# Grade 2 MATH Spring Semester



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Thank you,

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# Introduction and Implementation – Bridge Resource

Thank you for purchasing an instructional product from Amara 4 Education.

This introduction is intended to:

- Enhance teacher understanding on the overall design of the daily resource
- Detail recommended implementation processes to increase student performance
- Provide strategies for efficient and effective pedagogy to heighten student numeracy in the classroom

#### Bridge Resource Design: Fall and Spring Semester

Both the fall and spring semester Bridge Resources consist of eighty (80) daily learning opportunities with a detailed answer key located at the end of the 80 exercises. These two resources provide a simultaneous review of content as well as a daily opportunity for students to solve application word problems. The grade level is indicated by a series of triangles, dots, circles or stars in the learning opportunity header. These symbols are used in lieu of numbers to reduce self-esteem issues of children receiving special education services working in a below grade level Bridge Resource.

The Bridge Resource has a two-fold objective - build grade level numeracy and support the daily core lessons as well as rectify prior grade level numeracy skill gaps. The Bridge Resource is specifically designed for students to acquire rudimentary mathematical operational skills from both a conceptual and physical mathematics perspective. Each of the 80 Learning Opportunities is divided into three sections:

- PART 1 -- Numeracy Development
- PART 2 -- Application Practice
- PART 3 -- Reflection and Conceptual Understanding.

The daily learning opportunities are designed to sequentially build and provide a spiral review. Students are exposed to skills and concepts prior to engaging in the associated application process on a daily opportunity and are provided repeated practice on specific skills to ensure verification of mastery.

A <u>Skill Support Package</u> is also available for purchase at each grade level. These resource skill packets contain specific numeracy skills (and solutions) that provide additional practice as well as pre-requisite skill building practice in key numeracy areas.

#### Bridge Resource Implementation

The implementation and consistent daily use are key aspects to the overall performance of any system. A Bridge Resource is not an exception to this thinking. In addition to the core lesson, it is paramount that a daily learning opportunity be a structural and consistent part of the daily ninety (90) minute math block. Students master skills and applications if sufficient practice is provided. Conversely, students will not master skills that are not adequately practiced.

It is important to note that effective implementation of a Bridge Resource usually requires more time at the beginning of the semester to set up and establish efficient routines and clearly communicate teacher expectations. However, as students are consistently engaged in the daily process, the time required for a student to complete a single daily learning opportunity is significantly lessened within a few weeks

# Introduction and Implementation – Bridge Resource

of implementation. With any pedagogy or instructional resource, the teacher must guide and hold students accountable to ensure quality engagement each day.

**Prior to implementation**, it is advisable and frequently less expensive for a local reproduction company to copy all 80 learning opportunities pages and secure the pages with a plastic binder that allows a 'daily student resource' to lie flat on a desk when fully opened. It is also recommended that the pages be reproduced on single-sided sheets. Doing so will allow students to use the corresponding blank page to neatly show their work in an organized manner – as conveyed by the classroom teacher.

When each student is provided their own bound Bridge Resource, a running record is created so each child's work history can be reviewed by a teacher, administrator or parent to provide documentation of a student's daily progress over time. Individually bound Bridge Resources also afford time efficiency in a teacher's daily routines since he or she is not required to make Xerox copies each day or distribute and collect papers. Students readily retrieve their bound Bridge Resource from their desk and independently engage that day's learning opportunity.

The **implementation recommendations** listed below are intended to maximize student learning and academic performance using an Amara Bridge Resource.

- 1. It is highly recommended that the teacher solves the learning opportunity for that day in advance, so they are aptly prepared for the exercise solutions and any pedagogical points to emphasize on each exercise. Therefore, the teacher must also have an assigned booklet.
- 2. When students are first introduced to this resource, teachers should model their expectations on the quality and specific organizational structure of student daily work. The primary grade level teacher may model these expectations with a guided practice for at <u>least</u> 8 to 10 separate learning opportunities. At that point, students may work independently via a structured setting complete a numbered exercise in accordance with teacher expectations stop and check the problem together. A deliberate and clearly modeled implementation process ensures high quality, accountable student work.
- 3. An effective means to accomplish this task is to require students to draw a rectangular grid on the corresponding blank page and show their computations for each numbered learning opportunity exercise in one of the grid's boxes.
- 4. Once the students begin to work through each of the problems, the teacher should continue to monitor the completion of problems by:
  - Stamping or 'marking with a check' that the problem(s) are/is correct.
  - Providing corrective feedback on those that are incorrect. If a student has made a computational error, have them check the problem and complete again, correctly.
  - Annotating in his/her own teacher booklet any conceptual or computational issues students may be struggling with due to lack of understanding. This assists the teacher to determine specific exercises that must be modeled and reviewed. Also, refer to the <u>Skill</u> <u>Support Package</u> or to the Formative Loop Resource Library to select appropriate skill practice and direction.
- 5. This resource and process serves as a daily diagnostic tool. If the teacher observes students incorrectly answer a specific skill or application, it is a clear indicator of a lack of skill or application mastery/retention. A short mini-lesson or spaced repetition instruction for three or four days invariably remedies a previous skill deficiency.
- 6. Upon completion of your allotted time for a learning opportunity, teacher may decide to guide students through a think-aloud of 1 or 2 problems that were challenging for the majority of students.

# Introduction and Implementation – Bridge Resource

#### **Recommendations on Numeracy Development**

The 80 Learning Opportunities can be completed in less than 15 minutes each day <u>with</u> heightened student numeracy in basic fundamental operations. One of the most important numeracy aspects that an elementary student must master to automaticity is the basic math fact operations in addition and subtraction. The vast majority of operations involved in elementary arithmetic is highly dependent upon a student's ability to efficiently apply math fact knowledge. Fortunately, nearly all primary-aged grade level students can master their basic addition and subtraction operations during first and second grades, but an effective procedure must be securely in place.

A highly recommended and inexpensive daily numeracy program that assists students in learning and mastering <u>both</u> math fact and processing math skills is *Formative Loop*. This numeracy program requires a daily 5 minute paper-pencil <u>written</u> assessment and the program digitally tracks each student's progress. The *Formative Loop* numeracy program is individualized for each student, but a teacher can account for each student's progress in real time. The *Formative Loop* numeracy program also possesses a math fact sequence mastery in manageable chunks of daily exposure until the student is adequately prepared to successfully complete mixed addition (or, subtraction, multiplication, or division) one-digit facts. Finally, *Formative Loop* offers a skill resource library that assists the classroom teacher with skill practice on almost any mathematical topic readily available for immediate download.

In order to aid students in mastering math fact operations and processing skills, specific numeracy skills are presented within the daily learning opportunities. Those support skill sheets are also included for extra practice as needed in a grade level *Skill Support Package* available for purchase on the Amara 4 Education website. Additionally, Amara offers free downloadable math incentives that are singularly designed to intrinsically motivate students to master their math facts. The website also provides free downloadable white papers on various instructional pedagogy.

If any educator has constructive criticism on what we can do better, please contact us at the email address on the front cover. We appreciate any and all feedback that our team of teachers and administrators can use to better serve the needs of our students.

Thank you,

Amara

Fall and Spring Bridge Resource - Table of Contents			
Section 1	Daily Learning Opportunities (01 – 80)		
Section 2	Daily Learning Opportunities (01 – 80) Answer Key		



# Grade 2

# **Mathematics**

**Spring Semester** 

# 80 Daily Learning Opportunities

**Student Name:** 

**Teacher Name:** 



































# PART 2: Application Practice

0

15



PART 3: Reflection and Conceptual Understanding

400



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10

11

1,200







# PART 2: Application Practice



# PART 3: Reflection and Conceptual Understanding

A.) Find the <u>shaded</u> minutes.









Spring Learning Opportunity 07 "Layering a Sound Foundation" Name:\_\_\_\_

#### PART 1: Numeracy Development



# PART 2: Application Practice



#### PART 3: Reflection and Conceptual Understanding

A.) Find the <u>shaded</u> minutes.













PART 2: Application Practice



PART 3: Reflection and Conceptual Understanding











Name:\_\_\_\_\_

#### **PART 1:** Numeracy Development



#### PART 2: Application Practice



#### PART 3: Reflection and Conceptual Understanding





































#### PART 2: Application Practice













PART 3: Reflection and Conceptual Understanding





Name:

86

69

#### PART 1: Numeracy Development



#### PART 2: Application Practice





*Hint:* Equal spaces between the minuend and subtrahend.





Name:\_

79

#### PART 1: Numeracy Development



PART 2: Application Practice





Hint: Equal spaces between the minuend and subtrahend.









PART 2: Application Practice



PART 3: Reflection and Conceptual Understanding

Count the quarters. Write the amount of money/cents under each group of quarters.









PART 2: Application Practice



PART 3: Reflection and Conceptual Understanding

Count the quarters. Write the amount of money/cents under each group of quarters.





PART 2: Application Practice



PART 3: Reflection and Conceptual Understanding

Write the word that describes each number in the addition or subtraction equations on the line provided.





PART 2: Application Practice



PART 3: Reflection and Conceptual Understanding

Write the word that describes each number in the addition or subtraction equations on the line provided.





PART 2: Application Practice



PART 3: Reflection and Conceptual Understanding

Write the word that describes each number in the addition or subtraction equations on the line provided.









PART 2: Application Practice



PART 3: Reflection and Conceptual Understanding









PART 3: Reflection and Conceptual Understanding





Spring Learning Opportunity 24 "Layering a Sound Foundation"



#### PART 1: Numeracy Development











Spring Learning Opportunity 25 "Layering a Sound Foundation"



#### PART 1: Numeracy Development























PART 2: Application Practice











# PART 2: Application Practice

**7.** The table shows the number of goals that three country's soccer teams had during the season.

Calculate the total number of soccer goals for each team.

Team	Soccer Goals	Total
Brazil	₩ ₩ ₩ ₩ ₩ III	
Spain	₩₩₩₩₩	
ltaly	HH HH HH HH I	



# PART 3: Reflection and Conceptual Understanding

Fill in the mid-points.







#### PART 2: Application Practice

**6.** The table shows the number of laps that 3 girls ran around the school track last month.

Calculate the total number of laps for each girl.

Girl	Laps Run at School Track	Total
Bettina	HH HH HH II	
Priscilla	₩ ₩ ₩ ₩ ₩ W	
Gina	HH HH HH III	



#### PART 3: Reflection and Conceptual Understanding

Fill in the mid-points.







#### PART 2: Application Practice

6. The table shows the number of votes that 3 boys for the second grade school president.

*Calculate* the total number of votes for each boy.

Воу	Votes for 2 <sup>nd</sup> Grade School President	Total
Pedro	₩ ₩ ₩ ₩ ₩I	
Luis	₩ ₩ ₩ ₩ ₩ III	
Sal	HH HH HH I	

- a.) What is the difference between Pedro and Sal's vote totals?
- b.) How many more votes did Luis receive than Sal?
- c.) What is the total number of Pedro and Luis' votes?

# PART 3: Reflection and Conceptual Understanding

Fill in the mid-points.










Pair every two objects. If objects are equally paired, even number. If NOT, then it is an odd number.











Pair every two objects. If objects are equally paired, even number. If NOT, then it is an odd number.









PART 3: Reflection and Conceptual Understanding

Pair every two objects. If objects are equally paired, even number. If NOT, then it is an odd number.









Even numbers must always have equal addends. Write equal addends for each even number.

Even 📩	2 = <u>1</u> + <u>1</u>	6 =+	10 =+	14 =+	18 =+
Numbers	4 =+	8 =+	12 =+	16 =+	20 =+





PART 3: Reflection and Conceptual Understanding

Even numbers must always have equal addends. Write equal addends for each even number.

Even 占	2 =+	6 =+	10 =+	14 =+	18 =+
Numbers	4 =+	8 =+	12 =+	16 =+	20 =+





Even numbers must always have equal addends. Write equal addends for each even number.

 Even
 2 = -+ 4 = -+ 6 = -+ 8 = -+ 10 = -+ 

 Numbers
 12 = -+ 14 = -+ 16 = -+ 18 = -+ 20 = -+ 







A.) Ring ONLY the even numbers.

1 (6) 2 4 7

**B.)** Ring True or False.

Even numbers have equal addends.

True False

Even numbers <u>CAN</u> be separated in **True** 2 <u>equal</u> whole numbers. **False** www.amara4education.com







Write the even numbers and odd numbers to 21.

Even Numbers: 0, 2, 4,,,	, , , , , 20
Odd Numbers: <b>1</b> , <b>3</b> , <b>5</b> ,,, _,	,,,, 21





PART 3: Reflection and Conceptual Understanding

Write the even numbers and odd numbers to 21.







There were 56 students riding on the bus.

How many more students could ride the school bus?

cents in her purse.

How much money do Joe and Alma have combined?

cents



# PART 3: Reflection and Conceptual Understanding

A. Fill in the blanks for each even number.

```
6 = 3 + 3 Half of 6 is 3.
```

students

EVEN8 = +Half of 8 isNUMBERS2 = +Half of 2 is

# B. Ring True or False.

Even numbers have <u>equal</u> addends.

True False

Even numbers <u>CAN</u> be separated in **True** 2 <u>equal</u> whole numbers. **False** 





# PART 2: Application Practice



## PART 3: Reflection and Conceptual Understanding

A. *Fill* in the blanks for each even number.

4 =\_\_+\_\_ **Half** of 4 is\_\_.

## B. Ring Yes or No.

Do even numbers have equal addends? Yes No

Can even numbers be cut in half with **Yes** two equal whole numbers? **No** 





**The Rule of Even Numbers:** If the **<u>ones digit</u>** is a 0, 2, 4, 6, or 8 – the number is an **<u>EVEN NUMBER</u>**.

Is the number 12 an even number? What is the ones digit? 2 Odd

Is the number **1**<u>8</u> an even number?

What is the ones digit? \_\_\_\_ Even





PART 2: Application Practice



PART 3: Reflection and Conceptual Understanding

**The Rule of Even Numbers:** If the **ones digit** is a 0, 2, 4, 6, or 8 – the number is an **EVEN NUMBER**.

Is the number 18 an even number?

What is the ones digit? \_\_\_\_ *Even* 

Is the number **1**<u>3</u> an even number?

Even

Odd

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What is the ones digit? \_\_\_\_







**The Rule of Even Numbers:** If the **<u>ones digit</u>** is a 0, 2, 4, 6, or 8 – the number is an **<u>EVEN NUMBER</u>**.

Is the number 21 an even number?

What is the ones digit? \_\_\_\_ *Even* 

Is the number **20** an even number?

What is the ones digit?

Even

Odd



Spring Learning Opportunity 45 "Layering a Sound Foundation"

Name:

# PART 1: Numeracy Development









PART 3: Reflection and Conceptual Understanding

**The Rule of Even Numbers:** If the **<u>ones digit</u> is a 0, 2, 4, 6, or 8 – the number is an <b><u>EVEN NUMBER</u>**.

Is the number 26 an even number?

What is the ones digit? \_\_\_\_ *Even* 

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Is the number 35 an even number?

What is the ones digit?



Even









**The Rule of Even Numbers:** If the **<u>ones digit</u>** is a 0, 2, 4, 6, or 8 – the number is an **<u>EVEN NUMBER</u>**.

Is the number 39 an even number?

What is the ones digit? **Even** 

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Is the number 42 an even number?

What is the ones digit?

```
www.amara4education.com
```

Even

Odd







PART 3: Reflection and Conceptual Understanding









PART 3: Reflection and Conceptual Understanding







PART 3: Reflection and Conceptual Understanding





time.

3:15 3:45

3:00 AM 3:00 PM

5 days 7 days

12 weeks 4 weeks

# PART 2: Application Practice

<b>7.</b> Jasper went to the store.	8. Circ	cle <u>onl</u> y t e <b>rs</b> .	he <b>even</b>		9. <i>Ring</i> the correct
He purchased a candy bar for 35¢.	22	36	40	20	four
He also purchased a soda for 55¢.	23	30	40	20	School is being dismissed
How much money did Jasper spend at the store?	17	8	25	0	There are this many days in 1 full week.
cents	12	23	19	4	Each month has this many weeks.

PART 3: Reflection and Conceptual Understanding





7. Don was paid 25 dollars for	<b>8.</b> At the carnival, Amy won 2	9. Ring the correct time.		
mowing his father's yard for the month of June.	stuffed bears at the baseball throwing booth.	It is a quarter7:15after seven.7:45		
Jef earned 63 dollars for working on a farm during June.	She sold the stuffed bears to a friend for 10 dollars <u>each</u> .	Ana is sleeping2:30 AMin her bed.2:30 PM		
How much more money did Jef earn than Don?	How much money did Amy receive for the two bears?	There are this5 daysmany days in 17 daysfull week.7 days		
dollars	dollars	Each month has <b>4 weeks</b> this many weeks. <b>8 weeks</b>		

PART 3: Reflection and Conceptual Understanding

Angel asked, "How can you tell a pyramid from a prism?"

His teacher replied, "A pyramid has 1 point."









# PART 2: Application Practice









586 =



3

= 11





F100

550





# A.) *About* how big is an **inch**?



About the **width** of your *two* fingers.

## B.) About how big is a centimeter?







# PART 2: Application Practice



# PART 3: Reflection and Conceptual Understanding

A.) *About* how big is an **inch**? *Complete* 



About the width of

# B.) About how big is a centimeter? Complete







A.) *About* how long is the paperclip in inches? B.) *About* how long is the paperclip in centimeters?

Paperclip length <u>estimate</u>

in inches: \_\_\_\_



Paperclip length <u>estimate</u> in **centimeters**: \_\_\_\_\_





A.) *About* how long is the line in inches?

B.) About how long is the line in centimeters?

 Length of line estimate
 Length of line estimate

 in inches:
 in centimeters:



PART 2: Application Practice

8.	The <u>pict</u>	<u>ograph</u> sho	ws the nu	mber of tickets that students sold to the circus, a movie, or the rodeo.
	Entertainment Choices			<ul> <li>a.) Write the total number of tickets for each Activity Choice above each column (Circus, Movie or Rodeo).</li> </ul>
	ja (Ö) (Ö)			<b>b.)</b> How many total tickets were sold to all three activities?
	ĝ; ĝ;	₹Ŏ Ĵ	¢ € \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	c.) How many more Rodeo tickets were sold than Movie tickets?
	Circus	Movie	Rodeo	d.) How many fewer Movie tickets were sold than Circus tickets?
	Activity Choice		e	Each 🖉 means 10 tickets

A.) About how long is the comb in inches?

Length of comb estimate

in **inches**:

B.) About how long is the comb in centimeters?

in **centimeters**:

Length of comb estimate

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PART 2: Application Practice



PART 3: Reflection and Conceptual Understanding

<i>Write</i> the number	NUN	IBER BA	<u>NK</u> :	Days in a year:	Hours in a day:
NUMBER BANK	60	7	24	Days in a week:	Minutes in an hour:
and match the description.	365	4	12	Weeks in a month:	Months in a year:



PART 2: Application Practice

8.	. The <i>pictograph</i> shows the vote totals for favorite sports for the North Elementary second graders.						
	Favorite Sports		ts	a.) Write the number of votes for each sport above the column of 'balls.'			
	and the second			<b>b.)</b> How many more students chose soccer over baseball?			
				c.) How many students chose soccer and football?			
	Baseball	Soccer	Football	d.) How many fewer students chose baseball than football?			
	Playground Choice		noice	Each 🕕 , 🜰 or 🚯 means 5 tickets			

PART 3: Reflection and Conceptual Understanding

Write the number	NUN		<u>vk</u> :	Months in a year:	Minutes in an hour:
NUMBER BANK	24	12	60	Days in a year:	Days in an week:
and match the description.	52	365	7	Weeks in a year:	Hours in a day:



<ol> <li>Ashley baked 52 cookies.</li> <li>She sold 27 cookies. How many cookies does she have left?</li> </ol>	<b>9.</b> <i>Find</i> the Number. What <i>even number</i> is between 3 and 5?	<b>10.</b> Answer the questions.
	What one digit, even number	
<b>8.</b> Write the 2-digit number that has a:	is greater than 7 but less than 13?	How many rows?
- five in the ones place. - one in the tens place.	What is the <i>value</i> of the 8 in the number 482?	How many columns?
		How many squares?

<i>Write</i> the number	NU	MBER BA	<u>NK</u> :	Weeks in a year:	Minutes in an hour:
NUMBER BANK	24	12	60	Days in a week:	Days in a year:
and match the description.	52	365	7	Months in a year:	Hours in a day:







Fill in the number line.



8. Answer the questions.

How many **rows**?

*Complete* the equation for

finding the total number of squares in the rectangle.

\_\_\_\_+\_\_\_=\_

# PART 2: Application Practice



# PART 3: Reflection and Conceptual Understanding





















# PART 3: Reflection and Conceptual Understanding











# PART 3: Reflection and Conceptual Understanding








PART 3: Reflection and Conceptual Understanding









PART 2: Application Practice



Animal	Number
Cats	43
Dogs	39
Birds	12
Snakes	8

How many more dogs are owned than snakes?

Compare the number of cats and dogs using < , > , =. \_\_\_

- **9.** What is the <u>approximate</u>

*length* of your pencil?

\_ centimeters





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triangular prism





#### PART 2: Application Practice



School Lap Contest for Month of May										
Grade Level Total Number of Lap										
2 <sup>nd</sup> Graders	400									
3 <sup>rd</sup> Graders	360									
4 <sup>th</sup> Graders	650									
5 <sup>th</sup> Graders	790									

What is the difference between the 4" and 5" graders?

Compare the  $3^{rd}$  and  $4^{th}$  grade laps using < , > , =.





PART 3: Reflection and Conceptual Understanding

90

15

+5

85

85



*Making 100* by **adding up**.

*Fill* in the

missing numbers.











PART 3: Reflection and Conceptual Understanding







PART 2: Application Practice



PART 3: Reflection and Conceptual Understanding







#### **PART 2:** Application Practice



PART 3: Reflection and Conceptual Understanding





Name:

#### PART 1: Numeracy Development



#### PART 2: Application Practice



PART 3: Reflection and Conceptual Understanding







#### PART 2: Application Practice



#### PART 3: Reflection and Conceptual Understanding







#### PART 2: Application Practice













#### PART 2: Application Practice



#### PART 3: Reflection and Conceptual Understanding





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**PART 2:** Application Practice



PART 3: Reflection and Conceptual Understanding







**PART 2:** Application Practice











#### PART 2: Application Practice











#### PART 2: Application Practice





PART 3: Reflection and Conceptual Understanding



# Grade 2

## ANSWER KEY

### 80 Daily Learning Opportunities

### **Mathematics**

**Spring Semester** 



	•• ><	Spr "Layering	ring - Solutio g a Sound Four	ns dation"	$\succ$	01 - 03	
		Lea	arning Opportur	nity 01			
Part 1 – Nu	umeracy Development						CCS
<b>1.</b> 1	10; 6; 4;	2; 8					2.OA.B
<b>2.</b> 5	5; 4; 3;	1; 2					2.OA.B
3. 1	I <sup>st</sup> column: Given; 10;	<b>2<sup>nd</sup> column:</b> 6; 2	2				2.OA.B
<b>4.</b> 2	2; 20; 200					2.OA.B.2;	2.NBT.B
5. 1	I <sup>st</sup> column: Given; 3;	<b>2<sup>nd</sup> column:</b> 5; 4	ŧ				2.OA.E
<b>6.</b> 4	40; 50; 60; 70; 80; 90; 11	10;	400; 500; 600; 7	00; 800; 900; 1,10	00		2.NBT.A
Part 2 – Ap	pplication Practice						
<b>7.</b> 12 7:	2 noon/midnight or 12:00 or :30 or half past 7; 10	12 o'clock; 8 :45 or a quarter till 11	:00 or 8 o'clock;	3:00 or 3 o'c	lock; 9:15 or a	a quarter past 9;	2.MD.C
8. 69 Part 3 – Pa	9 > 59; 160 > 106; 207 <	: 270 Understanding					2.NBT.A
			" () () () () () () () () () () () () ()	in farmer the state of		and many the fam.	
Studen	nt Answers: AM; PM NO	midday'. Of cours in one day 12 h It takes for the Ear	e, <b>PM</b> is from the L ours AM and 12 ho th to make one cor	atin phrase, 'post n ours PM totaling 24 nplete revolution or	nrase, 'ante meridiem neridiem.' Stress that hours in one 'Earth' d n its axis.	there are 24 hours ay.	2.MD.C
		Lea	rning Opportun	ity 02			
Part 1 – Ni	umeracy Development						ccss
1. 9	g. g. g.	5. 5					2.0A.B
<b>2.</b> 6	6: 4: 3:	3: 1					2.0A.B
3. 1	1 <sup>st</sup> column: 10; 4;	<b>2<sup>nd</sup> column:</b> 8; 1	12				2.OA.B
<b>4.</b> 3	3; 30; 300					2.0A.B.2;	2.NBT.B
5. 1	1 <sup>st</sup> column: 2; 3;	<b>2<sup>nd</sup> column:</b> 6; 5	5				2.0A.B
<b>6.</b> 3	30; 40; 50; 60; 70; 80; 90	); 110;	200; 300; 400; 5	00; 600; 700; 800	; 900; 1,100		2.NBT.A
Part 2 – Aj	pplication Practice						
<b>7.</b> 9:3	30 or half-past 9;	7:00 or 7 o'clock;	5:30 or I	nalf-past 5;	12:15 or a quarter	past 12;	2.MD.C
2:	15 or quarter past 2;	5:45 or a quarter till	6				
<b>8.</b> 31	12 > 307; 486 < 490; 255	5 = 255					2.NBT.A
Part 3 – Re	eflection and Conceptual	<u>Understanding</u>					
Studen	nt Answers: AM; PM NO	TE: Stress AM is NOT midday'. Of cours in one day 12 h	"After Midnight." It e, <b>PM</b> is from the L ours AM and 12 ho	is from the Latin ph atin phrase, 'post n ours PM totaling 24	nrase, 'ante meridiem' neridiem.' Stress that hours in one 'Earth' d	and means 'before there are 24 hours ay.	2.MD.C
		Lea	rning Opportun	ity 03			
Part 1 – Ni	umeracy Development						<u>ccs</u>
<b>1.</b> 1	14; 11; 11;	12; 8					2.OA.B
2.	7; 3; 4;	5; 5					2.OA.B
3. 1	1 <sup>st</sup> column: 14; 10;	2 <sup>nd</sup> column: 18;	16				2.OA.B
4. 7	7; 50; 100					2.OA.B.2;	2.NBT.B
5. 1	1 <sup>st</sup> column: 6; 4;	2 <sup>nd</sup> column: 8;	7				2.OA.B
6. 2	20; 30; 40; 50; 60; 70; 80	); 90; 100; 110;	100; 30	0; 400; 500; 600;	700; 800; 900; 1,10	00	2.NBT.A
Part 2 – Aj	pplication Practice						
<b>7.</b> 6: 4:	45 or quarter till 7; 40 or twenty till 5;	9:05 or five after 9; 5:25 or twenty-five af	11:20 or two ter 5	enty after 11;	11:50 or ten till 12	;	2.MD.C
<b>8.</b> 49	92 < 496; 400 > 3	99; 511 < 513	5				2.NBT.A
Part 3 – Re	eflection and Conceptual	<u>Understanding</u>					
Studer	nt Answers: AM; PM NC	JTE: Stress AM is NOT midday'. Of cours in one day 12 I It takes for the Ea	「"After Midnight." I se, <b>PM</b> is from the hours AM and 12 h	t is from the Latin p Latin phrase, 'post s ours PM totaling 24	hrase, 'ante meridiem meridiem.' Stress tha I hours in one 'Earth' ( In its axis	' and means 'before t there are 24 hours day.	2.MD.C



 Student Answers:
 AM; PM
 NOTE: Stress AM is NOT "After Midnight." It is from the Latin phrase, 'ante meridiem' and means 'before midday'. Of course, PM is from the Latin phrase, 'post meridiem.' Stress that there are 24 hours in one day --- 12 hours AM and 12 hours PM totaling 24 hours in one 'Earth' day. It takes for the Earth to make one complete revolution on its axis.
 2.MD.C.7

#### Learning Opportunity 05

<u> Part 1 – Numeracy Development</u>		<u>CCSS</u>
<b>1.</b> 1 <sup>st</sup> column: 4; 40; <b>2</b> <sup>nd</sup> column: 6;	60	2.OA.B.2
<b>2.</b> 17; 7; 7		2.OA.B.2
3. Check Students' work. NOTE: for AM – (after n	nidnight) is a way to remember AM means morning times -	but AM = ante meridiem. <b>2.OA.B.2</b>
<b>4.</b> 1 <sup>st</sup> column: 1; 10; 2 <sup>nd</sup> column: 2;	20	2.OA.B.2
<b>5.</b> 40; 50; 300; 800		2.NBT.B.5; 2.NBT.B.7
<b>6.</b> 10; 30; 50; 60; 70; 80; 90; 110; 120	100; 200; 300; 500; 600; 700; 800; 900; 1,100	2.NBT.A.2
Part 2 – Application Practice		
<b>7.</b> 6:25 or 25 after six; 10:55 or five to 11;	11:15 or a quarter after 11;	2.MD.C.7
<b>8. 35¢</b> i.e. (10 + 10 + 10 + 5 = <u><b>35¢</b></u> )		2.MD.C.8
<b>9.</b> 802 < 820; 651 > 615; 831 > 731		2.NBT.A.4
Part 3 – Reflection and Conceptual Understanding		
Student Answers: A.) Given; 30; 45; 60;	B.) Number Line: Check students' work for accuracy.	2.MD.C.7; 2.OA.B.2

Part 1 – Numeracy Development	<u>CCSS</u>
1. 1 <sup>st</sup> column: 8; 80; 2 <sup>nd</sup> column: 2; 20	2.0A.B.2
<b>2.</b> 18; 6; 9	2.OA.B.2
3. Check Students' work. NOTE: for AM - (after midnight) is a way to remember AM means morning times - but AM =	ante meridiem. 2.OA.B.2
<b>4.</b> 1 <sup>st</sup> column: 3; 30; <b>2</b> <sup>nd</sup> column: 4; 40	2.OA.B.2
<b>5.</b> 10; 80; 700; 400	2.NBT.B.5; 2.NBT.B.7
<b>6.</b> 8; 10; 12; 14; 16; 18; 20; 22; 24; 20; 25; 30; 35; 40; 45; 50; 55	2.NBT.A.2
Part 2 – Application Practice	
7. minute hand points directly at 12; minute hand points directly at 6 minute hand points directly at 3	2.MD.C.7
8. Amy has 50¢. Yes. 50 > 45. She has sufficient money to purchase the candy bar. i.e. (25 + 10 + 10 + 5 = 50¢)	2.MD.C.8
<b>9.</b> 994 > 992; 904 < 940; 916 = 916	2.NBT.A.4
Part 3 – Reflection and Conceptual Understanding	
Student Answers: A.) 15; 30; 45; 60; B.) Number Line: Check students' work for accuracy.	2.MD.C.7; 2.OA.B.2



<u>Part 1 -</u>	- Numeracy Develo	opment							<u>CCSS</u>
1.	1 <sup>st</sup> column: 20;	200;	2 <sup>nd</sup> column:	14;	140				2.OA.B.2; 2.NBT.B.5
2.	12; 8;		7						2.OA.B.2
3.	99; 29;		49;	61;		13;	11		2.NBT.B.5
4.	1 <sup>st</sup> column: 5;	50;	2 <sup>nd</sup> column:	6;	60				2.OA.B.2; 2.NBT.B.5
5.	10; 20 25; 35	40;	50						2.NBT.B.5
6.	4; 6; 8; 10; 12;	14; 16; 18	; 20; 22; 24;			15; 20; 25;	30; 35	; 40; 45; 50; 55; 60	2.NBT.A.2
<u> Part 2 –</u>	- Application Pract	tice							
7.	minute hand points	s directly at 3	3; mi	nute ha	nd poin	its directly at 6		minute hand points directly at 9	2.MD.C.7
8.	60¢ i.e. (25 + 25 -	+ 10 = <u>60¢)</u>							2.MD.C.8
9.	4:45 PM;	12:00 PN	Λ						2.MD.C.7
<u> Part 3 -</u>	Reflection and Co	onceptual U	Inderstanding						
Stu	dent Answers: A.)	<b>)</b> 5; 10; 20;	25;	l	<b>3.)</b> Nur	mber Line: Che	eck stud	lents' work for accuracy.	2.MD.C.7; 2.OA.B.2

<u> Part 1 -</u>	- Numera	cy Developn	nent				<u>CCSS</u>
1.	15 ones	s = <b>10</b> ones +	<b>5 ones = 1</b> Ten <b>5</b>	ones			2.NBT.A.1
2.	11;	9;					2.0A.B.2
3.	38;	38;	84;	52;	21;	15	2.NBT.B.5
4.	10; 20	25; 35	40; 50				2.NBT.B.5
5.	20;	25					2.NBT.B.5
6.	5;	10					2.NBT.B.5
<u> Part 2 -</u>	- Applicat	tion Practice					
7.	minute h	and points di	rectly at 6;	minute hand p	points directly at 3	minute hand points directly at 9	2.MD.C.7
8.	<b>75¢</b> i.e.	(25 + 25 + 2	5 = <u>75¢)</u>				2.MD.C.8
9.	8:15 PM;		11:30 AM				2.MD.C.7
<u>Part 3 -</u>	- Reflectio	on and Conc	eptual Understa	nding			
Stu	dent Ansv	wers: A.) 20	); 35; 55; 50;	В.)	Number Line: Che	ck students' work for accuracy.	2.MD.C.7; 2.OA.B.2



Part 1	- Numerac	y Develo	opment							<u>ccss</u>
1.	<b>11</b> ; <b>10</b> o	nes + <b>1</b>	ones; 1 te	n <b>1</b> ones;		18 ones; 10 o	nes + 8	ones; 1 ten 8 ones		2.NBT.B.7
2.	15;	8								2.OA.B.2
3.	1 <sup>st</sup> row:	279;	588;	2 <sup>nd</sup> row:	350;	265				2.NBT.B.7
4.	5; 15;		15; 25;		35; 45				2.OA.B.2;	2.NBT.B.5
5.	55;	52								2.NBT.B.5
6.	26;	40								2.NBT.B.5
Part 2 -	- Applicatio	on Prac	<u>tice</u>							
7.	Pen: 7 Bl	ocks; S	Screwdriver:	10 Blocks;		Difference = 3	Blocks	(i.e. 10−7 = <u>3</u> )	2.MD.A.	1; 2.MD.A.4
8.	80¢ i.e. (	25 + 25	+ 25 + 5 =	80¢)						2.MD.C.7
Part 3	- Reflection	n and C	onceptual	Understand	ling					
Stu	dent Answ	ers: 9	equal space	es between	27 and 36	5. 36 – 27 = <u>9</u> .	NOTE:	Stress the meaning of subtraction is number of spaces between the subt	always the equal rahend and minuend.	<b>2.MD.B.6</b> Always.

<u> Part 1 -</u>	Numera	cy Devel	opment				<u>CCSS</u>	
1.	13; 10	ones + 3	ones; 1	I ten 3 ones;		17 ones; 10 ones + 7 ones; 1 ten 7 ones	2.NBT.B.7	
2.	12;	3					2.OA.B.2	
3.	1 <sup>st</sup> row	: 309;	999;	2 <sup>nd</sup> row:	831;	14	2.NBT.B.7	
4.	0; 10;		20; 3	30;	50; 60		2.OA.B.2; 2.NBT.B.5	
5.	70;	65					2.NBT.B.5	
6.	40;	47					2.NBT.B.5	
<u> Part 2 -</u>	Applica	tion Prac	tice					
7.	Comb:	5 Blocks;	Spoon:	9 Blocks;		Difference = <b>4</b> Blocks (i.e. $9 - 5 = \underline{4}$ )	2.MD.A.1; 2.MD.A.4	
8.	<b>100¢</b> i.e	e. (25 + 2	5 + 25 +	25 = <u>100¢)</u>			2.MD.C.7	
<u>Part 3 -</u>	Reflecti	on and C	onceptu	ıal Understan	<u>ding</u>			
<b>Student Answers:</b> 15 equal spaces between 37 and 52. $52 - 37 = 15$ . <b>NOTE:</b> Stress the meaning of subtraction is always the equal <b>2.MD.B.6</b>								



<u> Part 1 –</u>	Numeracy Development	<u>CCSS</u>							
1.	<ol> <li>3 tens (11 ones) 3 tens (1 ten 1 ones) 1 (ten) in circle 4 tens 1 ones 41</li> <li>3 tens (15 ones) 3 tens (1 ten 5 ones) 1 (ten) in circle 4 tens 5 ones 45</li> </ol>								
2.	15; 7	2.0A.B.2							
3.	Check Students' Work for Accuracy	2.NBT.A.3							
4.	90; 96	2.NBT.B.5							
5.	55; 75	2.NBT.B.5							
<u> Part 2 –</u>	Application Practice								
6.	Straw: <b>8</b> paperclips; Scissors: <b>4</b> paperclips; Difference = <b>4</b> paperclips (i.e. $8 - 4 = \underline{4}$ )	2.MD.A.1; 2.MD.A.4							
7.	<b>5</b> boys; (i.e. Half of 10 is <u><b>5</b></u> .)	2.0A.A.1; 2.0A.B.2							
8.	<b>12</b> feet; (i.e. 39 inches - 27 inches = <b>12</b> inches)	2.NBT.B.5; 2.MD.B.5							
<u>Part 3 –</u>	Reflection and Conceptual Understanding								
Stud	<b>Jent Answers:</b> 15 equal spaces from 48 = 63. 48 + 15 = <u>63</u> . <b>NOTE:</b> Stress the meaning of addition is always the equal number of spaces laid end-to-end of the two adder	2.MD.B.6							

#### Learning Opportunity 15

Part 1 – Numeracy Development	<u>ccss</u>
1. 3 tens (10 ones) 3 tens (1 ten 0 ones) 1 (ten) in circle 4 tens 0 ones 40 5 tens (13 ones) 5 tens (1 ten 3 ones) 1 (ten) in circle 6 tens 3 ones 63	2.NBT.B.7
<b>2.</b> 15; 7	2.OA.B.2
3. Check Student Work for accuracy	2.NBT.B.7
<b>4.</b> 100; 105	2.NBT.B.5
<b>5.</b> 90; 95	2.NBT.B.5
Part 2 – Application Practice	
<b>6.</b> Arrow: <b>10</b> ducks; Black Line: <b>6</b> ducks; Sum = <b>16</b> ducks (i.e.10 + 6 = <u><b>16</b></u> ) <b>2.</b>	MD.A.1; 2.MD.A.4
7. 10 girls; (i.e. Double 5 is 10.)         2.	OA.A.1; 2.OA.B.2
8. 31 students; (i.e. 83 students - 52 students = 31 students)         2.0	A.A.1; 2.NBT.B.5
Part 3 – Reflection and Conceptual Understanding	

Student Answers: 17 equal spaces between 86 and 69.  $86 - 69 = \underline{17}$ . NOTE: Stress the meaning of subtraction is always the equal **2.MD.B.6** number of spaces between the subtrahend and minuend. Always.



Part 1	– Numerac	y Devel	opment								<u>CCSS</u>
1.	Given;	55;	31;	50;	28;	71;	40;	30			2.NBT.B.7
2.	100, 80	, 60									2.NBT.A.2
3.	Check S	Students	Work for A	Accuracy							2.NBT.A.3
4.	19;	39	11;	10							2.NBT.B.5
5.	135;	120									2.NBT.B.7
6.	110;	115									2.NBT.B.7
<u>Part 2</u>	– Applicat	ion Prac	tice								
7.	²/ <sub>5</sub> ;	4/ <sub>8</sub> ;	<sup>5</sup> / <sub>10;</sub>	<sup>3</sup> / <sub>3</sub>	NOTE:	Stress r	numerator	and <b>d</b> enom	inator (' <b>d'</b> for <b>d</b> own)		2.G.A.1
8.	Jalen = 1	<b>2</b> ; Cal	eb = <b>3</b>								2.0A.A.1; 2.0A.B.2
9.	Hour han	d points	to 3; Minu	te Hand po	pints to 12;	NOT	TE: Stress	hour hand	is SHORTER than m	ninute hand on clocks	5. <b>2.MD.C.7</b>
Part 3	– Reflectio	n and C	Conceptual	l Understa	nding						
Stu	Ident Answ	<b>/ers:</b> 2	5; 50;	75; 10	0						2.NBT.B.5; 2.MD.C.8

<u> Part 1 –</u>	Numer	racy Develo	opment								<u>ccss</u>
1.	32;	67;	42;	81;	78;	80;	94;	50			2.NBT.B.7
2.	120,	100, 80									2.NBT.A.2
3.	Checl	k Students'	Work for	Accuracy							2.NBT.A.3
4.	28;	89	21;	20							2.NBT.B.5
5.	145;	140									2.NBT.B.7
6.	130;	125									2.NBT.B.7
<u> Part 2 –</u>	Applic	ation Prac	<u>tice</u>								
7.	Check	Students' V	Vork for A	ccuracy.	NOTE: Stre	ss the ' <b>d</b> '	' – <b>d</b> enomi	nator identifies the	e <u>equal</u> number of seg	gments of a whole.	2.G.A.3
8.	Al = <b>4</b> ;	Tim	= 16							2.OA	.A.1; 2.OA.B.2
9.	Hour h	and points	to 2; Minu	ute Hand p	points to 12;	NOT	E: Stress	hour hand is SHO	ORTER than minute h	and on clocks.	2.MD.C.7
<u>Part 3 –</u>	Reflec	tion and C	onceptua	l Underst	anding						
Stud	dent An	swers: 25	5; 50;	75; 10	00					2.NBT	.B.5; 2.MD.C.8



<u> Part 1 –</u>	Numerad	y Develo	pment									<u>ccss</u>
1.	81;	695;	562;	59;	70;	792;						2.NBT.B.7
2.	700, 90	0, 1,100										2.NBT.A.2
3.	Check S	Students' V	Vork for Ad	ccuracy								2.NBT.A.3
4.	14 tens	= 1 hundı	red 4 tens	NOTE:	Stress	with students that	at 10 tens =	100 and 10	ones = 1 ten			2.NBT.A.1
5.	70 + 3;		<b>7</b> is in th	ne tens pl	ace							2.NBT.A.3
<u> Part 2 –</u>	Applicat	ion Practi	ce									
6.	Check St	udents' W	ork for Acc	curacy	NOTE: S	Stress <b>d</b> enominato	itor (' <b>d'</b> for <b>c</b>	lown) determ	nines the equ	al spacing of	the 2D shape.	2.G.A.3
7.	Rows: 2;	Columr	ns: <b>5</b> ;	Total sq	uares: 1	0						2.G.A.2
8.	Minute Ha	and points	to 3									2.MD.C.7
<u>Part 3 –</u>	Reflectio	n and Co	nceptual	Understa	<u>nding</u>							
Stud	dent Answ	vers: add	dend = 52,	addend =	₌ 44, sum	n = 96;	mir	nuend = 63, s	subtrahend =	51, difference	e = 12	Vocab.

<u> Part 1 –</u>	Numeracy	/ Developme	ent							<u>ccss</u>
1.	84;	899; 7	98; 8	99; 99;	996;					2.NBT.B.7
2.	800, 1,0	00, 1,200								2.NBT.A.2
3.	Check St	udents' Work	k for Accu	racy						2.NBT.A.3
4.	17 tens =	1 hundred	7 tens N	OTE: Stress	with students that	t <b>10 tens = 100</b> ar	nd <b>10 ones = 1 t</b>	en.		2.NBT.A.1
5.	90 + 0;	0	is in the o	ones place						2.NBT.A.3
<u> Part 2 –</u>	Applicatio	on Practice								
6.	Check Stu	dents' Work	for Accura	acy NOTE:	Stress <b>d</b> enominat	tor (' <b>d'</b> for <b>d</b> own) o	determines the e	qual spacing of the 2	D shape.	2.G.A.3
7.	Rows: 3;	Columns:	<b>5</b> ; To	otal squares:	15					2.G.A.2
8.	Minute Ha	nd points to §	9							2.MD.C.7
<u> Part 3 –</u>	Reflection	n and Conce	ptual Und	derstanding						
Stu	dent Answe	ers: addend	d = 35, ado	dend = 44, su	m = 79;	minuend	= 76, subtrahend	d = 43, difference = 3	3	Vocab.



<u> Part 1 -</u>	Numeracy L	<u>Development</u>						<u>CCSS</u>
1.	88; 6	92; 796;	889					2.NBT.B.7
2.	Check Stud	lents' Work for A	ccuracy					2.NBT.A.3
3.	5 hundreds	; <b>15</b> tens; <b>8</b> ones	s; <b>5</b> hund	reds; 1 hund	red 5 tens; 8 ones;	6 hundreds, 5 tens, 8 ones;	658	2.NBT.A.1; 2.NBT.B.7
4.	209 = <b>200</b> -	+ <b>0 + 9</b> ;	380 = <b>300</b>	+ <b>80</b> + <b>0</b> ;				2.NBT.A.3
<u> Part 2 –</u>	- Application	Practice						
5.	Check Stude	ents' Work for Ac	curacy <b>NO</b>	TE: Students	s have drawn polygo	ns/circles during fall, described, pa	rtitioned,	must visualize. 2.G.A.1
6.	6 dollars 65	cents = \$ 6.65						2.MD.C.8
7.	4:45 PM;	2:35 AI	N					2.MD.C.7
<u>Part 3 –</u>	Reflection a	nd Conceptual	Understand	ng				
Stu	dent Answers	s: 15 tens = 1 h	undred 5 ten	; NOTE:	A visual that matche	s the composing tens to hundred/t	en in pro	blem 3 above. 2.NBT.A.1

<u> Part 1 -</u>	- Numeracy	Develop	oment					<u>CCSS</u>
1.	90; 9	970;	888;	988				2.NBT.B.7
2.	2;	4;	2;	3				2.0A.B.2
3.	8 hundreds	s; <b>18</b> ter	ns; <b>4</b> ones;	<b>8</b> hu	indreds; 1 hundred 8 tens; 4 ones;	9 hundreds, 8 tens, 4 ones;	984 2.1	NBT.A.1; 2.NBT.B.7
4.	400 = <b>400</b>	+ <b>0</b> + <b>0</b> ;		561 = <b>5</b> 6	00 + 60 + 1;			2.NBT.A.3
<u> Part 2 -</u>	- Application	Practio	ce					
5.	Check Stud	ents' Wo	ork for Accu	uracy N	IOTE: Students have drawn polygor	ns/circles during fall, described, pa	artitioned, must	t visualize. 2.G.A.1
6.	12 dollars 4	5 cents	= \$ 12.45					2.MD.C.8
7.	10:55 AM;		3:15 PM					2.MD.C.7
<u>Part 3 -</u>	- Reflection	and Co	nceptual U	Inderstar	nding			
Stu	dent Answer	s: 18 t	ens = <b>1</b> hu	ndred 8 te	ens; NOTE: A visual that matche	s the composing tens to hundred/	ten in problem	3 above. 2.NBT.A.1



Part 1	– Numerac	y Develo	opment						<u>CCSS</u>
1.	54;	289;	913					2	.NBT.B.7
2.	10 blocks	s							2.MD.A.1
3.	2;	4;	4;	3					2.OA.B.2
4.	788;	229;	609					2	.NBT.B.7
5.	3 + 3 +	3 = 9							2.OA.C.4
6.	Given;	8 = <b>eig</b>	lht					2	2.NBT.A.3
7.	3 tens =	30						2	2.NBT.A.1
Part 2	– Applicati	ion Pract	<u>tice</u>						
8.	Check St	udents' W	Vork for Ac	curacy					2.G.A.1
9.	45 dollars	s <b>32</b> cents	s = \$ <b>45.32</b>	2					2.MD.C.8
10.	7 miles;	(i.e. 16 –	9 = <b>7</b> mile:	s)				2.OA.B.2;	2.MD.B.5
Part 3	- Reflectio	on and Co	onceptual	Understand	ling				
Stu	dent Answ	vers: 15	, 35, 55;		250; 450,	550		2	2.NBT.A.2

<u> Part 1 -</u>	- Numera	cy Develo	pment			<u>CCSS</u>
1.	95;	99;	697			2.NBT.B.7
2.	4;	4;	4;	4		2.OA.B.2
3.	845;	896;	855			2.NBT.B.7
4.	4 + 4 +	+ 4 = 12				2.OA.C.4
5.	28 = <b>tw</b>	enty-eigh	it,	11 = <b>eleven</b>	NOTE: Stress the 'hyphen' between the two numbers in word form.	2.NBT.A.3
6.	5 tens =	= 50				2.NBT.A.1
<u>Part 2 -</u>	- Applica	tion Pract	ice			
7.	Check S	tudents' W	/ork for Ac	curacy		2.G.A.1
8.	Check st	tudents' wo	ork for acc	uracy. <b>8</b> squares.		2.G.A.2
<u>Part 3 -</u>	- Reflecti	on and Co	onceptual	<b>Understanding</b>		
Stu	dent Ans	wers: 15	, 25, 35,	45, 55;	250; 450, 550	2.NBT.A.2



<u> Part 1 –</u>	Numer	acy Develo	pment							CCSS
1.	92;	989;	897;	939						2.NBT.B.7
2.	Check	students' v	vork for a	ccuracy						2.G.A.1
3.	<b>10</b> one	es = <b>1</b> ten								2.NBT.A.1
4.	74 = <b>s</b>	eventy-fou	<b>r</b> ,	47 = forty-seven		12 = <b>tv</b>	velve	NOTE: Stress the spelling	of "forty" – no 'u'.	2.NBT.A.3
5.	0 tens	0;		2 hundreds = 200						2.NBT.A.1
<u> Part 2 –</u>	Applica	ation Pract	ice							
7.	22, 28	, 19							2.NBT.A	.2; 2.MD.D.10
8.	4;	3							2.04	.B.2; 2.G.A.1
<u> Part 3 –</u>	Reflect	tion and Co	nceptual	Understanding						
Stud	dent Ans	<b>swers:</b> 75,	85, 95,	105, 115;	750,	850; 950,	1,050,	1,150		2.NBT.A.2

<u> Part 1 –</u>	Numeracy	Develoj	pment					<u>CCSS</u>
1.	89;	492;	490;	510				2.NBT.B.7
2.	Check stud	dents' w	ork for ac	curacy				2.G.A.1
3.	10 ones =	1 ten						2.NBT.A.1
4.	95 = ninet	<b>y-five</b> ,		88 = eighty-eight	13 = <b>thirte</b>	en		2.NBT.A.3
5.	6 tens 60;			<b>3</b> hundreds = <b>300</b>				2.NBT.A.1
<u> Part 2 –</u>	Application	Practi	ce					
6.	26, 28, 16	6;	<b>10</b> (26 –	- 26 = <b>10</b> );	<b>12</b> (28 – 16 = <b>12</b> );	54	(26 + 28 = <b>54</b> )	2.NBT.A.2; 2.MD.D.10
<u> Part 3 –</u>	Reflection	and Co	nceptual	<u>Understanding</u>				
Stuc	dent Answer	<b>s:</b> 65,	75, 85, 9	95, 105, 115;	650, 750,	850, 950,	1,050, 1,150	2.NBT.A.2



<u>Part 1 -</u>	- Numeracy	/ Develo	pment					<u>ccss</u>
1.	80;	595;	481;	563				2.NBT.B.7
2.	3;	3, 13;	Differe	ence = <b>28</b>				2.NBT.A.1; 2.NBT.B.7
3.	1 ten 6 o	nes = <b>16</b>	ones;	1 ten 3 o	nes = <b>13</b> ones;	NOTE: Same physical grou	uping as in problem 2 above.	2.NBT.A.1
4.	44 = fort	y-four,		68 = <b>sixt</b>	y-eight	19 = nineteen		2.NBT.A.3
<u>Part 2 -</u>	- Applicatio	on Practi	ice					
5. Part 3 -	15, 20, 3 - <b>Reflectio</b>	35; <b>and Co</b>	b.) M	ost = <b>Plane</b> ; I Understan	Fewest = <b>Train</b> ; ding	<b>c.) 35</b> (15 + 20 = <b>35</b> );	<b>d.) 20</b> (35 − 15 = <b>20</b> )	2.NBT.A.2; 2.MD.D.10
<u>r urt s</u> -	dent Answe	ers: 1:0	odd;	8: even	2: even			2.0A.C.3
					NOTE: Tactile met each hand the numbe	hod: Students use each hai I. Then, they match the finge r is 'even.' If not, the numbe	nd. If the number is '2', they ra ers. If there is a finger on each er is 'odd.'	ise their index finger on hand that matches,

<u>Part 1 -</u>	- Numeracy De	evelopment				<u>CCSS</u>
1.	64; 17	7; 916;	518			2.NBT.B.7
2.	<b>8,</b> ( <b>7</b> + 10);	8, 17;	<b>8; 17;</b> D	ifference = <b>69</b>		2.NBT.A.1; 2.NBT.B.7
3.	1 ten 7 ones	= <b>17</b> ones;	1 ten 4 one	s = <b>14</b> ones;	NOTE: Same physical grouping as in problem 2 above.	2.NBT.A.1
4.	47 = <b>forty-s</b> e	even,	74 = <b>seven</b>	ty-four	18 = eighteen	2.NBT.A.3
<u>Part 2 -</u>	- Application F	Practice				
5. <u>Part 3 -</u>	35, 15, 15; - <b>Reflection a</b> n	b.) ea d Conceptua	ast, west; c I Understandin	.) 30 (15 + 15 = 3	<b>30</b> ); <b>d.) 20</b> (35 – 15 = <b>20</b> )	2.NBT.A.2; 2.MD.D.10
Stu	dent Answers:	7: <b>odd</b> ;	10: <b>even</b>	2: even	1	2.OA.C.3
			N	OTE: Tactile me each hand the numb	ethod: Students use each hand. If the number is '2', they d. Then, they match the fingers. If there is a finger on eac er is 'even.' If not, the number is 'odd.'	raise their index finger on h hand that matches,

![](_page_98_Figure_0.jpeg)

<u> Part 1 –</u>	Numeracy	Develo	opment							<u>CCSS</u>
1.	63;	862								2.NBT.B.7
2.	40;	30;	50;	10						2.NBT.B.5
3.	5, 6;	4, (6 +	10);	4, 16;	4; 16;	Difference = 27				2.NBT.A.1; 2.NBT.B.7
4.	1 ten 6 on	es = <b>16</b>	ones;	1 ten 1	ones = <b>11</b> c	ones; NOTE:	Physical mo	del for pi	roblem 3 above.	2.NBT.A.1
5.	1 <sup>st</sup> colum	n:	2;	3;	6;	2 <sup>nd</sup> column:	10;	15;	20	2.OA.B.2; 2.NBT.B.5
<u> Part 2 –</u>	Application	n Pract	ice							
6.	Edges: 12	2,	Vertices:	8,	Faces: 6	3				2.G.A.1
7.	243 > 20	4 = 20	)4;	386 >	354 > 350					2.NBT.A.4
<u>Part 3 –</u>	Reflection	and Co	onceptual U	Indersta	nding					
Stud	lent Answei	r <b>s:</b> 2 = 4 =	= 1 + 1; = 2 + 2;	6 = <b>3</b> + 8 = <b>4</b> +	3; 4;	10 = <b>5</b> + <b>5</b> ; 12 = <b>6</b> + <b>6</b> ;	14 = <b>7</b> + <b>7</b> 16 = <b>8</b> + <b>8</b>	, ,	18 = <b>9 + 9</b> ; 20 = <b>10 + 10</b>	2.OA.C.3

<u>Part</u>	1 –	Numerad	cy Deve	lopment						CCSS	
	1.	65;	988							2.NBT.B.7	
:	2.	90;	60;	30;	50					2.NBT.B.5	
;	3.	6, 1;	5, (1 ·	+ <b>10</b> );	5, 11;	5; 11;	Difference = 14			2.NBT.A.1; 2.NBT.B.7	
	4.	1 ten 7	ones = 1	17 ones;	<b>1</b> ten '	1 ones = 11	ones; NOTE	: Physical mod	lel for problem 3 above	2.NBT.A.1	
!	5.	1 <sup>st</sup> colu	mn:	4;	5;	8;	2 <sup>nd</sup> column:	15;	20; 10	2.OA.B.2; 2.NBT.B.5	
Part :	2 –	Applicat	ion Pra	<u>ctice</u>							
	6.	Edges:	9,	Vertices	s: 6,	Faces:	5			2.G.A.1	
	7.	451 =	451 > 4	415;	750 >	650 > 60	0			2.NBT.A.4	
Part :	Part 3 – Reflection and Conceptual Understanding										
S	tud	ent Ansv	vers: 2 12	2 = 1 + 1; 2 = 6 + 6;	4 = <b>2</b> 14 = <b>7</b>	+ 2; + 7;	6 = <b>3</b> + <b>3</b> ; 16 = <b>8</b> + <b>8</b> ;	8 = <b>4</b> + <b>4</b> ; 18 = <b>9</b> + <b>9</b> ;	10 = <b>5</b> + <b>5</b> ; 20 = <b>10</b> + <b>10</b>	2.OA.C.3	

![](_page_99_Figure_0.jpeg)

<u> Part 1 –</u>	Numeracy	/ Develop	<u>ment</u>					<u>ccss</u>			
1.	122;	1,087						2.NBT.B.7			
2.	700;	400;	600;	800				2.NBT.B.7			
3.	1 inch;	3 inches;	NOT	<b>E:</b> An <u>i</u>	n <b>ch</b> is approx	cimately t	he width of two extended fingers (pointer and index fingers)	2.MD.A.1			
4.	22;	45;	22					2.NBT.B.5			
5.	8;	7;	12				2.OA.B.	2; 2.NBT.B.5			
6.	Rows: 4;	;	Columns:	<b>6</b> ;	Squares:	24		2.OA.C.4			
<u> Part 2 –</u>	Applicatio	on Practic	e								
7.	Edges: 2	<u>2,</u>	Vertices:	0,	Faces: 2;	NOTE:	A face must be a FLAT face, not curved. – Same with a sphere.	2.G.A.1			
8.	3:12;		7:07;	NOTE:	Students wil	l initially l	have difficulty writing time under 10 minutes because of the '0' $-$ 07.	2.MD.C.7			
<u> Part 3 –</u>	Part 3 – Reflection and Conceptual Understanding										
Stud	Student Answers: Even Numbers: 6, 8, 10, 12, 14, 16, 18; Odd Numbers: 7, 9, 11, 13, 15, 17, 19 2.OA.C.3										

<u>Part 1 –</u>	Numeracy	/ Develop	ment			<u>CCSS</u>				
1.	30;	1,171				2.NBT.B.7				
2.	300;	500;	900;	600		2.NBT.B.7				
3.	4 inches;	2 inches	; N	OTE: An	inch is approximately the width of two extended fingers (pointer and index fingers)	2.MD.A.1				
4.	33;	49;	44			2.NBT.B.5				
5.	15;	10;	11		2.OA.B.2	2; 2.NBT.B.5				
6.	Rows: 6	;	Column	s: <b>4</b> ;	Squares: 24	2.OA.C.4				
<u>Part 2 –</u>	Applicatio	on Practic	e							
7.	Edges: 1	,	Vertices	: 1,	Faces: 1; NOTE: A face must be a FLAT face, not curved.	2.G.A.1				
8.	9:21;		10:27;	NOTE:	Students will initially have difficulty writing time under 10 minutes because of the '0' $-$ 07.	2.MD.C.7				
<u> Part 3 –</u>	Part 3 – Reflection and Conceptual Understanding									
Stud	dent Answe	ers: Eve	n Numbei	rs: 4, 6, 8	, 10, 12, 14, 16, 18; Odd Numbers: 5, 7, 9, 11, 13, 15, 17, 19	2.OA.C.3				

![](_page_100_Figure_0.jpeg)

<u> Part 1 –</u>	Numeracy	/ Development			<u>cc</u>	<u>;SS</u>					
1.	30;	813			2.NB1	ſ.B.7					
2.	10;	20;	5;	15	2.OA.B.2; 2.NBT	Г.В.5					
3.	3 centime	eters (cm);	7 cent	imeters (cm)	<b>NOTE:</b> A centimeter is <u>about</u> the width of a student's little fingernail. 2.MI	).A.1					
4.	38;	16			2.NBT	Г.В.5					
5.	1 hundre	d = <b>10</b> tens			2.NB	Г <b>.А.</b> 1					
<u>Part 2 –</u>	Part 2 – Application Practice										
6.	59 dollars	s (i.e. 35 + 24 =	<b>59</b> dollars)	; <b>YES</b> , 59 > 55	5. <b>2.NBT.A.4; 2.ME</b>	).B.5					
7.	26 cents	(i.e. 75 - 49 = <b>26</b>	cents)		2.NB	Г.В.5					
8.	12:28;	6:33			2.MI	).C.7					
<u>Part 3 –</u>	Part 3 – Reflection and Conceptual Understanding										
Stuc	dent Answe	ers: 2, 2, 2;	3, 3, 3;	4, 4, 4;	YES – equal addends; YES – <u>even WHOLE numbers</u> CAN be cut in half 2.04	4.C.3					

<u>Part 1 -</u>	- Numeracy Develo	opment			<u>ccss</u>					
1.	300, 400, 500, 6	600			2.NBT.A.2					
2.	5; 4;	15;	20	2.OA.I	B.2; 2.NBT.B.5					
3.	5 centimeters (cm	n); <b>2</b> centii	neters (cm)	<b>NOTE:</b> A centimeter is <u>about</u> the width of a student's little fingernail.	2.MD.A.1					
4.	35; 50				2.NBT.B.5					
5.	<b>1</b> hundred = <b>10</b> te	ens			2.NBT.A.1					
<u> Part 2 -</u>	- Application Pract	tice								
6.	24 inches (i.e. 65	5 - 41 = <b>24</b> inches)			2.MD.B.5					
7.	46 cents (i.e. 11 +	+ 13 + 22 = <b>46</b> cents	)		2.NBT.B.6					
8.	1:38;	8:42			2.MD.C.7					
<u>Part 3 -</u>	Part 3 – Reflection and Conceptual Understanding									
Stu	dent Answers: Giv	ven; 8, Eve NOTE: Stress th	n. <b>NO</b> T at the one digit	<b>FE:</b> Half of 18 is 9; 18 = 9 + 9 Equal Addends. <b>2.0A</b> determines whether a number is classified as an even or odd number.	.B.2; 2.OA.C.3					

![](_page_101_Figure_0.jpeg)

<u> Part 1 –</u>	Numeracy Deve	opment		<u>CCSS</u>
1.	36; 30			2.NBT.B.7
2.	6, 14; 581		NOTE: It is recommended to slowly explain this process to students.	2.NBT.B.7
3.	1 hundred 4 ten	s = <b>14</b> tens	NOTE: This physical model is the same transfer of tens in problem 2 above.	2.NBT.A.1
<u> Part 2 –</u>	Application Prac	tice		
4.	5 + 5 + 5 = 15			2.OA.C.4
5.	Check student v	ork on sha	ling of fraction. 1/4	2.G.A.1; 2.G.A.3
6.	8:58;	9:03;	NOTE: Students will initially have difficulty writing time on minutes close to an hour. Practice!	2.MD.C.7
<u> Part 3 –</u>	Reflection and C	Conceptual	Understanding	
Stu	udent Answers:	1, Odd; NOTE: NOTE:	0, Even. Stress that the one digit determines whether a number is classified as an even or odd number. Refer to the statements of discussion on even and odd numbers in Learning Opportunity 43 abo	2.OA.C.3

<u> Part 1 –</u>	Numeracy Dev	velopment		<u>ccss</u>
1.	26; 2	23		2.NBT.B.7
2.	5, 3, 8;	4, 13, 8;	4, 13; 284 <b>NOTE:</b> It is recommended to slowly explain this process to students.	2.NBT.B.7
3.	1 hundred 3 te	ens = <b>13</b> tens	NOTE: This physical model is the same transfer of tens in problem 2 above.	2.NBT.A.1
<u> Part 2 –</u>	Application Pr	ractice		
4.	2 + 2 + 2 = 6			2.0A.C.4
5.	Check studen	t work on shadi	ng of fraction. $^{3}/_{3}$ 2	.G.A.1; 2.G.A.3
6.	1:58;	2:04;	NOTE: Students will initially have difficulty writing time on minutes close to an hour. Practice!	2.MD.C.7
<u> Part 3 –</u>	Reflection and	d Conceptual L	Inderstanding	
Stu	Ident Answers:	: 6, Even; NOTE: 3 NOTE: 1	5, Odd . Stress that the one digit determines whether a number is classified as an even or odd number. Refer to the statements of discussion on even and odd numbers in Learning Opportunity 43 above.	2.OA.C.3

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<u>Part 1</u>	– Numeracy D	evelopment			<u>ccss</u>							
1	. 439;	993			2.NBT.B.7							
2	. 8, 6, 9;	7, 16, 9;	7, 16; 387 <b>NOTE:</b>	It is recommended to slowly ( $\ensuremath{\textit{repeatedly}}\xspace)$ explain this process to students.	2.NBT.B.7							
3	. 1 hundred 6	tens = 16 tens	NOTE: This physica	al model is the same transfer of tens in problem 2 above.	2.NBT.A.1							
<u>Part 2</u>	– Application I	Practice										
4	. 2+2+2+2	2 = 8			2.OA.C.4							
5	. 12; 2;	20			2.OA.C.3							
6	. 10:30 AM;	2:45 AM;	12:00 PM		2.MD.C.7							
<u>Part 3</u>	Part 3 – Reflection and Conceptual Understanding											
S	tudent Answer	s: 2 + 2 + 2 + 2	= 8; NOTE: Same add	ition model as in problem 4 for arrays. 2.OA.B.	2; 2.OA.C.4							

Part	1 -	Numeracy	Developme	<u>nt</u>				<u>CCSS</u>			
	1.	512;	911					2.NBT.B.7			
	2.	4, 7, 5;	3, 17, 5;	3, 17;	280	NOTE: It	is recommended to slowly ( <b>repeatedly</b> ) explain this process to students.	2.NBT.B.7			
	3.	1 hundred	7 tens = 17	tens	NOTE:	This physic	al model is the same transfer of tens in problem 2 above.	2.NBT.A.1			
Part	Part 2 – Application Practice										
	4.	3 + 3 + 3 +	3 = 12					2.0A.C.4			
	5.	16; 0	); 2;	30	4;	26		2.OA.C.3			
	6.	12:00 AM;	24	hours;	12	hours of Al	I and 12 hours of PM – Total is 24 hours in one day.	2.MD.C.7			
Part	Part 3 – Reflection and Conceptual Understanding										
	Student Answers: $3 + 3 + 3 = 12$ ;NOTE: Same addition model as in problem 4 for arrays.2.0A.B.2; 2.0A.C.4										

![](_page_103_Figure_0.jpeg)

<u> Part 1 –</u>	Numeracy Devel	lopment				ccs	S			
1.	512;	911				2.NBT.I	3.7			
2.	first column: 32	, 42;	second	column: 2	23, 392	2; 2.NBT.I	3.7			
3.	Check students'	work for ac	curacy.			2.G.A	<b>.</b> 1			
4.	25 = twenty-five;	; Given;	103 = or	ne hundred	three;	; NOTE: Stress the 'hyphen.' There is NO 'and' in whole number word form.2.NBT.	4.3			
5.	3;	2				2.OA.E	3.2			
6.	Given;	400				2.NBT.E	3.7			
<u> Part 2 –</u>	Application Prac	tice								
7.	4 + 4 + 4 = 12					2.0A.0	:.4			
8.	0; 2;	10;	6;	20;	18	2.0A.0	2.3			
9.	2:05;	10:00 A	M;	24 hour	s;	12 hours 2.MD.	C.7			
<u>Part 3 –</u>	Reflection and C	Conceptual	Understa	nding						
Stu	Student Answers: 6 + 6 + 6 = 18 2.OA.B.2									

#### Learning Opportunity 50

Part 1 – Numeracy Development										
1.	476;	1,099					2.NBT.B.7			
2.	first column:	21, 62;	second	column: 23	, 395		2.NBT.B.7			
3.	Check stude	nts' work for ac	curacy.				2.G.A.1			
4.	42 = forty-two	o; 142 = c	ne hundre	d forty-two;	204 =	two hundred four;	NOTE: There is NO 'and' in whole number word form. 2.NBT.A.3			
5.	4;	4					2.0A.B.2			
6.	300;	250					2.NBT.B.7			
<u> Part 2 –</u>	Application F	Practice								
7.	90 cents (i.e	e. 35 + 55 = <b>90</b>	cents)				2.MD.B.5			
8.	36; 40	; 20;	8;	0;	12;	4	2.OA.C.3			
9.	3:45;	3:00 PM	Л;	7 days;		4 weeks	2.MD.C.7			
<u> Part 3 –</u>	Part 3 – Reflection and Conceptual Understanding									
Student Answers:         4 + 6 + 2 = 12         2.OA.B.2										

Daw		N						0000
Pan	1-	Numeracy Dev	elopment					<u> </u>
	1.	116;	587					2.NBT.B.7
	2.	first column: 3	88, 71;	second c	olumn: 33, 57	<b>7</b> 1;		2.NBT.B.7
	3.	Check student	s' work for acc	uracy.				2.G.A.1
	4.	240 = two hun	dred forty;	332 = thr	ee hundred thi	rty-two;	213 = two hundred thirteen;	2.NBT.A.3
	5.	3;	7					2.0A.B.2
	6.	500;	150					2.NBT.B.7
Part	t 2 –	Application Pr	actice					
	7.	38 dollars (6	3 – 25 = <b>38</b> dol	llars)				2.MD.B.5
	8.	20 dollars (1	0 + 10 = <b>20</b> dol	llars)				2.OA.B.2
	9.	7:15;	2:30 AM	;	7 days;	4 weeks		2.MD.C.7
Part	t 3 –	Reflection and	Conceptual U	Inderstand	ling			
	Stu	dent Answers:	triangular PR	RISM;	triangular PYI	Ramid; <b>Note:</b>	All edges converge to ONE POINT on a pyramid.	2.G.A.1

![](_page_104_Figure_0.jpeg)

<u> Part 1 –</u>	Numeracy Dev	elopment				<u>ccss</u>			
1.	43;	175				2.NBT.B.7			
2.	5 cm;	2 cm;	9 cm;	13 cm		2.MD.A.1			
3.	743 = seven hu	undred forty-thr	ree 609 = six hundred nine;	586 = five hundred ei	ighty-six; <b>NOTE:</b> No 'and' in whole numbers.	2.NBT.A.3			
4.	8;	8				2.0A.B.2			
5.	800;	650				2.NBT.B.7			
Part 2 – Application Practice									
6.	a.) Check stud	ents' work.	<b>b.)</b> Most = Dao; Least = Ally	c.) Joe; Ally	d.) Joe; Gail	2.MD.D.10			
Part 3 – Reflection and Conceptual Understanding									
Stu	dent Answers:	Triangular PY	RAMID; Rectangula	r PRISM; Rect	tangular PYRAMID	2.G.A.1			

<u> Part 1 –</u>	Numeracy Dev	elopment				<u>CCSS</u>				
1.	31;	533				2.NBT.B.7				
2.	2 inches;	1 inch;	4 inches;	5 inches		2.MD.A.1				
3.	801 = eight hu	ndred one	763 = seven hundred sixty-three;	619 = six hundred nineteen;	NOTE: No 'and' in whole numbers.	2.NBT.A.3				
4.	7;	4				2.0A.B.2				
5.	900;	850				2.NBT.B.7				
Part 2 – Application Practice										
6.	a.) Check stud	ents' work.	<b>b.)</b> 30 (i.e. 50 – 20 = 30)	<b>c.)</b> 20 (i.e. 40 – 20 = 20)	<b>d.)</b> 30 (i.e. 10 + 20 = 30)	2.MD.D.10				
Part 3 – Reflection and Conceptual Understanding										
Stu	Student Answers: Practice with students so they always have a tactile method of approximating the size of an inch and a centimeter.									

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<u> Part 1 –</u>	Numerac	y Devel	lopment				<u>CCSS</u>	
1.	65;		258				2.NBT.B.7	
2.	1 inch;		4 ½ inches;		2 1/2 inches;	4 inches	2.MD.A.1	
3.	5; 9;	5; 4;	5; 4;	9; 4			2.NBT.A.3	
4.	100;		300				2.NBT.B.7	
5.	5;		6				2.0A.B.2	
<u> Part 2 –</u>	Applicati	on Prac	ctice					
6.	15 dolla	rs <b>30</b> ce	nts = \$ 15.30	)			2.MD.C.8	
7.	7. 8 edges 5 faces 5 vertices; 2.G.A.1						2.G.A.1	
8.	8. C – 55 - 17 – 10 2.NBT.						2.NBT.B.5	
<u> Part 3 –</u>	Part 3 – Reflection and Conceptual Understanding							
Stu	Student Answers:about 2 inches;about 4 to 6 centimeters2.MD.A.3							

<u> Part 1 -</u>	- Numerac	y Deve	elopment				<u>ccss</u>	
1.	45;		464				2.NBT.B.7	
2.	½ inch;		3 1/2 inches;		2 inches;	5 inches	2.MD.A.1	
3.	6; 10;	6; 4;	10; 4;	10; 4			2.NBT.A.3	
4.	200;		500				2.NBT.B.7	
5.	6;		3				2.0A.B.2	
<u> Part 2 -</u>	Part 2 – Application Practice							
6.	6. 34 dollars 0 cents = \$ 34.00 2.MD.C.8							
7.	7. 6 edges 4 faces 4 vertices; 2.G.A						2.G.A.1	
8.	8. B - 80 + 25 - 20 2.NBT.						2.NBT.B.5	
<u>Part 3 -</u>	Part 3 – Reflection and Conceptual Understanding							
St	Student Answers:about 3 inches;about 6 to 8 centimeters2.MD.A.3							

![](_page_106_Figure_0.jpeg)

<u> Part 1 –</u>	Numeracy	y Develop	oment								<u>ccss</u>
1.	102;		652								2.NBT.B.7
2.	Check st	udents' w	ork for acc	uracy.							2.MD.C.7
3.	9:10;	8:55;	10:40;	11:20							2.MD.C.7
4.	minute h minute h	and points and points	s directly at s directly at	t 12; t 3;	mi	nute hand poin	ts directly at 4;	minute ha	and points	directly at 6;	2.MD.C.7
5.	6, 7, 13;	7, 6;	13, 7, 6;	1:	8, 6, 7						2.OA.B.2
6.	800;	450									2.NBT.B.7
7.	9;	7									2.OA.B.2
<u>Part 2 –</u>	Applicatio	on Practio	<u>2e</u>								
8.	a.) Chec	k student	s' work.	b.)	65 (i.e	. 40 + 25 = <b>65</b> )	<b>c.) 85</b> (i.e	. 40 + 10 + 25 = 8	85)	<b>d.) 5</b> (i.e. 25 – 20 = <b>5</b> )	2.MD.C.10
<u> Part 3 –</u>	Reflection	n and Cor	nceptual L	Inders	anding	2					
Stu	Ident Ansv	wers: firs	st column:	365; 7	; 4;	second	column: 24; 6	0; 12			2.MD.C.7

<u> Part 1 –</u>	- Numeracy Development	<u>ccss</u>
1.	102; 197	2.NBT.B.7
2.	Check students' work for accuracy.	2.MD.C.7
3.	2:03; 1:59; 9:53; 9:57	2.MD.C.7
4.	minute hand points directly at 2; minute hand points directly at 5; minute hand points directly at 6;	minute hand points directly at 8; 2.MD.C.7
5.	8, 9, 17; 9, 8; 17 17, 8, 9; 17, 9, 8	2.OA.B.2
6.	850; 25	2.NBT.B.7
7.	8; 7	2.OA.B.2
<u> Part 2 –</u>	- Application Practice	
8.	<b>a.)</b> Check students' work. <b>b.) 15</b> (i.e. 40 - 25 = <b>15</b> ) <b>c.) 85</b> (i.e. 40 +	45 = 85) d.) 5 (i.e. 25 - 20 = 5) 2.MD.C.10
<u> Part 3 –</u>	- Reflection and Conceptual Understanding	
Stu	udent Answers: first column: 12; 365; 52; second column: 6	0; 7; 24 <b>2.MD.C.7</b>

![](_page_107_Figure_0.jpeg)

<u> Part 1 –</u>	Numerad	cy Develop	ment				<u>CCSS</u>
1.	110						2.NBT.B.7
2.	60;	25;	20				2.NBT.B.6
3.	Edges =	= <b>9</b> ;	Faces = <b>5</b> ;	Vertices = 6			2.G.A.1
4.	Pencil:	7 to 8 cm;	3 to 4 inches;	Cool	ie: 4 to 5 cm;	; 2 inches	2.MD.A.3
5.	45;	30					2.NBT.B.5
6.	2;	2					2.0A.B.2
<u> Part 2 –</u>	Applicat	ion Practic	e				
7.	38 (i.e.	75 – 37 = 3	38)				2.OA.A.1; 2.NBT.B.7
8.	Odd (i.	e. 4 + 7 = <b>1</b>	1; 11 is an odd nu	umber); 207		2.0A.B.2;	2.OA.C.3; 2.NBT.A.3
9.	3 rows;	5 + 5 + 5	= 15				2.0A.C.4
<u> Part 3 –</u>	Reflectio	on and Cor	nceptual Underst	anding			
Stu	idont Ans	wors 6 s	naces 2 (to make	10). 4 spaces from	10 to 14.	NOTE: Slowly guide students through this process	2 0 4 B 2

 

 NOTE:
 Slowly guide students through this process.
 2.OA.B.2

 NOTE:
 Some students have difficulty learning their subtraction facts, especially the single digit from a double-digit math fact. This process helps those students learn the more difficult subtraction facts without memorization, but visualization of of the 'difference' process on a number line.
 This process only works for single digit subtracted from two digits.

<u>Part 1 -</u>	- Numerac	y Develo	pment			<u>ccss</u>
1.	130					2.NBT.B.7
2.	80;	55;	0			2.NBT.B.6
3.	Edges =	• <b>9</b> ;	Faces = <b>5</b> ;	Vertices = 6		2.G.A.1
4.	Car – 2	1/2 inches				2.MD.A.1
5.	5;	50				2.NBT.B.5
6.	6;	5				2.OA.B.2
<u>Part 2 -</u>	- Applicati	ion Pract	<u>ice</u>			
7.	16;	8;	3			2.MD.D.10
8.	3 rows;	4 + 4 +	4 = 12			2.OA.C.4
<u>Part 3 -</u>	- Reflectio	n and Co	onceptual Unde	erstanding		
St	udent Ans	wers: 4	; 4 spaces, 1 (to	o make 10); <b>3</b> spaces from 10 to 13;	NOTE: Students must understand number line. Practice.	2.0A.B.2


64 - 66

## Learning Opportunity 64

<u> Part 1 –</u>	Numera	cy Develo	pment						<u>CCSS</u>
1.	95							:	2.NBT.B.7
2.	15;	75;	60					:	2.NBT.B.6
3.	Edges =	= 12;	Faces = <b>6</b> ;	Vertices = 8					2.G.A.1
4.	Car – 6	centimete	rs						2.MD.A.1
5.	25;	100						:	2.NBT.B.5
6.	8;	8							2.OA.B.2
<u>Part 2 –</u>	Applicat	ion Practi	ice						
7.	9;	6;	1					:	2.MD.D.10
8.	Check s	student wo	ork for accuracy.						2.G.A.1
<u>Part 3 –</u>	Reflectio	on and Co	nceptual Unders	tanding					
Stu	udent Ans	wers: 4;	; 2 spaces, 4; 2 (te	o make 10); <b>2</b> spaces f	rom 10 to 12;	NOTE:	Students must understand number line.	Practice.	2.0A.B.2

### Learning Opportunity 65

<u> Part 1 –</u>	Numeracy Development	<u>ccss</u>
1.	54; 77; NOTE: Students should be shown that to check subtraction they can "ADD UP" – Not only practice on additio and subtraction algorithmic skills – it relates the two computations as opposite operations!	n <b>2.NBT.B.7</b>
2.	95; 40	2.NBT.B.6
3.	First column: 5, 30, 400; Second column: 4, 50, 200	2.OA.B.2; 2.NBT.B.7
<u> Part 2 –</u>	Application Practice	
4.	17; Odd	2.OA.B.2; 2.OA.C.3
5.	892	2.NBT.A.3
6.	<b>61</b> (i.e. 67 + 34 = <b>61</b> )	2.NBT.B.5
7.	4; 5; 0	2.MD.D.10
8.	Check student work for accuracy.	2.G.A.1
<u>Part 3 –</u>	Reflection and Conceptual Understanding	
Stu	Ident Answers: 5; 1 spaces, 5; 1 (to make 10); 4 spaces from 10 to 14; NOTE: Students must understand number line	Practice. 2.OA.B.2

<u> Part 1 –</u>	Numeracy Development		<u>ccss</u>
1.	43; 43; 89; NOTE: Students should be shown and subtraction algorithm	n that to check subtraction they can "ADD UP" – Not only practice on addition ic skills – it relates the two computations as opposite operations!	2.NBT.B.7
2.	Given; 5; 4; 4; NOTE: Only w With s	works for 2 digit subtracting 1 digit. Review number lines for physical meaning. sufficient practice EVERY student that struggled with subtraction, all students will	2.OA.B.2 be adept.
3.	40; 20; 60		2.NBT.B.5
<u> Part 2 –</u>	Application Practice		
4.	6; Even	2.OA.E	3.2; 2.OA.C.3
5.	460		2.NBT.A.3
6.	<b>50¢</b> (i.e. 25 + 25 = <b>50¢</b> )		2.NBT.B.5
7.	7; 4; 6		2.MD.D.10
8.	Check student work for accuracy.		2.G.A.1
<u> Part 3 –</u>	Reflection and Conceptual Understanding		
Stu	ident Answers: First column: 3; 100, 1,000;	Second column: 36, 5,280, 12; <b>NOTE:</b> Find objects that the students can relate to the physical length of objects. For example, this paper is almost 12 in in height. Three of these papers is almost a yard. A yard is ABOUT equal to 1 A mile and kilometer – find and communicate a distance the students can relate	2.MD.A.1 ches meter. e near school.



67 - 69

Learning Opportunity 67

<u>Part 1 -</u>	- Numeracy De	velopment				<u>ccss</u>
1.	37; 37; 72;	NOTE: Stu and	idents should be sho d subtraction algorith	wn that to check subtraction the mic skills – it relates the two con	y can "ADD UP" – Not only practice on addition nputations as opposite operations!	2.NBT.B.7
2.	8; 4;	5;	9			2.OA.B.2
3.	70; 30	80				2.NBT.B.5
<u> Part 2 -</u>	- Application F	ractice				
4.	10; 6;	24;	40			2.0A.C.3
5.	400					2.NBT.A.1
6.	\$8.75 (i.e.	3 + 5 = \$ 8 do	llars) + (25 x 3 = 75	cents)	2.OA.	B.2; 2.MD.C.8
7.	79; 39				2.NBT.B	.5; 2.MD.D.10
8.	Check stude	nt work for acc	curacy.			2.G.A.1
9.	<b>12</b> inches = 1	foot; NO	TE: A piece of 8.5 x	11 inch paper is a good reminde	er of a foot. 3 sheets laid end-to-end = 1 yard.	2.MD.A.3
<u>Part 3 -</u>	- Reflection an	d Conceptua	I Understanding			
				relate to the physical length in height. Three of these pap A mile and kilometer – find a	of objects. For example, this paper is almost 12 i pers is almost a yard. A yard is ABOUT equal to a and communicate a distance the students can rela	nches 1 meter. ate near school.
[				Learning Opportunity 68		
<u>Part 1 -</u>	- Numeracy De	evelopment				<u>CCSS</u>
1.	52; 52; 80;	NOTE: Stu	udents should be sho	own that to check subtraction the	y can "ADD UP"	2.NBT.B.7
2.	8; 9;	1;	9			2.0A.B.2
3.	90; 50	; 20				2.NBT.B.5
<u>Part 2 -</u>	- Application F	Practice				
4.	206 (i.e.	33 + 41 + 2 +	130 = 206)			2.NBT.B.6
5.	Students' an	swers will vary	y. Check to ensure t	they are reasonable. Use a shee	et of paper (HEIGHT) as an estimating 12 inch rul	er. 2.MD.A.3
6.	\$7.73 (i.e.	3.45 + 4.28 =	7.73)		2.OA.	B.2; 2.MD.C.8
7.	82; 27	; 43 > 3	39		2.NBT.A.4; 2.NBT.B	8.5; 2.MD.D.10
8.	Check stude	nt work for ac	curacy.			2.G.A.1
9.	6 to 16 cm;	Check stude	ent work for reasonal	bleness.		2.MD.A.3
Part 3 -	- Reflection an	d Conceptua	I Understanding			
St	udent Answers	: First colum	nn: 5,280; 100, 1,0	000; Second column: 3, 12, 36	3	2.MD.A.1

<u> Part 1 –</u>	Numeracy Develo	<u>pment</u>			<u>CCSS</u>		
1.	51; 51; 24; 75	NOTE: Students and subtraction	should be shown that to che on algorithmic skills – it rela	eck subtraction they can "ADD UP" – Not only practice on the two computations as opposite operations!	on addition 2.NBT.B.7		
2.	7; 8;	7; 9; <b>N</b> (	OTE: Only works for 2 digit With sufficient practice	subtracting 1 digit. Review number lines for physical meta EVERY student that struggled with subtraction, all stu	eaning. <b>2.OA.B.2</b> dents will be adept.		
3.	900; 500; 200	D			2.NBT.B.5		
<u> Part 2 –</u>	Application Pract	<u>ice</u>					
4.	15; Odd				2.OA.B.2; 2.OA.C.3		
5.	Students' answers	s will vary. Check t	o ensure their answers are	reasonable.	2.MD.A.3		
6.	Check students' v	vork for accuracy.	8 smaller rectangles.		2.G.A.2		
7.	<b>140</b> (i.e. 790 – 65	0 = <b>140</b> );	650 > 360	2.NBT.B.7;	2.NBT.A.3; 2.MD.D.10		
8.	Check student wo	ork for accuracy.			2.G.A.1		
Part 3 – Reflection and Conceptual Understanding							
Stu	ident Answers: G	iven; 5; 40; 4	45; 5; 20; 25; <b>NOTE</b>	Practice skill and students will be numerically adept.	2.OA.B.2; 2.NBT.B.5		



#### Learning Opportunity 71

Part 1	– Nume	eracy Deve	lopmen	<u>nt</u>							<u>CCSS</u>
1	. 213;	213; 162	; 375	NOTE: Studer	nts shoule	d be shown tha	t to check	<pre>subtra</pre>	ction th	iey can "ADD UP".	2.NBT.B.7
2	. 6;	5;	4								2.OA.B.2
3	. 100;	400;	600	C							2.NBT.B.7
Part 2	– Appli	cation Pra	ctice								
4	. INCI	HES: ½;	6;	4 1/2;	CENT	IMETERS: 1;	15;		12		2.MD.A.1
Part 3	Part 3 – Reflection and Conceptual Understanding										
:	Student	Answers:	5; 70;	75; 5; 8	0; 85;	5; 60; 65;					2.OA.B.2; 2.NBT.B.5

<u>Part 1 –</u>	Numerac	y Develo	pment							<u>CCSS</u>
1.	152; 15	2; 51; 20	03 <b>NOTE</b>	: Students	s should be showr	that to ch	eck subtra	action they car	n "ADD UP".	2.NBT.B.7
2.	3;	6;	1							2.OA.B.2
3.	700;	900;	500							2.NBT.B.7
<u>Part 2 –</u>	Applicati	on Pract	ice							
4.	INCHES	5: 1;	3 ½;	6;	CENTIMETERS	S: 2½;	9;	15 ½		2.MD.A.1
<u>Part 3 –</u>	Part 3 – Reflection and Conceptual Understanding									
St	udent Ans	swers: 5	5; 90; 95;	5; 50	D; 55; 5; 70	; 75;				2.OA.B.2; 2.NBT.B.5



## Learning Opportunity 73

Part 1 – Numeracy Development	<u>CCSS</u>
<b>1.</b> 483; 483; 270; 753	2.NBT.B.7
<b>2.</b> 4; 5; 7	2.OA.B.2
3. 5; 10; 15; NOTE: Practice skill and students will be numerically adept.	2.OA.B.2; 2.NBT.B.5
Part 2 – Application Practice	
<b>4.</b> \$27.81 (12.45 + 15.36 = 27.81)	2.NBT.B.7; 2.MD.C.8
5. 12-16 feet; 4-6 yards; NOTE: Check students work for reasonableness. Show the approximate 'car' distance in the c	lassroom. 2.MD.A.3
6. 12; NOTE: Stress that 'area' is the INSIDE of an object.	2.0A.C.4; 2.G.A.2
7. 11 o'clock; NOTE: Easy elapsed time. Practice with students – hours only. Remain in either AM or PM.	2.MD.C.7
<b>8. B.</b> (i.e. 6.50 – 1.70 + 3.25)	2.NBT.B.5
9. Check students' work for accuracy.	2.MD.C.7
Part 3 – Reflection and Conceptual Understanding	
Student Answers: Given; 50; 100; 150; 50; 300; 350; NOTE: Practice skill and students will be numerically adep	t. 2.OA.B.2; 2.NBT.B.7

### Learning Opportunity 74

Part 1 – Numeracy Development	CCSS
<b>1.</b> 326; 326; 54; 380	2.NBT.B.7
<b>2.</b> 8; 6; 3	2.OA.B.2
3. 5; 30; 35; NOTE: Practice skill and students will be numerically adept. 2.0	A.B.2; 2.NBT.B.5
Part 2 – Application Practice	
<b>4.</b> 35 (i.e. 120 – 85 = <b>35</b> )	2.NBT.B.7
5. 10-14 yards; 10-14 meters; NOTE: Students should KNOW that a meter's length and a yard's length are about the same.	2.MD.A.3
6. 12; NOTE: Stress that 'area' is the INSIDE of an object.	2.OA.C.4; 2.G.A.2
7. 5 o'clock; NOTE: Easy elapsed time. Practice with students – hours only. Remain in either AM or PM.	2.MD.C.7
<b>8. C.</b> (i.e. 65 – 25 + 50)	2.NBT.B.5
9. Check students' work for accuracy.	2.MD.C.7
Part 3 – Reflection and Conceptual Understanding	
Student Answers:         50; 500; 550; 50; Given; 50; 50; 400; 450;         2.0	A.B.2; 2.NBT.B.7

Part 1 – Numeracy Development	CCSS
1. 5; 40; 45; NOTE: Practice skill and students will be numerically adept.	2.OA.B.2; 2.NBT.B.7
<b>2.</b> 5; 4; 7	2.OA.B.2
<b>3.</b> 50; 500; 550	2.NBT.B.7
Part 2 – Application Practice	
<b>4.</b> 6 (i.e. Half of 12 is <b>6</b> )	2.NBT.B.7
5. 8-12 feet; NOTE: Use the classroom ceiling as a reference length.	2.MD.A.3
6. $2+2+2=6$	2.OA.C.4; 2.G.A.2
<b>7.</b> 50 (i.e. 105 – 50 = <b>50</b> ); 195 (i.e. 105 + 90 = <b>195</b> )	2.MD.D.10
8. Check students' work for accuracy.	2.MD.C.7
Part 3 – Reflection and Conceptual Understanding	
Student Answers: 6, 6; 4; 2 + 2 = 4: NOTE: Stress the number line model or draw a picture of a gr	roup model (below) 3.OA.C.7



### Learning Opportunity 77

<u> Part 1 –</u>	Numera	acy Develo	opment	<u>ccss</u>			
1.	5;	45	15		2.NBT.B.5		
2.	4;	8;	3		2.OA.B.2		
3.	50;	700;	750		2.NBT.B.7		
<u> Part 2 –</u>	Applica	ation Pract	<u>ice</u>				
4.	18; C	heck Stude	nts' Work for Accura	2.NBT.B.5; 2.MD.B.6			
5.	Check	Students'	Work for Accuracy.		2.G.A.1		
6.	18 (i.e	e. 65 – 47 =	= 18)		2.NBT.B.5; 2.MD.B.5		
7.	Check	2.G.A.3					
<u>Part 3 –</u>	Part 3 – Reflection and Conceptual Understanding						
<b>Student Answers:</b> 9; 3 + 3 + 3 = 9; 8				8; 4 + 4 = 8	3.OA.C.7		

<u>Part 1 –</u>	Part 1 – Numeracy Development								
1.	55;	75	85			2.NBT.B.5			
2.	8;	7;	4			2.0A.B.2			
3.	250;	150;	50			2.NBT.B.7			
<u> Part 2 –</u>	Applica	tion Prace	<u>tice</u>						
4.	13; Ch	eck Stude	ents' Work for Accurac	sy.		2.NBT.B.5; 2.MD.B.6			
5.	Check	Students'	Work for Accuracy.			2.G.A.3			
6.	Minute	hand poir	nts directly to the 3;	Minute hand points directly to the 6;	Minute hand points directly to the 9	2.MD.C.7			
<u>Part 3 –</u>	Part 3 – Reflection and Conceptual Understanding								
St	udent An	swers:	8; 2+2+2+2=8;	8; 4 + 4 = 8		3.0A.C.7			

<	••	>	$\succ$	$\sub$	S "Layer	pring ing a S	- Solutions	$\supset$	<	79 - 80	>
					L	earnin	g Opportunity 79				
<u> Part 1 –</u>	- Numerao	cy Develo	pment								<u>CCSS</u>
1.	95;	65	75								2.NBT.B.5
2.	6;	9;	3								2.0A.B.2
3.	350;	450;	250								2.NBT.B.7
<u> Part 2 –</u>	- Applicat	ion Pract	ice								
4.	12:05;	11:55	5:10;	9:03;	10:25;	10:33					2.MD.C.7
5.	Check S	Students' \	Nork for A	ccuracy.							2.G.A.1
6.	12 edge	es, 6 face	s, 8 vertic	es;	1 edge,	1 face,	1 vertex;	8 edges, 5 fac	es, 5 vertices		2.G.A.1
Dorf 2	Dofloatic	on and Ca	noontual	Indorato	ndina						

 Part 3 – Reflection and Conceptual Understanding

 Student Answers:
 10;
 2 + 2 + 2 + 2 + 2 = 10;
 12;
 6 + 6 = 12

# Learning Opportunity 80

Part 1 – Numeracy Development									<u>ccss</u>		
	1.	85;	45	65							2.NBT.B.5
	2.	7;	4;	0							2.OA.B.2
	3.	850;	750;	550							2.NBT.B.7
Part 2 – Application Practice											
	4.	1:03;	12:57	4:18;	5:48;	6:27;	8:37				2.MD.C.7
	5. Check Students' Work for Accuracy.									2.G.A.1	
	6.	6 edges,	4 faces,	4 vertices	;	2 edges,	2 faces,	0 vertices;	9 edges, 5 fac	es, 6 vertices	2.G.A.1
Part 3 – Reflection and Conceptual Understanding											
<b>Student Answers:</b> 12; $3+3+3+3=12$ ; 12; $4+4+4=12$								3.0A.C.7			

3.0A.C.7