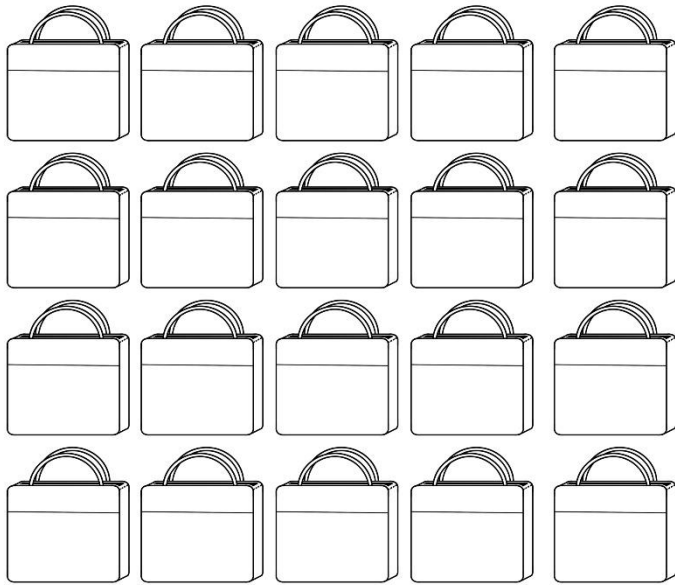


B. Directions: Group the objects based on the given division situation.

1. The fish bowls are divided to 2 people



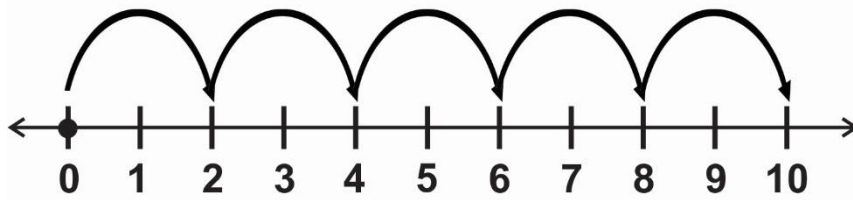
2. Divided the bag to 5 girls



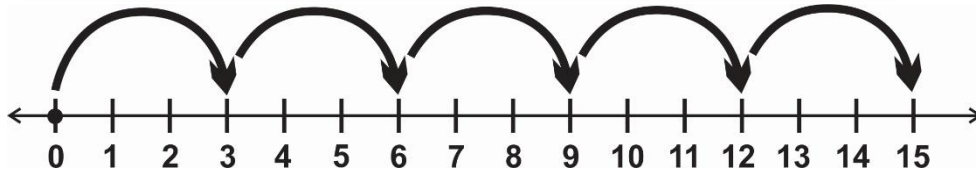
Answers to Item 2

A.

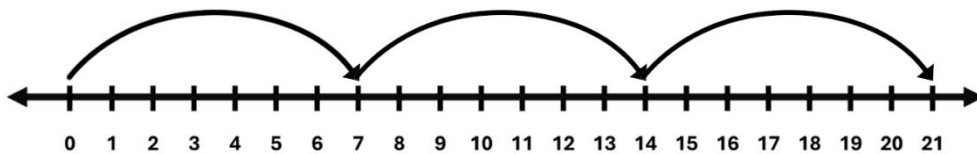
1.



2.



3.

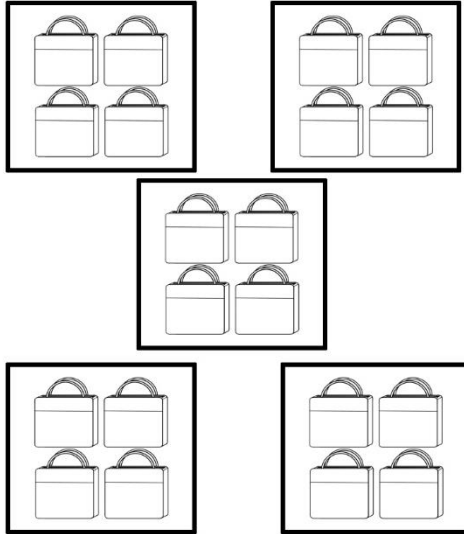


B.

1.



2.



Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 17

Visualizing Division of Numbers up to 100 by 2,3,4,5, and 10 (Multiplication Table of 2, 3, 4, 5 and 10)

Key Idea

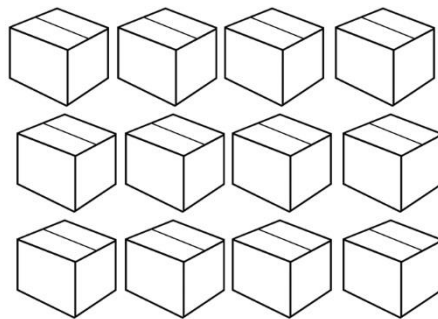
Visualize division of numbers up to 100 by 2,3,4,5, and 10 (multiplication table of 2, 3, 4, 5 and 10)

Lesson Component 1 (Lesson Short Review)

Time: **10** minutes

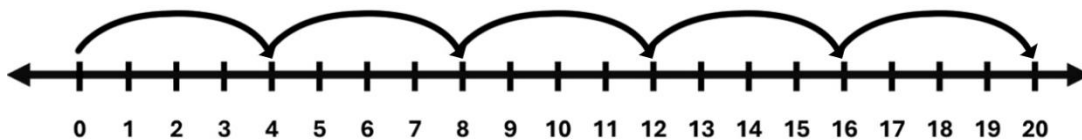
Questions

1. How many groups of 3s can be made in 12 boxes?



2. What is the division equation in item 1?

3. Study the number line. How many units are there in every jump?



4. How many 4s are there in the number line?

5. What division equation can be derived in the number line?

Answers

1. 4

2. $12 \div 3 = 4$

3. 4

4. 5

5. $20 \div 4 = 5$

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

In the previous task we learned about visualizing and representing division and writing a related equation for each type of situation: equal sharing, equal jumps on the number line, and formation of equal groups of objects. Today we will visualize division of numbers up to 100 by 2,3,4,5, and 10 that can be seen in multiplication table of 2, 3, 4, 5 and 10.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Division of Numbers
- Visualization

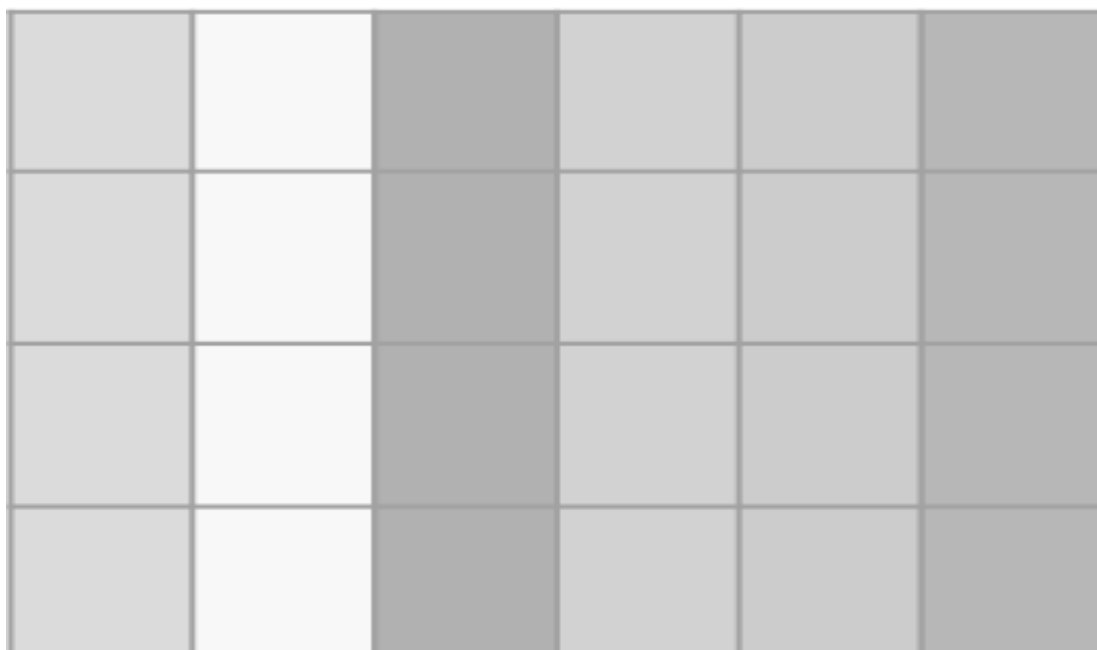
Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A

Stem for Items 1 and 2

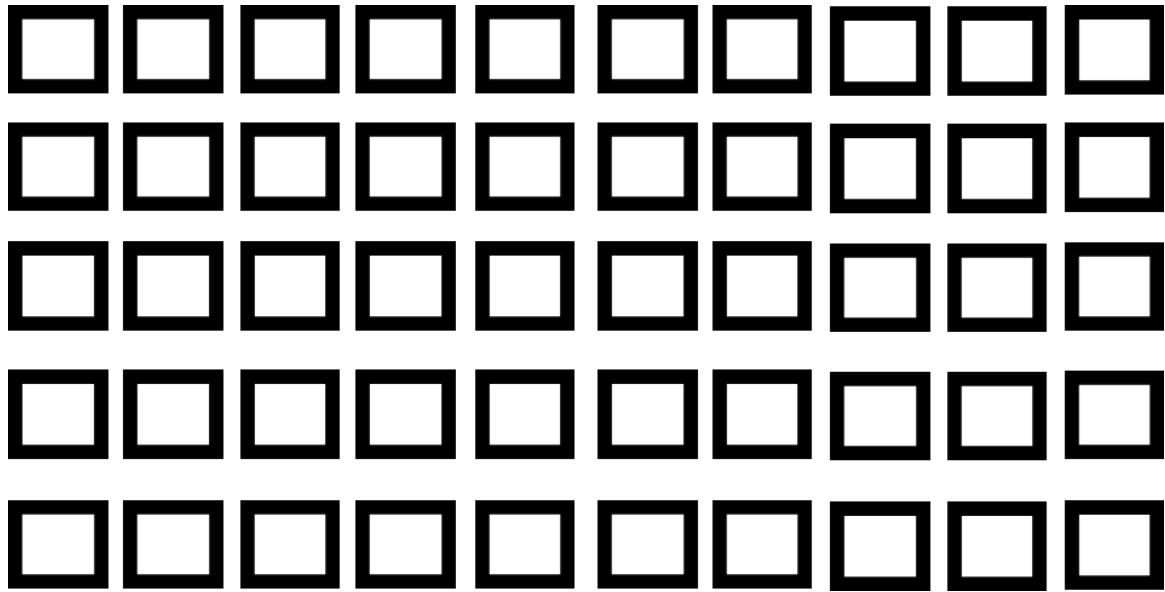
1. Count the number of squares and divide them based on the succeeding questions.



Questions:

- How many 2s of square are there? Mark X every 2s of square then count.
- How many 3s of square are there? Draw a straight line every 3s of square then count.
- How many 4s of square are there? Draw a wavy line every 4s of square then count.

2. Get 50 square tiles. Group them according to the division situation below and answer the questions that follow.



Questions:

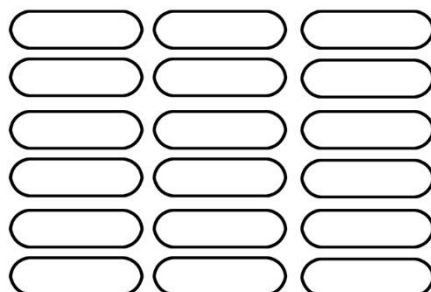
- a. Group the square tiles by 5.
- b. How many groups are formed?
- b. What will be the division equation if the square tiles are grouped by 5?
- c. Group the square tiles by 10.
- d. How many groups are formed?
- e. What will be the division equation if the square tiles are grouped by 10?

Part 4B

Item 1

Questions

1. How many 2s are there in 18 popsicle sticks? Box a set of 2s.

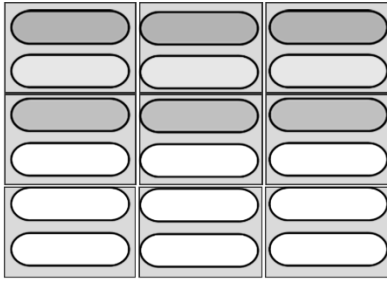


2. Write the division equation that can be derived in item 1.
3. How many 3s are there in 18 popsicle sticks? Make a set of 3s by encircling.
4. Write the division equation that can be derived in item 3?

Answers to Item 1

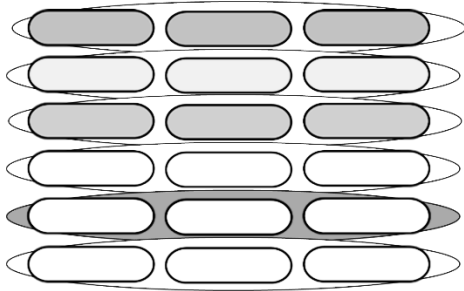
A.

1. 9,



2. $18 \div 2 = 9$

3. 6,



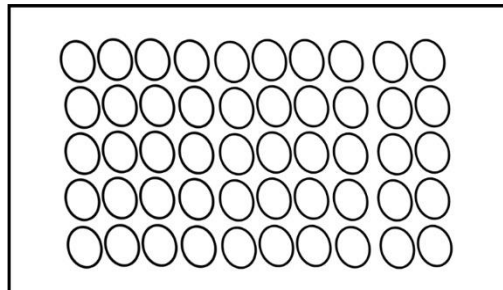
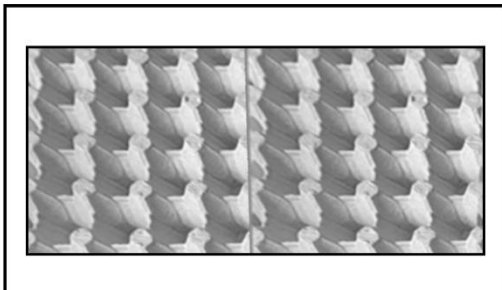
4. $18 \div 3 = 6$

Part 4C

Item 2


Questions

A. Directions: Study the picture and answer the questions that follow.



1. If you put all the eggs on the tray, how many set of 5 would there be?
2. Write the division equation for item 1.

3. If the 10 by 10 egg tray is used for 100 eggs, how many sets of 10 would there be?

4. Use this egg tray  to make a set of 4. How many sets of eggs are there?

5. Write the division equation for item 4.

Answers to Item 2

1. 8 sets

2. $40 \div 5 = 8$

3. 10 sets

4. 5

5. $20 \div 4 = 5$

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 18

Solving Routine and Non-routine Problems Involving Division of Numbers by 2, 3, 4, 5, and 10 and with Any of the other Operations of Whole Numbers Including Money Using Appropriate Problem-Solving Strategies and Tools

Key Idea

Solve routine and non-routine problems involving division of numbers by 2,3,4,5 and 10 and with any of the other operations of whole numbers including money using appropriate problem-solving strategies and tools.

Lesson Component 1 (Lesson Short Review)

Time: **10** minutes

Questions

Directions: Complete the table below by writing the correct multiplication equation and quotient in each column.

Item	Dividend	Divisor	Division Equation	Quotient
1.	10	2		
2.	21	3		
3.	40	4		
4.	75	5		
5.	100	10		

Answers

Item	Dividend	Divisor	Division Equation	Quotient
1.	10	2	$10 \div 2 = 5$	5
2.	21	3	$21 \div 3 = 7$	7
3.	40	4	$40 \div 4 = 10$	10
4.	75	5	$75 \div 5 = 15$	15
5.	100	10	$100 \div 10 = 10$	10

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

In the previous task, we recalled dividing numbers by 2, 3 4, 5 and, 10. Today, we will solve routine and non-routine problems involving division of numbers by 2, 3, 4, 5, and 10 and with any of the other operations of whole numbers including money using appropriate problem-solving strategies and tools.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Dividing Numbers
- Other Operations
- Problem-Solving Strategies
- Solve Routine Problems
- Solve Non-routine Problems
- Tools

Lesson Component 4 (Lesson Activity)

Time: **30** minutes

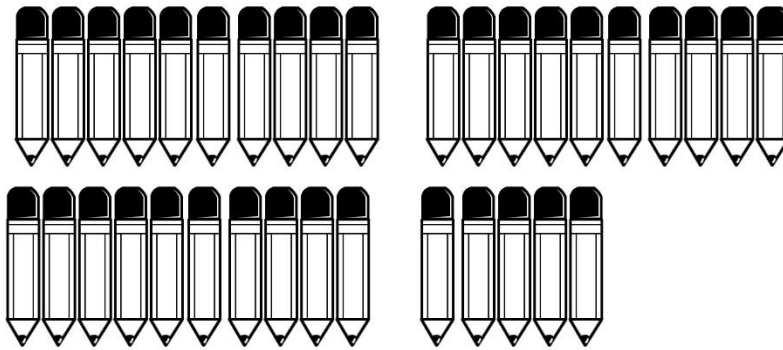
Part 4A**Stem for Items 1 and 2**

1. Tantan earned money from selling bottles. He earned ₱15 on Saturday and ₱35 on Sunday. If he will spend it equally from Monday to Friday, how much will be his budget for each day?

**Questions:**

- a. How do you solve a problem?
- b. Do you follow the steps to solve a problem? Enumerate the steps.
- b. What is asked in the problem?
- c. What are the given facts?
- d. How much money does he have?
- e. What operation/s are you going to use?
- f. What will be the number sentence for the given problem?
- g. Show the solution on the board.
- h. Did you get the answer correctly?
- i. How much allowance did he spend each day?

2. Jhada buys 35 pencils. She wants to keep 5 pieces and give the rest to her 10 friends, how many pencils will each of her friends receive?



Questions:

- How many pencils does Jhada have?
- How many pencils does she keep?
- How many pencils will she give to her friends?
- Illustrate the number of pencils she will give by taking away the number of pencils she will keep.
- If she will give 30 pencils to her 10 friends equally, how many pencils will each of her friends receive?
- How did Jhada distribute the pencils to her friends equally?
- Illustrate the division of 30 pencils to her 10 friends.
- Write the division equation to show the number of pencils received by her friends.

Part 4B

Item 1

Questions

Carl paid ₱90 for 2 notebooks and 1 pencil. If the pencil is worth ₱10, How much does each notebook cost?

1. Understand:

What is asked in the problem? _____

What are the given facts? _____

2. Plan:

What operation will be used? _____

What will be the number sentence? _____

3. Solve:

Show your solution.

4. Look back and Check:

Did you follow the steps correctly? _____

How much does each notebook cost? _____

Answers to Item 1

1. The cost of each notebook.

₱90, 3 notebooks, 1 pencil worth ₱10

2. subtraction and division

$$(\text{₱}90 - \text{₱}10) \div 3 = N$$

3. Step 1

$$\begin{array}{r} \text{₱}90 \\ - \quad 10 \\ \hline \text{₱}80 \end{array}$$

Step 2

$$\begin{array}{r} 40 \\ 2 \overline{)80} \\ - 8 \\ \hline 00 \\ - 0 \\ \hline 0 \end{array}$$

4. Yes

Each notebook costs ₱40.

Part 4C

Item 2

Questions

There are 18 candies in Jayjay's jar. How many candies will each of his 3 friends have, if he shares 6 pieces of it with his younger brother?

1. How many candies are there in the jar?
2. How many candies were left after giving 6 pieces of it to his brother?
3. Draw 18 candies and mark X the 6 pieces of candy.
4. How many candies will he give to her friends?
5. Draw 12 candies and group them into 3.
6. How many candies did each of his friends receive?
7. Is there any excess candies?
8. Write the division equation of the illustration below.



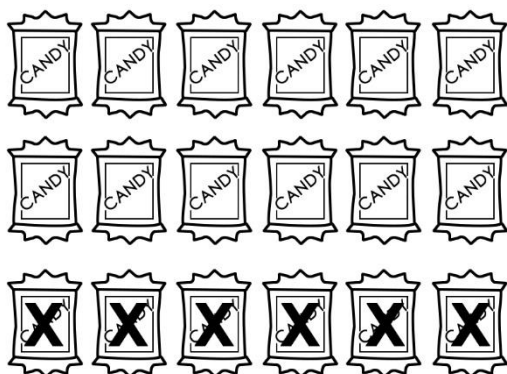
$$\boxed{} \div \boxed{} = \boxed{}$$

Answers to Item 2

1. 18

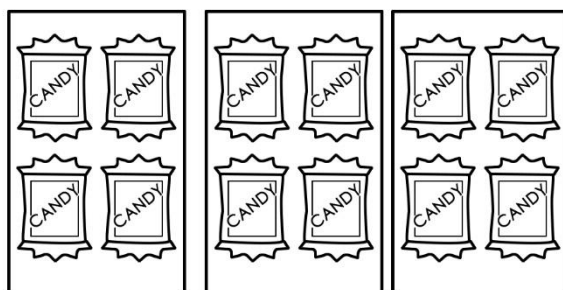
2. $18 - 6 = 12$

3.



4. 12

5.



6. 4

7. No

8. $12 \div 3 = 4$

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: 5 minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 19

Visualizing, Identifying, Classifying, and Describing Half Circles and Quarter Circles

Key Idea

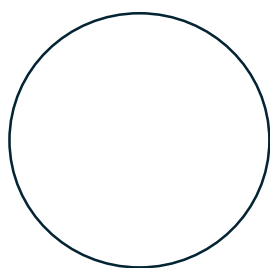
Visualize, identify, classify, and describe half circles and quarter circles

Lesson Component 1 (Lesson Short Review)

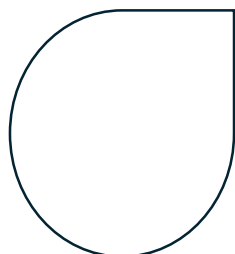
Time: 10 minutes

Questions

Can you identify the circles in the figures below? Draw a check mark (✓) if the figure is a circle and cross mark (✗) if it is not.



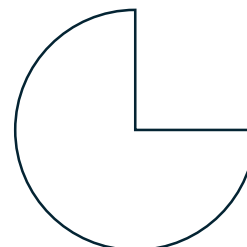
1



2



3



4

Answers

1. ✓
2. ✗
3. ✗
4. ✗

Lesson Component 2 (Lesson Purpose/Intention)

Time: 5 minutes

Teacher states:

In the previous activity, you were able to identify circles using figures. Today, we will use cut-outs, protractor, compass, and ruler to visualize, identify, classify, and describe half circles and quarter circles.

Lesson Component 3 (Lesson Language Practice)

Time: 10 minutes

Key words/terms are:

- Circle
- Compass
- Half Circle

- Plane Figure
- Protractor
- Quarter Circle

Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A

Stem for Items 1 and 2

1. I have here a circle as shown in Figure 1. I cut it in half, as shown in Figure 2. One-half of the part of the circle is shown in Figure 3.

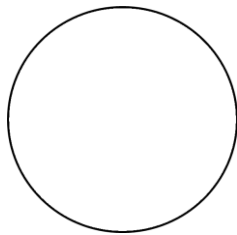


Figure 1

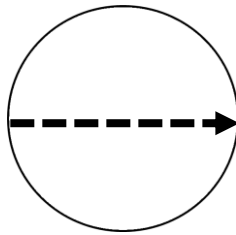


Figure 2



Figure 3

Questions:

- What kind of plane figure is shown in Figure 1?
- What do you notice in Figure 2?
- Describe Figure 3.
- What do you call it?
- How many half circles are there in one whole circle?
- What Mathematics tool can help you draw a semi-circle/ half circle?
- Can you draw half-circle objects?
- What are the characteristics of a half circle?

2. Look closely to the figures in the set.

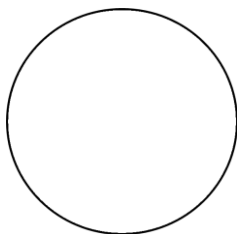


Figure 1

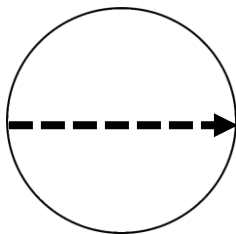


Figure 2

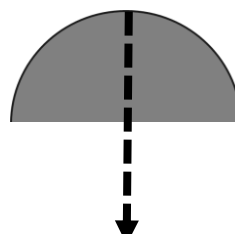


Figure 3

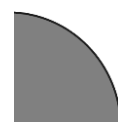


Figure 4

Questions:

- What kind of plane figure is shown in Figure 1?
- What do you notice in Figure 2?
- Do you remember Figure 3?
- What do you call it?
- What happened in Figure 4?
- Do you have any idea how this figure is called?
- How many quarter circles are there in one whole circle?
- Can you draw quarter-circle objects?
- What are the characteristics of a quarter circle?

Part 4B

Item 1

Questions

- Which of the following figures is a half-circle?



Figure A



Figure B

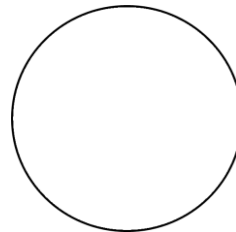


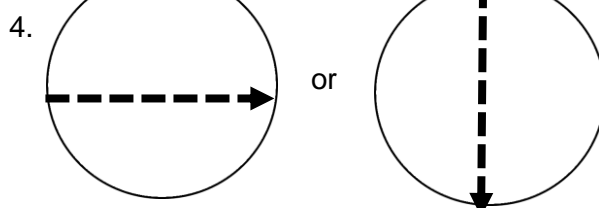
Figure C

- Which of the following Mathematical tools best represents a half-circle?
A. cut-out B. protractor C. compass
- Draw the figure which will complete Figure A to make it a half-circle.
- Sketch a ray which makes Figure C into two half-circles.

Answers to Item 1

- Figure B

- B



Part 4C

Item 2

Questions

1. Which of the following figures is a quarter-circle?

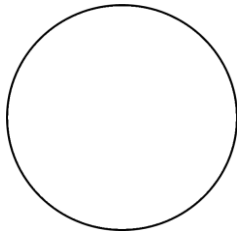


Figure A

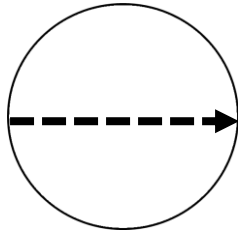


Figure B

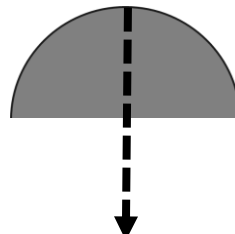


Figure C

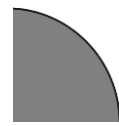


Figure D

2. Which of the following Mathematical tools best draws a perfect circle?

- A. cut-out B. protractor C. compass

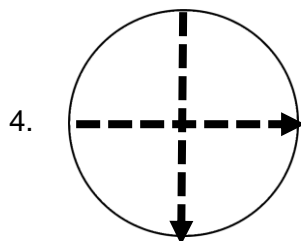
3. Draw another quarter circle congruent to the quarter circle in Figure D.

4. Sketch 2 rays to make Figure A into four quarter-circles.

Answers to Item 2

1. Figure D

2. C



Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: 5 minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?

- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 20

Identifying, Naming and Describing the Four Basic Shapes (Square, Rectangle, Triangle, and Circle) in 2-Dimensional and 3-Dimensional Objects

Key Idea

Identify, name and describe the four basic shapes (square, rectangle, triangle, and circle) in 2 dimensional and 3-dimensional objects

Lesson Component 1 (Lesson Short Review)

Time: 10 minutes

Directions

Read each question carefully. Answer with Yes or No.

1. Is this a square?



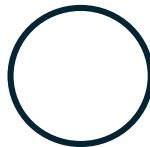
2. Does the figure show a rectangle?



3. Can the figure be called a triangle?



4. Is the figure circle is shape?



Answers

1. Yes
2. Yes
3. Yes
4. Yes

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

In the previous activity, you were able to identify the four basic shapes. Today, we will use real objects, cut-outs, compass, and ruler identify, name, and describe the four basic shapes on the 2-dimensional and 3-dimensional objects.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- 2-Dimensional Objects
- 3-Dimensional Objects
- Circle
- Rectangle
- Square
- Triangle

Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A**Stem for Items 1 and 2**

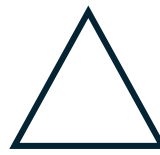
1. I have here figures A, B, C, and D.



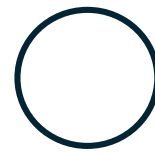
A



B



C

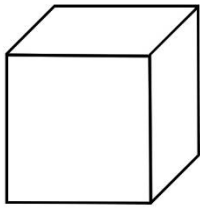


D

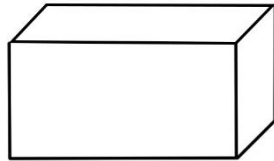
Questions:

- a. What kind of plane figure is shown in Figure A?
- b. How many sides does it have?
- c. What can you say about the measure of its sides?
- d. What kind of figure is shown in Figure B?
- e. How many sides does it have?
- f. Describe the measure of its lengths? Widths?
- g. How do you call Figure C?
- h. How many sides does it have?
- i. Do you know what shape is shown in Figure D?
- j. Can you name some objects that have any of the four basic shapes?

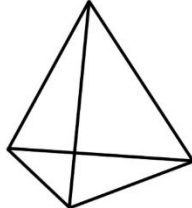
2. Examine the given figures.



E



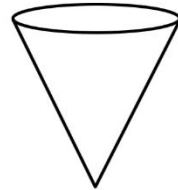
F



G



H



I

Questions:

- What kinds of shapes do you see in Figure E?
- Do you know how this Figure is called?
- Let us look closer at Figure F. What basic shapes make up this figure?
- Describe Figure G.
- What basic shapes can you see in Figure H?
- Can you give any shape that makes up Figure I?
- Give a 3-dimensional object in our classroom then describe it.

Part 4B

Item 1

Questions

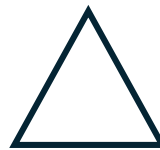
Choose the letter of the 2-dimensional that best fits the description in each item.



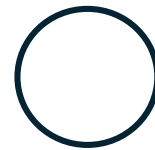
A



B



C



D

- Which of the shapes above is a circle?
- It is a basic shape that has 4 equal sides.
- it is a closed figure that has three sides.
- Which of the four figures have two pair of equal sides?

Answers to Item 1

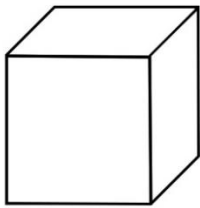
1. D
2. A
3. C
4. B

Part 4C

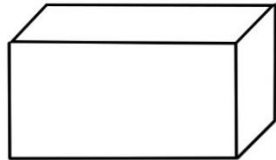
Item 2

Questions

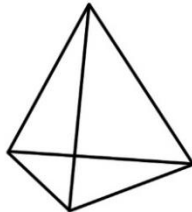
Use the illustrations below to answer the questions that follow.



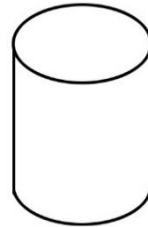
E



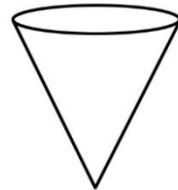
F



G



H



I

1. What basic shape can you see in Figure G?
2. How many circle shapes make up Figure H?
3. Which of the figures above consists of six squares?
4. What basic shapes make up Figure I?
5. How many rectangle shapes are there in Figure F?

Answers to Item 2

1. triangle
2. 2
3. Figure E
4. triangle and circle
5. 4

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 21

Determining Missing Term/s in a Given Continuous Pattern using Two Attributes

Key Idea

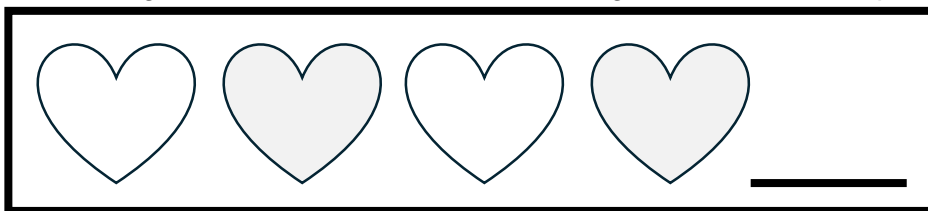
Determine missing term/s in a given continuous pattern using two attributes

Lesson Component 1 (Lesson Short Review)

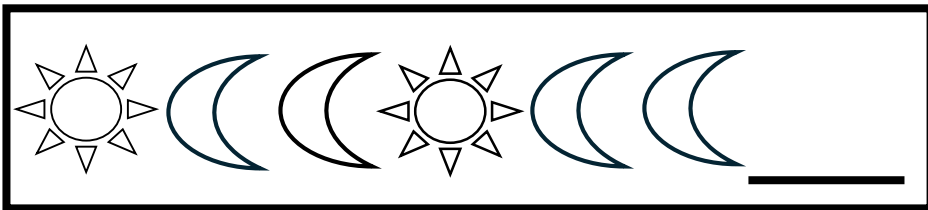
Time: 10 minutes

Questions

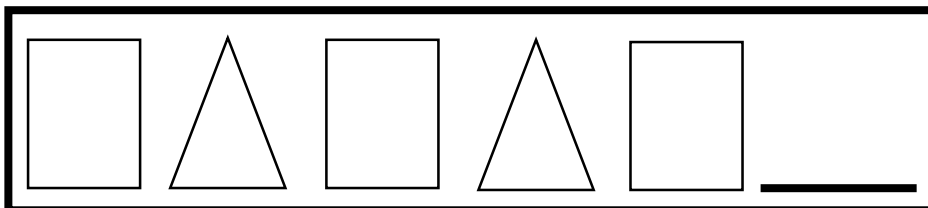
1. Study the set of figures below. What will be the next figure to continue the pattern?



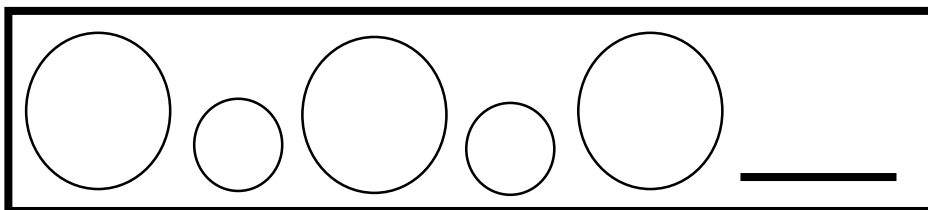
2. . Examine the set of figures below. What will be the next figure to continue the pattern?







3. Look closely at the set below. What will be the next figure to continue the pattern?



4. Examine the set of figures below. What will be the next figure to continue the pattern?



Answers

1. 
2. 
3. 
4.  (smaller circle)

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

A pattern is the repeated arrangement of shapes, sizes, colors, letters, numbers, figures, etc. in each set. By finding the pattern, we can determine the missing term/ s in a given continuous pattern using two attributes.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Attribute
- Pattern
- Term

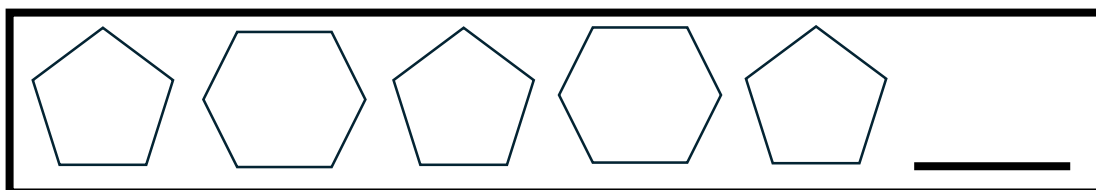
Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A

Stem for Items 1 and 2

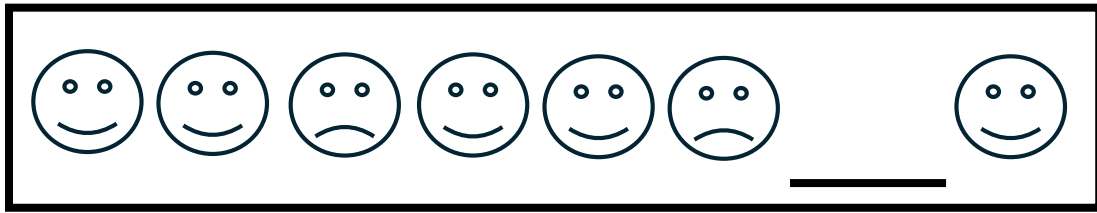
1. Look closely to the figures in the set.



Questions:

- a. What is the first figure in the set?
- b. What is the second figure?
- c. How about the third? Fourth?
- d. Do you see any pattern?
- e. What should be the next term to continue the pattern?
- f. Provide another set of figures for pupils to analyze the pattern which leads them in determining the missing term.

2. Look closely to the figures in the set.



Questions:

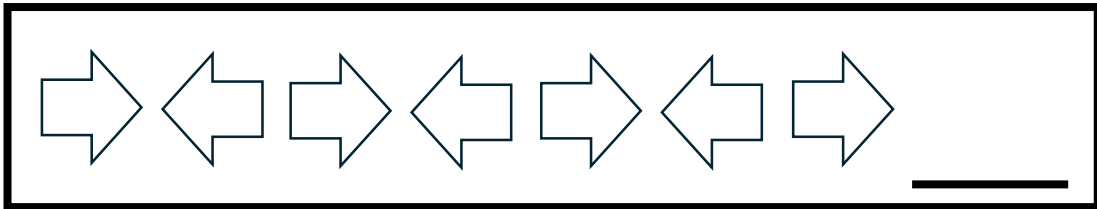
- What is the first figure in the set?
- What is the second figure?
- How about the third? Fourth? Fifth? Sixth?
- Do you see any pattern?
- What should be the next term to continue the pattern?
- Provide another set of figures for pupils to analyze the pattern which leads them in determining the missing term.

Part 4B

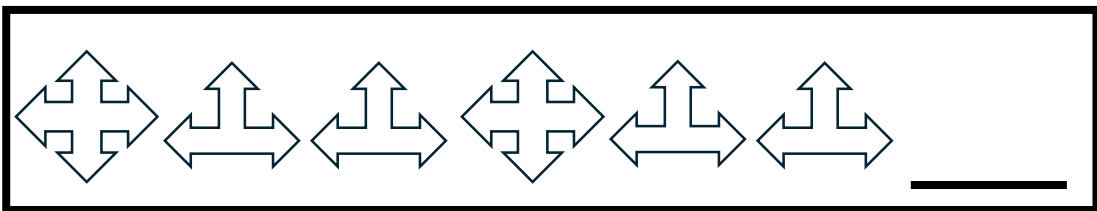
Item 1

Directions

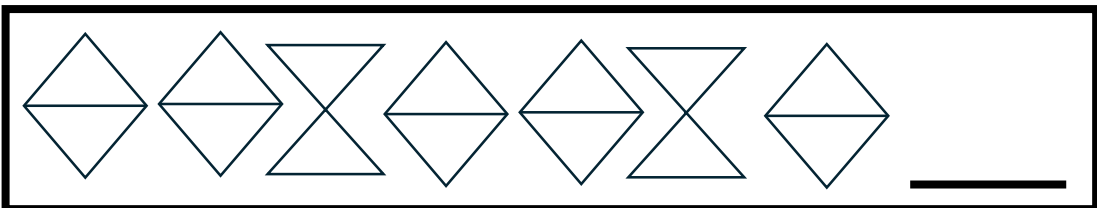
- Find the pattern and draw the missing term.




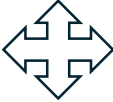

- Find the pattern and draw the missing term.



- Find the pattern and draw the missing term.



Answers to Item 1

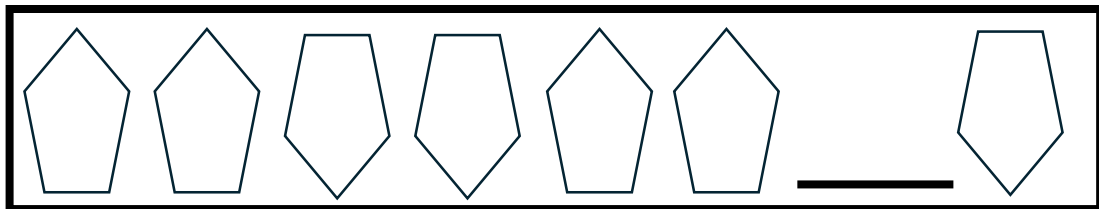
1. 
2. 
3. 

Part 4C

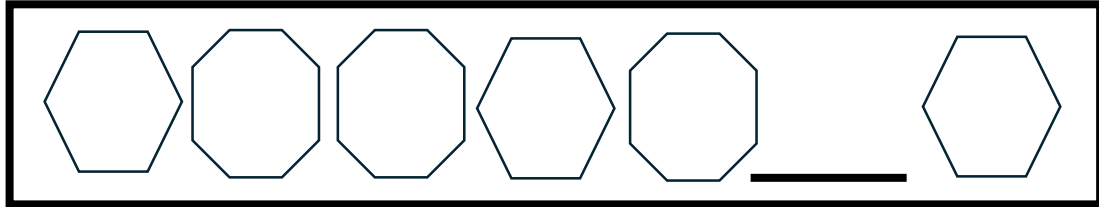
Item 2

Questions

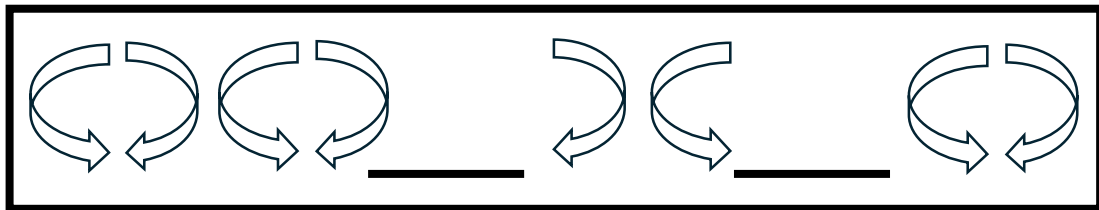
1. Find the pattern and draw the missing term.



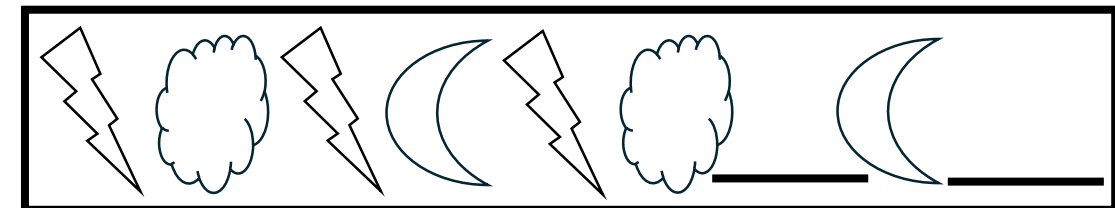
2. Find the pattern and draw the missing term.







3. Find the pattern and draw the missing term.



4. Find the pattern and draw the missing term.



Answers to Item 2

1. 
2. 
3. 
4. 

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 22

Determining the Missing Terms using One Attribute in a Given Continuous Pattern and in a Given Repeating Pattern

Key Idea

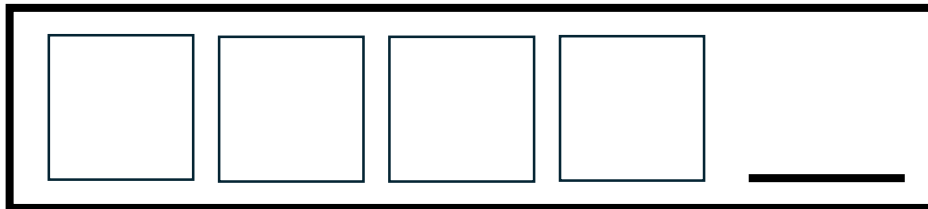
Determine the missing terms using one attribute in a given continuous pattern and in a given repeating pattern

Lesson Component 1 (Lesson Short Review)

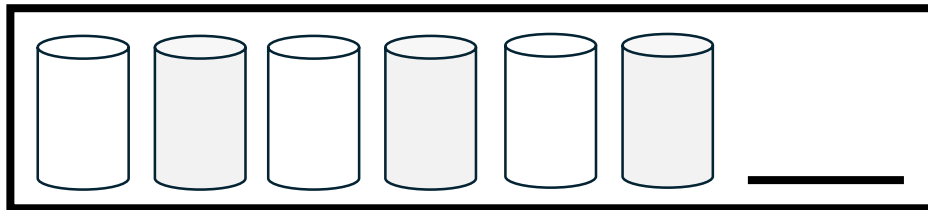
Time: 10 minutes

Directions

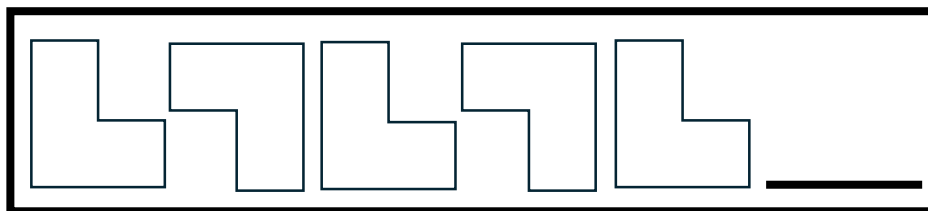
1. Study the set of figures below. What will be the next figure to continue the pattern?



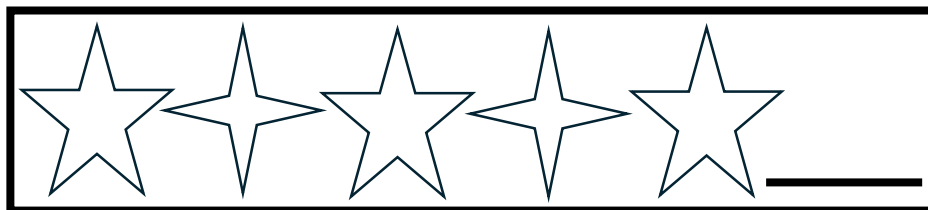
2. Examine the set of figures below. What will be the next term to continue the pattern?







3. Observe the set below. What will be the next figure to continue the pattern?



4. Look closely at the figures below. What will be the next term to continue the pattern?



Answers

1. 
2. 
3. 
4. 

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

A pattern is the repeated arrangement of shapes, sizes, colors, letters, numbers, figures, etc. in each set. By finding the pattern, we can determine the missing terms in a given continuous and repeating pattern using one of its attributes.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- Attribute
- Pattern
- Term

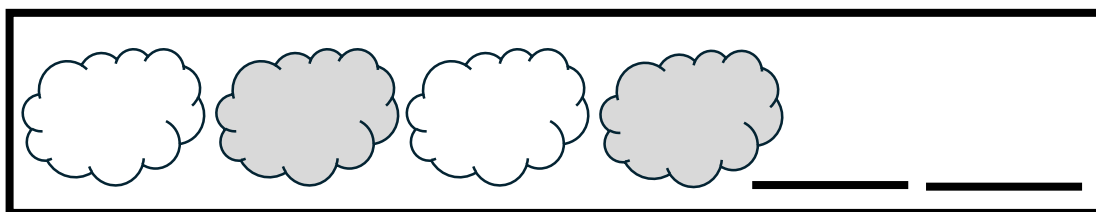
Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A

Stem for Items 1 and 2

1. Look closely to the figures in the set.



Questions:

- a. What is the first figure in the set?
- b. What is the second figure?
- c. How about the third? Fourth?
- d. Do you see any pattern?
- e. What attribute of the figure changes?
- f. What should be the next term to continue the pattern?

g. Provide another set of figures for pupils to analyze the pattern which leads them in determining the missing term.

2. Look closely to the figures in the set.



Questions:

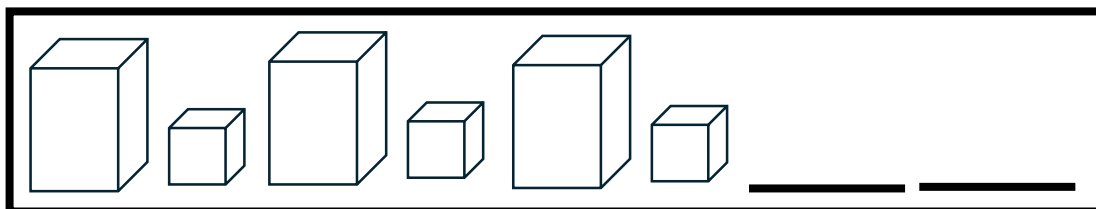
- What is the first figure in the set?
- What is the second figure?
- How about the third? Fourth?
- Do you see any pattern?
- What attribute of the figure changes?
- What should be the next term to continue the pattern?
- Provide another set of figures for pupils to analyze the pattern which leads them in determining the missing term.

Part 4B

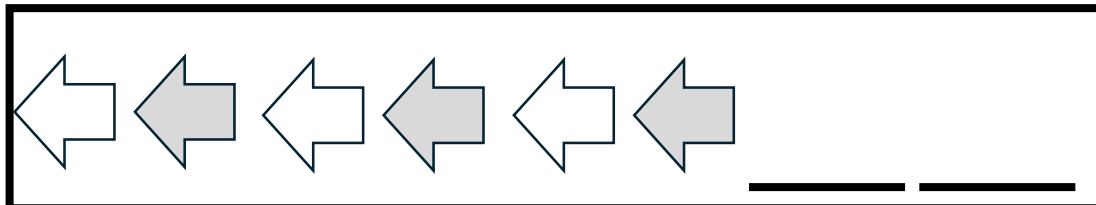
Item 1

Directions

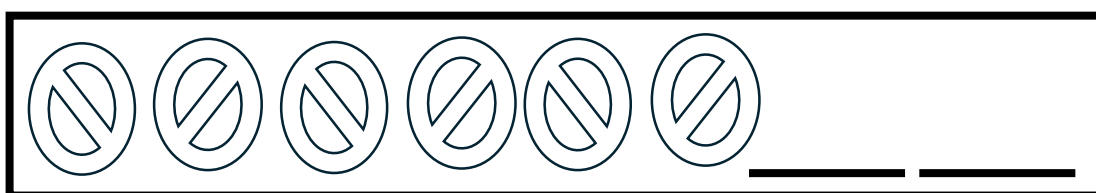
1. Find the pattern and draw the missing terms.






2.



3. Find the pattern and draw the missing terms.



Answers to Item 1

1. 
2. 
3. 

Part 4C

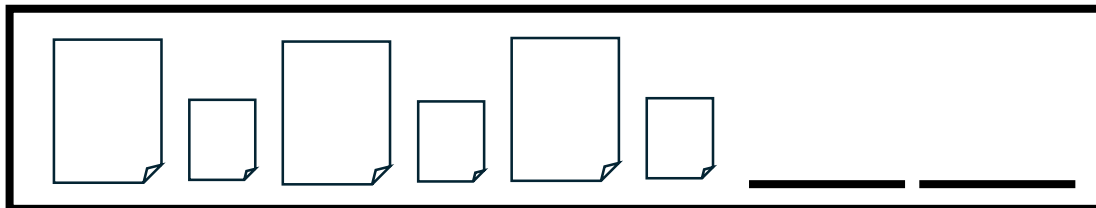
Item 2

Questions

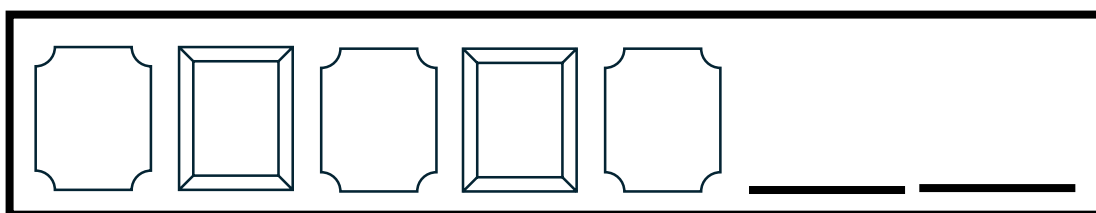
1. Find the pattern and draw the missing terms.






2. Find the pattern and draw the missing terms.



3. Find the pattern and draw the missing terms.



Answers to Item 2

1. 
2. 
3. 

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

Mathematics Grade 2 Lesson Plan 23

Identifying Straight Lines and Curves, Flat and Curved Surfaces in 3-Dimensional Object

Key Idea

Identify straight lines and curves, flat and curved surfaces in 3-dimensional object.

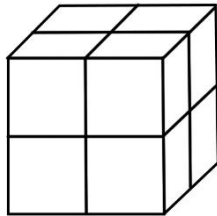
Lesson Component 1 (Lesson Short Review)

Time: 10 minutes

Directions

Name the plane figure that makes up a 2- dimensional and 3- dimensional figure below. Write your answer on the blank provided before the number.

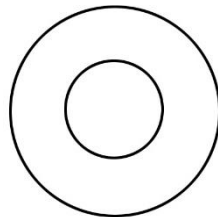
_____ 1.



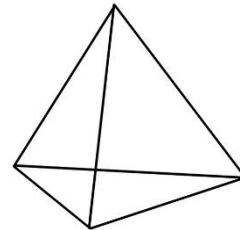
_____ 4.



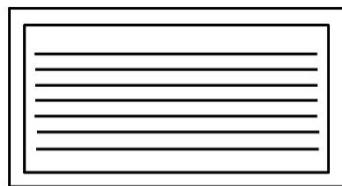
_____ 2.



_____ 5.



_____ 3.



Answers

1. square
2. circle
3. rectangle
4. circle
5. triangle

Lesson Component 2 (Lesson Purpose/Intention)

Time: **5** minutes

Teacher states:

In the previous task, we recalled the name of plane figures/ flat surfaces that make up the two-dimensional and three-dimensional figures. Today, we will Identify straight lines and curves, flat and curved surfaces in 3-dimensional object.

Lesson Component 3 (Lesson Language Practice)

Time: **10** minutes

Key words/terms are:

- 3-Dimensional Object
- Curve Line
- Curved Surface
- Plane Figure/ Flat Surface
- Straight Line

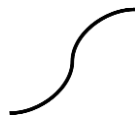
Lesson Component 4 (Lesson Activity)

Time: **30** minutes

Part 4A**Stem for Items 1 and 2**

Directions: Identify the following one-dimensional figures. Write ***Straight Line*** if it has no width or curves and ***Curve Line*** if it bends smoothly without sharp edges.

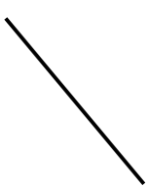
_____1.



_____4.



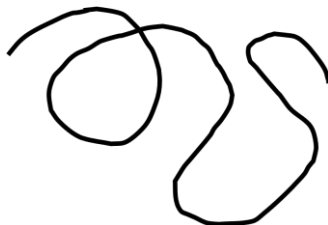
_____2.



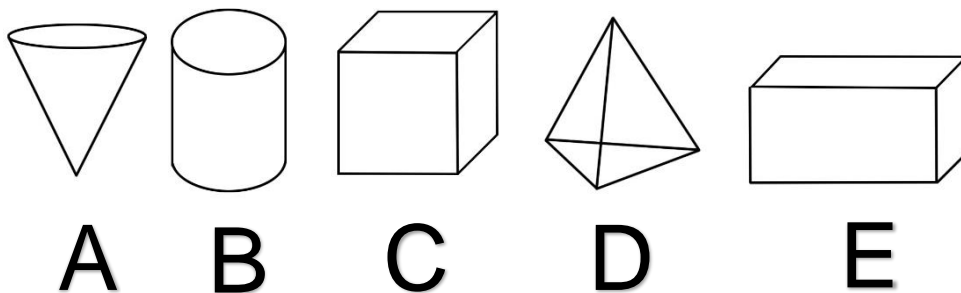
_____5.



_____3.



2. Examine the solid figures below.



Questions:






- Which solid figure has cylindrical curve and two circular flat surfaces?
- Which solid figure has six squares?
- Which solid figure has 4 rectangles and two squares?
- Which solid figure has a circular flat surface and a curved surface?
- Which solid figure has all triangular flat surfaces?

Part 4B

Item 1

Questions

Directions: Write **SL** if the figure is a straight line and **CL** if curve line.

- _____ 1. 
- _____ 2. 
- _____ 3. 
- _____ 4. 
- _____ 5. 

Answers to Item 1

1. CL
2. CL
3. SL
4. SL
5. CL

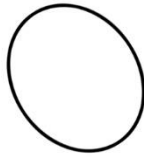
Part 4C

Item 2

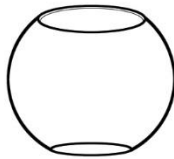
Questions

Directions: Write **flat surface** if the figure has plane surface without curves and **curved surface** if it has a round surface.

_____ 1.



_____ 2.



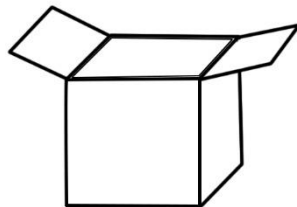
_____ 3.



_____ 4.



_____ 5.



Answers to Item 2

1. curved surface
2. curved surface
3. flat surface
4. curved surface
5. flat surface

Lesson Component 5 (Lesson Conclusion – Reflection and Goals)

Time: **5** minutes

The teacher facilitates pupil reflection and discussion, that addresses such questions as:

- What do you think were the key mathematical concepts addressed in this lesson?
- Would you rate your level of understanding of the material covered in this lesson as high, moderate, or low?
- Has the lesson helped you to gain further insight into aspects of the material covered that represent strengths or represent weaknesses?
- What would you describe as the main barriers, if any, to your ongoing progress and achievement in relation to the topic area addressed in this lesson?
- What do you think would best assist your ongoing progress and achievement in relation to the topic area?

For inquiries or feedback, please write or call:

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