Office of Exceptional Student Education

DISTANCE LEARNING PACKET
MICI PROGRAM

MATH - HIGH SCHOOL
Weeks 1: April 14 – 17, 2020

MATH - HIGH SCHOOL
Weeks 2: April 20 – 24, 2020

Students Rise. We all Rise
VMATH: LEVEL D - MODULE 3

WEEKLY DISTANCE LEARNING ESE ESSENTIAL ELEMENTS STUDENT SCHEDULE

4/13/20 - 4/24/20

Directions:
- Parent/Guardian will discuss Lesson Vocabulary terms for each lesson with student
- Parent/Guardian will discuss how we find the SUM (addition) or Difference (Subtraction) = the answer to an addition or subtraction problem
- Parents will assist students with completing each section of the lesson including: Get Started, Build the Concept, Try it Together, Work on Your Own, Skill Building: New & Review, Problem Solving and CHECK UP!

Goals/Objectives: Review/ improve basic addition and subtraction problem solving regrouping with a calculator (if identified as an accommodation) or without a calculator- try it first!

Module: VMATH LEVEL D, Module 3- Whole Number Addition and Subtraction
Topic: Adding and Subtraction Whole numbers with regrouping
Materials Needed: Voyager Math Student Workbook, paper, pencil, calculator (optional)

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<th>Week</th>
<th>Dates</th>
<th>Activity</th>
<th>Pages</th>
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<tbody>
<tr>
<td>1</td>
<td>4/13/20- 4/17/20</td>
<td>LESSONS 3-8</td>
<td>15-31</td>
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<td>4/20/20- 4/24/20</td>
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<td>Extension</td>
<td>4/24/20</td>
<td>Extension</td>
<td>Page 63</td>
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</table>
VMATH Level D- Module 3
Week 1(lessons 3-8) & Week 2 (lessons 11-15)

| LEARNING OBJECTIVES | 1. Student will be able to compute multiple digit addition and subtraction problems using regrouping. Allow the student to solve w/o the use of a calculator by recalling basic math facts including place value and basic addition and subtraction facts. Student may use a calculator if necessary
2. Student will review/use basic mathematical facts to explain answers using sums and differences
3. Student will review, define and explain academic vocabulary for each lesson |

| Video Link | Select a video or app from the Learn at Home Document |

| Guided Practice/Independent Practice | Student will complete the following lessons in VMATH D Module 3 with the assistance of parent/guardian or relative: Get Started, Build the Concept, Try It Together, Work on Your Own, Skill Building-New and Review, Problem Solving and CHECK-UP! |

| Closing | Students will review the weeks assignments and activities and discuss their learning, questions and revisit areas of difficulty or that required use of a calculator |

| Extend | • Extension exercises available on page 63 |

| Intervention | • Any activity from the district provide ESE Resources. |
Adding 2-Digit Numbers with Regrouping

GET STARTED

1. 576
   a. _____
   b. _____
   c. _____

2. 8
   5
   + 4

3. 46 + 43
   46
   + 43

4. 27 + 45
   1
   27
   + 45

5. 56 + 17

The base-10 pieces model 37 + 25.

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<tr>
<th>Tens</th>
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37 + 25 = _____
**TRY IT TOGETHER**

Find each sum. Regroup as needed.

6. 28 + 59
7. 32 + 49
8. 45 + 29

**WORK ON YOUR OWN**

Add 2-Digit Numbers with Regrouping

**Using Symbols**

1. \[58 + 36\]

   \[
   \begin{array}{c}
   58 \\
   + 36 \\
   \hline
   94
   \end{array}
   \]

2. \[1 58 + 36\]

   \[
   \begin{array}{c}
   8 + 6 = 14 \\
   14 > 9 \\
   \hline
   14 \text{ ones} = 1 \text{ ten 4 ones}
   \end{array}
   \]

**Using Words**

1. Write the numbers, one under the other, with the place values lined up.

2. Add the digits in the ones column. If the sum is greater than 9, regroup.

   **Regroup:** Write the ones digit of the sum in the ones column under the equal bar and the tens digit above the tens column.

3. Add the digits in the tens column. Write the sum in the tens column under the equal bar.
**SKILL BUILDING: NEW AND REVIEW**

Find each sum. Regroup as needed.

1. \[9 + 28 = 37\]
2. \[12 + 36 = 58\]
3. \[11 + 52 = 63\]
4. \[10 + 29 = 39\]
5. \[15 + 17 = 32\]

**Choosing an Operation**

Ted sold 26 chocolate cupcakes and 19 vanilla cupcakes. How many total cupcakes did Ted sell?

a. **Find**: how many total cupcakes Ted sold
b. **How**? Choose an operation.

c. **Solve**. This problem is about finding a total. Choose addition to solve.

\[26 + 19 = \text{total number of cupcakes sold}\]

Ted sold _____ cupcakes.

d. **Is the answer reasonable?** Explain.

___________________________
___________________________
___________________________
PROBLEM-SOLVING: NEW AND REVIEW

Solve each problem.

18. Connor sold 36 apple pies and 25 banana pies. How many fruit pies did he sell in all?

19. Shawna wrote the addition problem on the right.
   Explain Shawna’s mistake. What is the correct answer?
   \[ \begin{array}{c}
   18 \\
   + \quad 22 \\
   \hline
   310 
   \end{array} \]

20. Kelsey made 12 birthday invitations yesterday. Today she made 11 more invitations. If Kelsey mails all of her invitations, how many will she send?

21. Jennifer has 27 stickers. Paige has 56. If they put their stickers together, how many will they have?

CHECK UP

Answer each question.

1. What is the sum of 54 and 27?
   a. 50  b. 71  c. 81  d. 91

2. Jeff read 15 pages of his book before recess. He read 18 more pages before he went home. How many pages did Jeff read during the day?
   a. 23 pages  b. 213 pages  c. 53 pages  d. 33 pages

3. For problem 1, which is the correct way to write the addends vertically? Explain.
   \[ \begin{array}{c}
   54 \\
   + \quad 27 \\
   \hline
   81 
   \end{array} \]
   \[ \begin{array}{c}
   27 \\
   + \quad 54 \\
   \hline
   81 
   \end{array} \]

4. Explain why it is important when adding multi-digit numbers to write the numbers, one under the other.

WRITE MATH

CRITICAL THINKING
Adding Three 2-Digit Numbers with Regrouping

Name __________________________  Class __________________________  Date _________________

Level D Module 3 • Whole Number Addition and Subtraction

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GET STARTED

1. 793
a. _____

2. 9
9
6
+ 4

3. 56 + 37
56
+ 37

4. 46 + 32 + 17
46
32
+ 17

5. 34 + 27 + 32

The base-10 pieces show how to add 27, 38, and 13.

27 + 38 + 13 = _______

BUILD THE CONCEPT

PROBLEM-SOLVING

CRITICAL THINKING

Tens | Ones
-----|-----
______ | _____

27 + 38 + 13 = _______
TRY IT TOGETHER

Find each sum. Regroup as needed.

6. 17
   46
   + 25
   ___

7. 38
   46
   + 19
   ___

8. 29 + 54 + 12
   +___

WORK ON YOUR OWN

Add Three 2-Digit Numbers with Regrouping

Using Symbols

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<tbody>
<tr>
<td>1.</td>
<td>48 + 19 + 26</td>
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<td>2.</td>
<td>8 + 9 + 6 = 23</td>
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<tr>
<td>3.</td>
<td>2 + 48 + 19 + 26</td>
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</table>

Using Words

Write the numbers, one under the other, lining up the place values.

Add the digits in the ones column. If the sum is greater than 9, regroup.

Regroup: Write the ones digit of the sum in the ones column under the equal bar and the tens digit above the tens column.

Add the digits in the tens column. Write the sum in the tens column under the equal bar.
**SKILL BUILDING:**
**NEW AND REVIEW**

Find each sum. Regroup as needed.

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<td>13</td>
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<td>14</td>
<td>56</td>
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<tr>
<td>15</td>
<td>74 + 13 + 12</td>
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<tr>
<td></td>
<td>16</td>
<td>8 + 6 + 7</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>57 + 28</td>
</tr>
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</table>

**Using a 4-Step Plan**

Katie had $17 left over after the fair. She spent $15 on her ticket and $18 on rides. How much money did Katie bring to the fair?

a. **Find:** how much money Katie brought to the fair

b. **How?** Add how much money Katie had left over and how much she spent on her ticket and rides.

c. **Solve.**

\[
\begin{align*}
\text{amount left over} & = 17 \\
\text{spent on ticket} & = 15 \\
\text{spent on rides} & = 18 \\
\hline
\text{total} & = 43
\end{align*}
\]

Katie brought $______ to the fair.

d. **Is the answer reasonable? Explain.** ________________________________

___________________________

___________________________

___________________________
PROBLEM-SOLVING: NEW AND REVIEW

Solve each problem.

18. Al spent $10 on his ticket, $23 on rides and food, and had $18 left over. How much did Al bring to School Fun Day?

19. Marietta has 11 DVDs, Jamie has 16 DVDs, and Shannon has 13 DVDs. How many total DVDs do the 3 have?

20. Ty walked 6 miles on Monday and 8 miles on Tuesday. Eva walked 8 miles on Monday and 6 miles on Tuesday. Who walked farther?

21. Joe counted 89 books about dinosaurs at the school library. Sue counted 46 books about airplanes, 36 books about trucks, and 18 books about trains. Who counted more books? Explain.

CHECK UP

Answer each question.

1. What is the sum of 22, 17, and 38?
   a. 67  b. 617  c. 76  d. 77

2. A survey shows that students in a third-grade class have 18 dogs, 12 cats, and 14 hamsters. In all, how many pets does the third-grade class have?
   a. 40 pets  b. 64 pets  c. 44 pets  d. 314 pets

3. Jamie completed this addition problem.
   Explain Jamie’s mistake. What is the correct answer?

\[
\begin{array}{c}
26 \\
+ 34 \\
\hline
510 \\
\end{array}
\]

4. Tyler said he will have to regroup ones for tens in the addition problem 59 + 34 + 62. How does he know this?
Adding 3-Digit Numbers with Regrouping

**GET STARTED**

1. 563
   a. _____
   b. _____
   c. _____

2. 36 + 57
   \[
   \begin{array}{c}
   36 \\
   + 57 \\
   \hline
   \end{array}
   \]

3. 486 + 249
   \[
   \begin{array}{c}
   486 \\
   + 249 \\
   \hline
   \end{array}
   \]

4. 677 + 193
   + _____

Regroup ones for tens. Then regroup tens for hundreds.
## Lesson 5

### Try It Together

Find each sum. Regroup as needed.

5. \(265 + 458\)
6. \(592 + 239\)
7. \(273 + 461\)

### Work on Your Own

### Add 3-Digit Numbers with Regrouping

#### Using Symbols

1. \(629 + 184\)

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<td>+</td>
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<td>8</td>
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<tr>
<td>8</td>
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<td>3</td>
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2. \(629 + 184\)

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<td>+</td>
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<td>8</td>
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<td>1</td>
<td>3</td>
<td>9</td>
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3. \(629 + 184\)

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<td>+</td>
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<td>8</td>
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<td>1</td>
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4. \(629 + 184\)

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<td>+</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Using Words

1. Write the numbers, one under the other, lining up the place values.

2. Add the digits in the ones column. If the sum is greater than 9, regroup.

3. Add the digits in the tens column. If the sum is greater than 9, regroup.

4. Add the digits in the hundreds column.
Finding a Pattern

The first 4 locker numbers are 179, 183, 187, and 191. If this pattern continues, what is the number of the next locker?

a. **Find:** the number of the next locker

b. **How?** Find a pattern.

c. **Solve.**

Do the numbers in the pattern increase or decrease? __________
What is done to 179 to get to 183? __________
What is done to 183 to get to 187? __________
What is done to 187 to get to 191? __________
So, what is the pattern rule? __________
Apply this rule to the last number given in the pattern.
191 + _____ = _____
The number of the next locker is _____.

d. **Is the answer reasonable? Explain.** ____________________________
__________________________________________________
PROBLEM-SOLVING: NEW AND REVIEW

Solve each problem.

17. The first 4 house numbers on a street are 72, 77, 82, and 87. If this pattern continues, what will be the number of the next house? Explain.

18. Students at Main Elementary wrote letters. The younger students wrote 197 letters. The older students wrote 225 letters. In all, how many letters were written?

19. Samuel found the sum shown. Explain Samuel’s mistake.
   What is the correct sum?
   \[ \begin{array}{c}
   136 \\
   + \quad 364 \\
   \hline
   490
   \end{array} \]

20. James has a collection of 124 coins. Cody has 220 coins. How many coins do the boys have in all?

CHECK UP

Answer each question.

1. What is the sum of 496 and 257?
   a. 753   b. 643   c. 61,413   d. 743

2. Ana’s class recycled 247 items. Omar’s class recycled 198 items. How many items did both classes recycle?
   a. 247 items   b. 445 items   c. 335 items   d. 435 items

3. How is the regrouping shown in these two problems different?
   \[ \begin{array}{c}
   \hline
   143 \\
   + \quad 219 \\
   \hline
   362
   \end{array} \]
   \[ \begin{array}{c}
   \hline
   156 \\
   + \quad 372 \\
   \hline
   528
   \end{array} \]

4. What is one more than the greatest 2-digit whole number? Explain.
Adding Multi-Digit Numbers with Regrouping

GET STARTED

1

45
32
+ 25

2

742
107
+ 113

3

114 + 32 + 47

114
32
+ 47

4

423 + 125 + 70

+ ___

A place value chart can be used to add multi-digit numbers. This place value chart is used to add 72, 593, and 265.

<table>
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<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
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<tbody>
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<td>9</td>
<td>3</td>
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<td>2</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>+</td>
<td>7</td>
<td>2</td>
</tr>
</tbody>
</table>

Sum

72 + 593 + 265 = _____
Find each sum. Regroup as needed.

5. \(92 + 317\)  
6. \(741 + 89\)  
7. \(324 + 36 + 608\)

Add Multi-Digit Numbers with Regrouping

**Using Symbols**

1. \(419 + 378 + 65\)

\[
\begin{align*}
& 419 \\
& \underline{+ 378} \\
& \underline{+ 65} \\
& \underline{862}
\end{align*}
\]

**Using Words**

1. Write the numbers, one under the other, lining up the place values.

2. Add the digits in the ones column. If the sum is greater than 9, regroup.

3. Add the digits in the tens column. If the sum is greater than 9, regroup.

4. Add the digits in the hundreds column.
SKILL BUILDING:
NEW AND REVIEW
Find each sum. Regroup as needed.

8
118
+ 56
_____

9
298
+ 423
+ 55
_____

10
807
+ 35
+ 84
_____

11
340
38
73
_____

12
692
+ 24
_____

13
243
458
+ 17
_____

14
78 + 432

15
437 + 223 + 310

16
96 + 87 + 92

PROBLEM-SOLVING:
NEW AND REVIEW
Solve each problem.

17 The store sold 204 books the first day, 89 the second day, and 157 the third day. How many books did the store sell during the 3 days?

18 Ty’s family traveled 422 miles the first day and 398 miles the second day. How many miles did Ty’s family travel those 2 days?

19 Keiko is throwing her softball. The first time she throws the ball 108 feet, the second time 89 feet, and the third time 110 feet. How many feet did she throw the ball all 3 times?

20 There are 48 birds, 273 insects, and 165 reptiles at the Nature Center. How many animals are at the Nature Center in all?
**Lesson 6**

**CHECK UP**

Answer each question.

1. What is the sum of 76, 54, and 507?
   - a. 691
   - b. 527
   - c. 637
   - d. 130

2. Sean dribbled the basketball 312 times Friday, 529 times Saturday, and 93 times on Sunday. How many times did Sean dribble the ball altogether?
   - a. 944 times
   - b. 934 times
   - c. 890 times
   - d. 824 times

3. Which answer choice in problem 1 is the least reasonable? Explain.
   _________________________________________
   _________________________________________
   _________________________________________
   _________________________________________

To add 371, 158, and 46, Nina wrote the following:

\[
\begin{array}{c}
1 \ 371 \\
158 \\
+ 46 \\
\hline
989 \\
\end{array}
\]

Explain Nina’s mistake. What is the correct sum?

______________________________________________
______________________________________________
______________________________________________
______________________________________________

4. Write the missing ones digit in the second addend.

\[
\begin{array}{c}
1 \ 2 \ 4 \\
+ 6 \ \square \\
\hline
9 \ 3 \\
\end{array}
\]
Estimating Sums

Level D Module 3 • Whole Number Addition and Subtraction

Name __________________________  Class __________________________  Date _________________

GET STARTED

1. 315
   268
   + 124

2. 315 → ____
   268 → ____
   124 → ____

3. 315 → 300
   268 → 300
   + 124 → + 100

Estimate the sum: 238 + 574.

238 is between 200 and 300.
238 is closer to _____.
238 rounded to the nearest hundred is _____.

574 is between 500 and 600.
574 is closer to _____.
574 rounded to the nearest hundred is _____.

Add the rounded addends.

\[
\begin{align*}
238 & + 574 \\
\downarrow & \downarrow \\
_____ & + _____ = _____ \\
238 + 574 & is about _____.
\end{align*}
\]
Estimate each sum.

4. Estimate the sum of 284, 18, and 47.
   
   \[284 \quad + \quad 18 \quad + \quad 47\]
   
   Estimate each sum.

5. Estimate the sum of 245, 618, and 127.
   
   \[245 \quad + \quad 618 \quad + \quad 127\]

   
   \[227 \quad + \quad 341 \quad + \quad 456\]

Estimate Sums

**Using Symbols**

1. Estimate the sum of 583, 250, and 42.
   
   \[
   \begin{align*}
   583 & \rightarrow 600 \\
   250 & \rightarrow 300 \\
   + 42 & \rightarrow + 40 \\
   \end{align*}
   \]

2. Estimate the sum of 600, 300, and 40.
   
   \[
   \begin{align*}
   600 & \rightarrow \quad 300 \\
   + 40 & \rightarrow \quad + 40 \\
   \end{align*}
   
   940

**Using Words**

1. Round each number to its greatest place value.
   
   583 + 250 + 42 is about 940.

2. Add the rounded numbers.
SKILL BUILDING: NEW AND REVIEW

Estimate each sum.

7. $225 + 468$
8. $115 + 487$
9. $36 + 72$

10. $31 + 62 + 24$
11. $291 + 112 + 245$
12. $367 + 185 + 39$

Find each sum. Regroup as needed.

13. $619 + 223$
14. $534 + 91$
15. $242 + 453$

Choosing an Operation

Mr. Daniels drove 341 miles on Friday, 259 miles on Saturday, and 95 miles on Sunday. About how many total miles did Mr. Daniels drive on those 3 days?

a. **Find:** about how many miles Mr. Daniels drove

b. **How?** Choose an operation.

c. **Solve.** This problem is about finding a total, or sum. Choose addition to estimate the sum.

Mr. Daniels drove about ______ miles.

d. **Is the answer reasonable? Explain.**

___________________________
___________________________
___________________________
PROBLEM-SOLVING: NEW AND REVIEW

Solve each problem.

16. There are 117 players in the baseball league, 284 players in the football league, and 93 players in the basketball league. About how many total players are in the 3 leagues?

17. The softball team sold 285 candy bars and 367 jars of jam for its fund-raiser. About how many total items were sold?

18. What is the actual number of items that were sold in problem 17?

19. Beth, Jillian, and Leanne are sisters. Beth is 18 years old. Jillian is 15 years old. Leanne is 12 years old. What is the estimated sum of their ages?

CHECK UP

Answer each question.

1. Two numbers have a sum of about 500. What are 2 possible numbers?
   a. 320; 235  
   b. 145; 489  
   c. 467; 521  
   d. 58; 276

2. A new bike costs $265. A new helmet costs $97. About how much would it cost to buy the bike and helmet?
   a. about $362  
   b. about $300  
   c. about $400  
   d. about $500

3. In problem 2, why is the exact answer not the correct answer choice? ____________________________
   ____________________________  
   ____________________________

4. Which problem’s estimated sum will be greater than the exact sum? Explain.
   a. 164 + 79  
   b. 235 + 41

   ____________________________  
   ____________________________  
   ____________________________  
   ____________________________
Modeling Subtraction Using Base-10 Pieces

Get Ready

1. 3 tens and 4 ones → _______ tens and _______ ones

2. 5 tens and 7 ones → _______ tens and _______ ones

Discover

3. \[45 - 27 = \] _______


**4** $76 - 39 = \underline{\hspace{2cm}}$

**DISCOVER BOX**

Explain how you know when you need to regroup 1 ten as 10 ones when you subtract.

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

**EXPLORE MORE**

Use base-10 pieces to find each difference.

**5** $32 - 18 = \underline{\hspace{1cm}}$

**6** $61 - 29 = \underline{\hspace{1cm}}$

**7** $85 - 56 = \underline{\hspace{1cm}}$
Subtracting 2-Digit Numbers with Regrouping

Name ___________________________  Class __________________________  Date _________________

GET STARTED

1  86
   — 54

2  48 — 42
   —

3  52 — 19
   32
   — 19

4  64 — 28
   64
   — 28

Corey has 35 seashells. He gives away 18 seashells. How many seashells does Corey have left?

Can Corey subtract the ones digits? ______

Regroup 3 tens and 5 ones as _____ tens and _____ ones.

Corey has _____ seashells left.
Find each difference. Regroup as needed.

5. \[ 73 - 56 \]
   \[ \hline \]
6. \[ 46 - 39 \]
   \[ \hline \]
7. \[ 83 - 27 \]

Subtract 2-Digit Numbers with Regrouping

**Using Symbols**

1. \[ 64 - 28 \]
   \[ 64 \]
   \[ \underline{- 28} \]

2. \[ 64 \]
   \[ \underline{- 28} \]
   \[ \underline{514} \]

3. \[ 64 \]
   \[ \underline{- 28} \]
   \[ \underline{514} \]

4. \[ 64 \]
   \[ \underline{- 28} \]
   \[ \underline{514} \]

**Using Words**

1. Write one number under the other with the greater number on top. Line up the digits with the same place value.

2. To regroup, take 1 ten from the top digit in the tens column and add it to the top digit in the ones column. Rename the digit in the ones column to include the ten.

3. Subtract the digits in the ones column.

4. Subtract the digits in the tens column.

So, 64 minus 28 equals 36.
**SKILL BUILDING: NEW AND REVIEW**

Find each difference. Regroup as needed.

1. \[8 \quad 63 - 37 = {?} \]
2. \[9 \quad 52 - 16 = {?} \]
3. \[10 \quad 71 - 34 = {?} \]
4. \[11 \quad 54 - 35 = {?} \]
5. \[12 \quad 26 - 19 = {?} \]
6. \[13 \quad 62 - 33 = {?} \]
7. \[14 \quad 45 - 19 = {?} \]
8. \[15 \quad 74 - 58 = {?} \]
9. \[16 \quad 36 - 27 = {?} \]
10. \[17 \quad 35 - 14 = {?} \]
11. \[18 \quad 59 - 18 = {?} \]
12. \[19 \quad 26 - 23 = {?} \]

**PROBLEM-SOLVING: NEW AND REVIEW**

Solve each problem.

20. Mrs. Brown bought a pack of 50 pencils. She gave 22 of them to her students. How many pencils does Mrs. Brown have left?

21. Mrs. King filled a shelf in the library with 25 new books. Several students came in and checked out 11 of those books. How many books are left on the shelf?

22. Shandra bought a bag of 75 cookies. She and her friend ate 18 cookies. How many cookies are left in the bag? Explain how regrouping is used to solve the problem.

23. Shaelyn wrote 28 pages in her journal in June and 39 pages in July. How many pages did Shaelyn write in all?
Answer each question.

1. What is the difference of 76 and 58?
   a. 18  b. 22  c. 28  d. 134

2. Eric had 45 toy cars. He gave 18 of them to his cousin Jennifer. How many toy cars does Eric have left?
   a. 27 toy cars  b. 63 toy cars  c. 15 toy cars  d. 33 toy cars

3. Marvin subtracted 29 from 45 to find a difference of 24. Explain Marvin’s mistake. ____________________________
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________

Explain why regrouping is needed to find the difference of 65 and 28.
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

4. Write always, sometimes, or never to complete the following statement.
   Regrouping is _________________ needed when subtracting 2-digit numbers.
Cargo Captain (Multi-digit Subtraction)

Name _______________________________________  Class __________________________  Date _________________

Gizmos Log In Instructions
When you are told, log in to the Gizmo as follows:
• Log in to vmath.voyagersopris.com using your Username and Password.
• Select the Gizmos poster.
• Click on the Cargo Captain (Multi-digit Subtraction) Gizmo link.

GET READY

1. 286 = _______ hundreds, _______ tens, _______ ones
2. 37 = _______ tens, _______ ones = _______ ones
3. 420 = _______ hundreds, _______ tens = _______ tens

DISCOVER

4. You are the captain of a spaceship that delivers barrels of cargo.

The individual barrels can be grouped into crates (tens) and holds (hundreds).

Use the blue slider to set the number of barrels on board. Slide the knob to show 138 in the display.

Click Done.

Use the red slider to set the number of barrels to unload. Slide the knob to show 25 in the display. Click Done.

Click on the crates and barrels on the ship to unload 25 barrels until the number 25 is shown in red.

Click Done. How many blue barrels are left on board? _______ blue barrels
5. Click Back to Earth. Use the blue slider to set the number of barrels on board to 73. Click Done.
Use the red slider to set the number of barrels to unload to 48. Click Done.
Use the model to unload 48 barrels. You will need to unseal crates to unload 48 barrels. Do this by clicking the little tab at the bottom of the container.
Click Done. How many blue barrels are left on board?

   ____ blue barrels

**DISCOVER BOX**

For which of the following situations would you need to “unseal” the cargo in order to remove it? Explain how you know.

<table>
<thead>
<tr>
<th>On board</th>
<th>Unload</th>
<th>Remaining barrels</th>
</tr>
</thead>
<tbody>
<tr>
<td>176</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>188</td>
<td>56</td>
<td></td>
</tr>
</tbody>
</table>

_______________________________________________________________________

_________________________________________________________________________

**EXPLORE MORE**

Use the Gizmo to model each cargo trip. Remember to click Back to Earth to begin a new problem.


7. On board: 160  Unload: 43  Remaining barrels: ______

8. On board: 216  Unload: 82  Remaining barrels: ______
Subtracting 3-Digit Numbers with 1 Regrouping

Use the base-10 pieces to find 423 minus 151.

4 hundreds 2 tens 3 ones

3 hundreds 12 tens 3 ones

312

423

– 151

312
Find each difference. Regroup as needed.

5. \[ 242 \quad 6. \quad 266 \]
   \[ -135 \quad -92 \]

7. \[ 517 \quad 8. \quad 685 \]
   \[ -233 \quad -38 \]

Subtract 3-Digit Numbers with 1 Regrouping

**Using Symbols**

1. \[ 745 \quad 572 \]
   \[ 745 \quad -572 \]

2. \[ 745 \quad 572 \]
   \[ -572 \quad 3 \]

3. \[ 614 \quad 745 \]
   \[ 572 \quad 73 \]

**Using Words**

1. Write one number under the other with the greater number on top. Line up the digits that have the same place value.

2. If the ones digit of the top number is less than the ones digit of the bottom number, regroup. Subtract the digits in the ones column.

3. If the tens digit of the top number is less than the tens digit of the bottom number, regroup. Subtract the digits in the tens column.

4. Subtract the digits in the hundreds column.

So, 745 minus 572 equals 173.
Using a Table

The table shows the number of cookies sold at Buffy’s Bakery last week. How many more cookies were sold on Friday than on Thursday?

<table>
<thead>
<tr>
<th>Day</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cookies</td>
<td>115</td>
<td>104</td>
<td>128</td>
<td>149</td>
<td>182</td>
</tr>
</tbody>
</table>

a. Find: how many more cookies were sold on Friday than on Thursday

b. How? Read the numbers of cookies sold on Friday and Thursday from the table. Then subtract the numbers.

c. Solve.

\[ 182 - 149 = 33 \]

There were 33 more cookies sold on Friday.

d. Is the answer reasonable? Explain.

___________________________

___________________________

___________________________
PROBLEM-SOLVING: NEW AND REVIEW

Solve each problem.

18 The table shows the number of smoothies sold at Sippy’s last week. How many more smoothies were sold on Wednesday than on Tuesday?

<table>
<thead>
<tr>
<th>Day</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoothies Sold</td>
<td>125</td>
<td>118</td>
<td>132</td>
<td>112</td>
<td>156</td>
</tr>
</tbody>
</table>

19 It rained 271 days out of 365 days in a city one year. How many days were not rainy in the city that year?

20 The toy store offered 693 different toys last year. This year, the store offered 879 toys. How many more toys did the store offer this year?

21 Brandon climbed 514 centimeters up a tree, and Shaquille climbed 635 centimeters up the tree. How many centimeters higher did Shaquille climb than Brandon?

Answer each question.

1 What is the difference of 223 and 162?
   a. 161  b. 41  c. 141  d. 61

2 A laptop computer costs $874. A desktop computer costs $555. How much more does the laptop cost?
   a. $1,429  b. $321  c. $319  d. $329

3 Which answer choice in problem 2 is the least reasonable? Explain. ____________________________________________________________________________________________

4 Yen had some base-10 pieces. She traded 1 hundreds flat for 10 tens rods. Now she has 3 hundreds flats, 18 tens rods, and 6 ones blocks. What base-10 pieces did she start with?
   _____ hundreds flats, _____ tens rods, _____ ones blocks
3-Digit Numbers with Zeros

Subtracting 3-Digit Numbers with Zeros

The model shows how to find the difference of 203 and 134.

1. 481
   \[ \underline{481} \]
   \[ \underline{-168} \]
   \[ \underline{313} \]

2. 604 - 225
   a. Hundreds Tens Ones
      \[ \begin{array}{ccc}
      & 6 & 0 \\
      - & 2 & 2
      \end{array} \]
      \[ \begin{array}{ccc}
      5 & 2 & 5
      \end{array} \]
   b. Hundreds Tens Ones
      \[ \begin{array}{ccc}
      & 6 & 0 \\
      - & 2 & 2
      \end{array} \]
      \[ \begin{array}{ccc}
      5 & 4 & 4
      \end{array} \]

3. 107 - 79
   a. 107
      \[ \underline{107} \]
      \[ \underline{-79} \]
      \[ \underline{28} \]

   b. 107
      \[ \underline{107} \]
      \[ \underline{-79} \]
      \[ \underline{28} \]
Subtract 3-Digit Numbers with Zeros

Using Symbols

1. \[606 - 128\]
   \[
   \begin{array}{c}
   606 \\
   -128 \\
   \hline
   \end{array}
   \]

Using Words

Write the problem vertically. Line up the digits with the same place value.

2. \[5 \quad 9\]
   \[
   \begin{array}{c}
   606 \\
   -128 \\
   \hline
   \end{array}
   \]

Regroup 1 ten into 10 ones if needed. If there are no tens to regroup, regroup 1 hundred into 10 tens. Then regroup 1 ten into 10 ones. Subtract the digits in the ones column.

3. \[5 \quad 9\]
   \[
   \begin{array}{c}
   606 \\
   -128 \\
   \hline
   \end{array}
   \]

Subtract the digits in the tens column.

4. \[5 \quad 9\]
   \[
   \begin{array}{c}
   606 \\
   -128 \\
   \hline
   \end{array}
   \]

So, 606 minus 128 is equal to 478.

5. \[902 - 406\]
   \[
   \begin{array}{c}
   902 \\
   -406 \\
   \hline
   \end{array}
   \]

6. \[303 - 46\]
   \[
   \begin{array}{c}
   303 \\
   -46 \\
   \hline
   \end{array}
   \]
SKILL BUILDING: NEW AND REVIEW

Find each difference. Regroup as needed.

7. 802  
   − 389

8. 502  
   − 209

9. 701  
   − 352

10. 201 
    − 55

11. 60  
    − 1

12. 308 
    − 94

13. 726 − 138

14. 297 − 107

15. 154 − 48

Using a 4-Step Plan

Peter has 102 songs on his MP3 player. He deletes 29 songs. How many songs does he have left on the player?

a. **Find:** how many songs Peter has left on his MP3 player

b. **How?** Use a 4-step plan.

c. **Solve.** What operation is needed to solve the problem? __________

   102
   − 29

Peter has ______ songs left on his MP3 player.

d. **Is the answer reasonable? Explain.** ______________________________
   ______________________________
PROBLEM-SOLVING:
NEW AND REVIEW

Solve each problem.

16. Jeffrey has 209 pennies in his piggy bank. He gives his little brother 35 of them. How many pennies does Jeffrey have left?

17. Elisha used 302 yards of yarn to knit a hat. She used 115 yards of yarn to knit a scarf. How many more yards of yarn did Elisha use to knit the hat?

18. The home team’s band had 155 members. The visiting team’s band had 83 members. How many more members were in the home team’s band?

19. A spool of ribbon contains 408 inches of ribbon. If Becca uses 96 inches of ribbon for a project, and her sister uses 24 inches, how many inches of ribbon will be left? Explain.

CHECK UP

Answer each question.

1. What is the difference of 405 and 229?
   a. 224           b. 176
   c. 186           d. 286

2. Mason planned to use 204 bricks to build a chimney. He already had used 97 bricks. How many bricks did Mason have left to use?
   a. 293 bricks   b. 107 bricks
   c. 117 bricks   d. 217 bricks

3. Which answer choice in problem 2 is the least reasonable? Explain. ________________________________

4. Find the missing number in the subtraction problem.

   \[
   \begin{array}{c}
   916 \\
   \underline{- 16} \\
   757 \\
   \end{array}
   \]
Using Strip Diagrams to Solve Addition and Subtraction Problems

GET STARTED

1. \[ 21 - 6 = \underline{15} \]

2. \[ 12 + 5 + 6 = \underline{23} \]

3. There are 24 cars in a parking lot. There are 6 fewer trucks than cars in the lot. How many trucks are in the parking lot?

Let \( x \) represent \( \underline{24 - 6 = 18} \).

\[ x = \underline{18} \]

There are \( \underline{18} \) trucks in the parking lot.

4. Gail has 8 butterfly stickers. She has 4 more dinosaur stickers than butterfly stickers. How many stickers does she have in all?

Let \( x \) represent \( \underline{8 + 4 = 12} \).

\[ x = \underline{12} \]

Gail has \( \underline{12} \) stickers in all.

Owen ran on Monday, Wednesday, and Friday. He ran 5 miles on Monday and 8 miles on Wednesday. He ran 19 miles in all. How many miles did he run on Friday?

Let \( x \) represent \( \underline{19 - 5 - 8 = 6} \).

\[ x = \underline{6} \]

Owen ran \( \underline{6} \) miles on Friday.
Solve the problem.

5 Jamie has 6 comic books. Gwen has 3 more comic books than Jamie. How many comic books does Gwen have?

Let $x$ represent __________________________.

\[
\begin{align*}
\text{Gwen} & \quad x \\
\text{Jamie} & \quad 3
\end{align*}
\]

Solve the problem.

\[
\begin{align*}
\_ & \quad 2 \\
\_ & \quad 5 \\
x & \quad \_ \\
\end{align*}
\]

Gwen has _______ comic books.

Use a Strip Diagram to Solve a Problem

Kylie bought tulips. She has 8 white tulips. She has 2 fewer red tulips than white tulips. How many red tulips did Kylie buy?

**Using Symbols**

1. 8 white tulips
   - 2 fewer red tulips than white tulips
   - $x$ red tulips

**Using Words**

Find the important information in the problem. Let $x$ represent the unknown number.

2. Label the information on the diagram.

3. $8 - 2 = x$

4. $x = 6$

Kylie bought 6 red tulips.
SKILL BUILDING:
NEW AND REVIEW

Solve each problem.

6. Will has 7 comic books. Anna has 3 more comic books than Will. How many comic books do they have in all?

7. There are 8 ducks and 4 geese on a pond. The rest of the birds on the pond are swans. There are 16 birds on the pond in all. How many swans are on the pond?

Find each sum or difference.

8. 6 + 4 + 7
9. 20 − 7
10. 7 + 9 + 5

PROBLEM-SOLVING:
NEW AND REVIEW

Solve each problem.

11. The strip diagram can be used for this problem situation. Sarah has 12 quarters. Tim has 4 more quarters than Sarah. What does \(x\) represent?

12. Using the diagram from problem 11, how many quarters does Tim have?

13. Donna made 36 cookies. She gave 14 cookies to some friends. How many cookies does she have left?
Answer each question.

1. Which equation can be written from the diagram?
   - a. \(3 + 8 + 15 = x\)
   - b. \(15 + 8 = 3 + x\)
   - c. \(3 + 8 + x = 15\)
   - d. \(3 + 8 + x + 15 = 0\)

2. What is the value of \(x\) in the diagram in problem 1?
   - a. \(x = 4\)
   - b. \(x = 11\)
   - c. \(x = 20\)
   - d. \(x = 26\)

3. Which answer choice in problem 1 is the least reasonable? Explain.
   ____________________________
   ____________________________
   ____________________________
   ____________________________

Lisa wrote the equation \(10 + 5 = x\) for the model shown. Is her equation correct? If not, explain the mistake and write the correct equation.

4. Solve the equation.
\[8 + x + 5 = 18\]
\[x = \\]
Estimating Differences

Estimate the difference: \(87 - 34\).

Round 87 to the nearest ten.

87 is closer to _____.

Round 34 to the nearest ten.

34 is closer to _____.

So, the estimated difference of 87 and 34 is _____.

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Level D Module 3 • Whole Number Addition and Subtraction
Estimate each difference.

5. \[ \begin{array}{c c c c}
42 & \rightarrow & 700 \\
-17 & \rightarrow & -100 \\
\end{array} \]

6. \[ \begin{array}{c c c c}
563 & \rightarrow & 563 \\
-330 & \rightarrow & -330 \\
\end{array} \]

7. \[ \begin{array}{c c c c}
88 - 54 & \rightarrow & 88 \\
& \rightarrow & -54 \\
\end{array} \]

8. \[ \begin{array}{c c c c}
216 - 104 & \rightarrow & 216 \\
& \rightarrow & -104 \\
\end{array} \]

Estimate a Difference

Using Symbols

1. \[ \begin{array}{c c c c}
671 & \rightarrow & 700 \\
-128 & \rightarrow & -100 \\
\end{array} \]

Using Words

Round each number to its greatest place value.

2. \[ \begin{array}{c c c c}
700 & \rightarrow & 700 \\
-100 & \rightarrow & -100 \\
\end{array} \]

Subtract the rounded numbers.

600

So, the estimated difference for 671 minus 128 is 600.
SKILL BUILDING: NEW AND REVIEW

Estimate each difference.

9. \[
\begin{array}{r}
853 \\
-421
\end{array}
\]

10. \[
\begin{array}{r}
715 \\
-303
\end{array}
\]

11. \[
\begin{array}{r}
36 \\
-12
\end{array}
\]

12. \[
55 - 24
\]

13. \[
297 - 245
\]

14. \[
879 - 185
\]

Find each difference. Regroup as needed.

15. \[
468 - 323
\]

16. \[
590 - 131
\]

17. \[
911 - 447
\]

Using a Problem-Solving Plan

There are 874 seats in an auditorium. There were 724 people at a show. About how many seats were empty?

a. **Find:** about how many seats were empty

b. **How?** Round each number to the nearest hundred. Then subtract the rounded numbers.

c. **Solve.**

874 rounds to _____.

724 rounds to _____.

There were about _____ empty seats.

d. **Is the answer reasonable? Explain.** ________________________________

______________________________
PROBLEM-SOLVING: NEW AND REVIEW

Solve each problem.

18. There were 645 tickets available for a show. There were 348 tickets sold. About how many tickets were not sold?

19. A theater seats 575 people. There were 422 seats sold for the talent show. About how many seats were empty for the talent show in the theater? Explain.

20. What is the actual number of empty seats in problem 19?

21. There were 55 flowers planted in the garden. The gardener pulled out 36 flowers that were not blooming. About how many flowers are left in the garden?

CHECK UP

Answer each question.

1. Which is the estimate for the difference of 51 and 19?
   a. 30  
   b. 20  
   c. 70  
   d. 32

2. Joseph juggled for 31 seconds on Monday. On Tuesday, he dropped a ball after 74 seconds. About how much longer did Joseph juggle on Tuesday than he did on Monday?
   a. 50 seconds  
   b. 100 seconds  
   c. 40 seconds  
   d. 43 seconds

3. Which answer choice in problem 2 is the least reasonable? Explain. ______________________________________________________________________________________

4. Stan thought of a whole number. Stan’s number has 4 tens and rounds to 50. What could Stan’s number be? ______________________________________________________________________________________
Mr. Moore’s students voted for their favorite pet. The results are shown in the table. How many more students chose dogs than cats as their favorite pet?

a. Find: ____________________________________________________________
   ____________________________________________________________

b. How? __________________________________________________________
   ____________________________________________________________

c. Solve.

   Votes for dogs = _____
   Votes for cats = _____
   _____ - _____ = _____ students

   d. Is the answer reasonable? Explain. __________________________________
   ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________

How many students voted for hamsters and fish?
   _____ + _____ = _____ students
Use the table to solve the problem.

5 Ben made a table to show the number of animals on his uncle’s farm. How many horses and cows are on the farm?

  a. Find: ______________________________________
      ______________________________________

  b. How? ______________________________________
      ______________________________________

  c. Solve.
      ______ + ______ = _____ horses and cows

  d. Is the answer reasonable? Explain.
      ______________________________________

Solve a Problem Using a Table

The table shows the numbers of math problems completed by 4 students. How many problems did Jane and Vicky complete altogether?

 1. Find: how many problems Jane and Vicky completed altogether

 2. How? Identify the information in the table. Add to find the sum.

 3. Solve.
      Jane: 34 problems      Vicky: 28 problems
      34 + 28 = 62
      Jane and Vicky completed 62 problems altogether.

 4. Is the answer reasonable? Explain. Yes, the estimated sum is
      30 + 30 = 60, and 62 is close to 60.
**SKILL BUILDING:**
**NEW AND REVIEW**

The table shows the number of pairs of athletic shoes sold in a week. Use the table to solve each problem.

<table>
<thead>
<tr>
<th>Athletic Shoes</th>
<th>Pairs Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running</td>
<td>84</td>
</tr>
<tr>
<td>Tennis</td>
<td>96</td>
</tr>
<tr>
<td>Baseball</td>
<td>71</td>
</tr>
<tr>
<td>Soccer</td>
<td>60</td>
</tr>
</tbody>
</table>

6. How many more pairs of baseball shoes were sold than soccer shoes?

7. How many pairs of running and tennis shoes were sold?

8. How many fewer pairs of running shoes were sold than tennis shoes?

9. How many pairs of tennis, baseball, and soccer shoes were sold?

Find each sum or difference.

10. $48 + 52$  
11. $46 - 22$  
12. $18 + 74$

**PROBLEM-SOLVING:**
**NEW AND REVIEW**

Solve each problem. Use the table for problems 13 and 14.

<table>
<thead>
<tr>
<th>Friends</th>
<th>Number of Stickers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natalie</td>
<td>59</td>
</tr>
<tr>
<td>Jamie</td>
<td>37</td>
</tr>
<tr>
<td>Susan</td>
<td>30</td>
</tr>
</tbody>
</table>

13. How many more stickers does Natalie have than Jamie?

14. How many stickers do all three girls have?

15. Natalie had 68 stickers and gave some to a friend. She now has 59 stickers left. How many stickers did Natalie give to her friend?

16. Bruce bought 54 baseball cards. Bryan bought 32 baseball cards. How many more baseball cards did Bruce buy than Bryan?
Answer each question.

The table shows the number of pictures drawn each week in an art class.

<table>
<thead>
<tr>
<th>Week</th>
<th>Number of Pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>24</td>
</tr>
</tbody>
</table>

1. How many more pictures were drawn in Week 1 than in Week 2?
   a. 47 pictures  
   b. 32 pictures  
   c. 23 pictures  
   d. 12 pictures

2. How many total pictures were drawn in Weeks 2 and 3?
   a. 12 pictures  
   b. 36 pictures  
   c. 47 pictures  
   d. 63 pictures

3. Which answer choice in problem 1 is the least reasonable? Explain.
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

How many people went to the zoo Saturday and Sunday altogether? Explain.
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

Mara collected 54 leaves in 2 days. She collected 31 leaves the first day. How many leaves did Mara collect the second day?
   _______ – _______ = _______ leaves
Lesson PL1  Adding 3-Digit Numbers with No Regrouping
Find each sum.
1. 121  
   + 345  
   ________
2. 164  
   + 211  
   ________
3. 427  
   + 350  
   ________
4. 675 + 204
5. 562 + 216
6. 165 + 304
7. 274 + 602
8. 500 + 236
9. 164 + 522

Lesson PL2  Subtracting 2-Digit Numbers with No Regrouping
Find each difference.
1. 88  
   − 45  
   _____
2. 74  
   − 32  
   _____
3. 59  
   − 27  
   _____
4. 32  
   − 21  
   _____
5. 78  
   − 14  
   _____
6. 56  
   − 15  
   _____
7. 28 − 16
8. 95 − 43
9. 64 − 51
10. 45 − 32
11. 98 − 72
12. 67 − 34
DISTANCE LEARNING PACKET
MICI PROGRAM

MATH - HIGH SCHOOL

Weeks 3: April 27 – May 1, 2020
Week of 4/27/20 to 5/1/20
Lessons PL1- Lesson 3

Directions:
• Parent/Guardian will discuss Lesson Vocabulary terms for each lesson with student
• Parent/Guardian will discuss denominations of money and assist students, if necessary, with counting
• Parents will review monetary signs to assist with writing monetary amounts
• Parents will assist students with completing each section of the lesson including: Get Started, Build the Concept, Try it Together, Work on Your Own, Skill Building: New & Review, Problem Solving and CHECK UP!

Goals/Objectives:
1. Students will be able to identify coins
2. Students will be able to assign a value to each coin
3. Students will be use addition to count money
4. Students will be able to determine amounts needed for purchases
5. Student will be able to develop a budget based on a specific amount and the associated cost of goods and services

Module: VMATH Level C Module 4- Counting Money 2
Topic: Counting Money
Materials Needed: VMATH Student Workbook, scrap paper, coins, pencil and Learn at Home Document

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>ACTIVITY</th>
<th>PAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>4/27/20-5/1/20</td>
<td>LESSONS PL1 AND PL2-Lesson 3</td>
<td>1-17</td>
</tr>
</tbody>
</table>
# VMATH LEVEL C - MODULE 4

## Week 3

### 4/27-5/1/20

| Objectives | 1. Students will be to identify coins  
2. Students will be able to assign a value to each coin  
3. Students will be able to use addition to count money  
4. Students will be able to make decisions about money |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Link</td>
<td>Select a video or app from the Learn at Home Document</td>
</tr>
<tr>
<td>Guided Practice</td>
<td>Student will complete the following lessons in VMATH D Module 3 with the assistance of parent/guardian or relative: Get Started, Build the Concept, Try It Together, Work on Your Own, Skill Building- New and Review, Problem Solving and CHECK- UP!</td>
</tr>
<tr>
<td>Closing</td>
<td>Students will review the weeks assignments and activities and discuss their learning, questions and revisit areas of difficulty or that required use of a calculator</td>
</tr>
<tr>
<td>Extend</td>
<td>• Student may develop a one month budget based on a 25.00 a week allowance. Have students consider identify needs vs wants based on their / expenditures</td>
</tr>
<tr>
<td>Intervention</td>
<td>• Any activity from the district provide ESE Resources.</td>
</tr>
</tbody>
</table>
Academic Vocabulary
- penny
- dollar sign ($)
- dime
- decimal point
- cent sign (¢)

Dimes and Pennies

Get Started

1. ____________
   ____________
   ____________
   ____________

2. 10, 20, _______, _______, 50, 60, _______, _______, 90, 100

3. ____________
   ____________
   ____________
   ____________

4. ____________
   ____________
   ____________
   ____________
   ____________
   ____________

How To

Find the value of 4 dimes and 2 pennies.

Step 1
Count by 10.

Step 2
Count on by 1.

Think: Do I start with dimes or pennies?

________, __________, __________, __________, __________, __________, __________

The value of 4 dimes and 2 pennies is _________________.

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Level C Module 5 • Money and Geometry
Try It Together

Find the value of each group of coins.

5

6

Work On Your Own

Find the value of each group of coins.

7

8

9

Solve the problem.

10 Holly has 7 dimes and 8 pennies in her bank. How much money does Holly have in her bank? _____________
Using a Model

Jimmy has 4 dimes and 4 pennies. Which item can he buy?

Find

the item Jimmy can buy

How

Use coins to model the problem. Find the value of the group of coins.

Solve

Which item can Jimmy buy? ________________

Explain

Does my answer make sense? Explain.

___________________________________________________________________________

___________________________________________________________________________

Check Up

Fill in the bubble of the correct answer.

11 What is the value of the group of coins?

☐ 25¢  ☐ 52¢  ☐ 70¢

12 Show a group of dimes and pennies. What is the value of your group of coins? Talk it over.
Center 1: Items for Sale

1. Work with a partner. Write different prices up to 99¢ on index cards, one price to a card.

2. Take some items from the classroom. Put each price card with an item.

3. One partner is the storekeeper. The other partner is the customer. Take turns. The customer uses paper coins from page 59 to pay for an item.

4. Did the customer use the correct number of dimes and pennies? The storekeeper checks.

Center 2: Mystery Money

1. Work with a partner. Take some dimes and pennies from page 59. Do not take more than 9 dimes or 9 pennies. Do not let your partner see your coins.

2. Tell your partner how many coins you have. Tell the value of the coins.

3. Your partner guesses how many dimes and pennies you have.

4. Switch roles with your partner and play again.
Quarters, Dimes, and Nickels

Get Started

1. 

2. 

3. 

4. 

How To

Find the value of 2 quarters, 3 dimes, and 1 nickel.

Step 1
Count by 25.

Think: Which coin do I start with?

Step 2
Count on by 10.

Step 3
Count on by 5.

The value of 2 quarters, 3 dimes, and 1 nickel is _____________.

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Try It Together

Find the value of each group of coins.

5

6

———

———

Work On Your Own

Find the value of each group of coins.

7

8

———

———

9

———

Solve the problem.

10 Leo has 2 nickels, 2 dimes, and 2 quarters in his bank. How much money does Leo have in his bank? _______________
Kim has these coins.

What is the total value of Kim’s coins? Explain.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Check Up

Fill in the bubble of each correct answer.

11. What is the value of the group of coins?
   - ○ 30¢
   - ○ 85¢
   - ○ 90¢

12. John has 2 nickels, 3 dimes, and 1 quarter. How much money does John have?
   - ○ 55¢
   - ○ 60¢
   - ○ 65¢

13. Show a group of nickels, dimes, and quarters. What is the value of your set of coins? Talk it over.
Center 1: More Items for Sale

1. Work with a partner. Write different prices up to 95¢ on index cards, one price to a card. Each price must have a 0 or a 5 in the ones place.

2. Take some classroom items. Put a price card with each item.

3. One partner is the storekeeper. One partner is the customer. Take turns. The customer uses nickels, dimes, and quarters to pay for an item.

4. Did the customer use the correct number of nickels, dimes, and quarters? The storekeeper checks.
Barry has saved 5 dollars in quarters and dimes. He will spend some of his money on a ball. How many of each coin could he use to buy the ball?

________         ________

Step 1
Tell how many quarters.
The value of the quarters is ________.

Step 2
Tell how many dimes.
The value of the quarters and dimes is ________.
Try It Together

Find two ways to buy the item.

4

Your Need

Lesson 1

• Groups of Coins with the Same Value

Solve the problem.

6 Carlos has saved 4 dollars in quarters, dimes, and nickels. He wants to spend 50¢ on a balloon. He can pay with 2 quarters. How else can he pay?

_______ dimes

OR

1 quarter and ________ nickels

Work On Your Own

Find two ways to buy the item.

5

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Making a List

Pam has 5 dollars saved. Pam will use 40¢ to buy a book. She only has dimes and nickels. How can she pay for the book?

Find: how Pam can pay for the book

How: Make a list. Find all the ways to make 40¢ using just dimes and nickels.

Solve:

| 4 dimes | 0 nickels |
| 0 dimes | 8 nickels |

Explain: Does my answer make sense? Explain.

___________________________________________________
___________________________________________________

Check Up

Fill in the bubble of the correct answer.

7. Which coins do **not** make 30¢?
   - 2 dimes and 2 nickels
   - 1 quarter and 1 nickel
   - 5 nickels and 1 penny

8. Take a group of coins. What is the total value? What other coins can you use to show the same value? Talk it over.
Center 1: Make a Book about 99¢

1. Take 2 half-sheets of paper. Fold them down the middle. Staple on the fold.

2. Make a cover for the book.

3. Work by yourself. Draw coins to show a way to make 99¢. Show a different way on each page.

4. Share your book with another student. Check each other’s work.
Using Fewest Coins to Make an Amount

Get Started

1

2

3 36¢

How To

Make 22¢. Use the fewest coins.

Step 1
One quarter is ________. One quarter is greater than 22¢. Do not use a quarter.

Step 2
One dime is _________. Two dimes are _________. Three dimes are _________. Use 2 dimes.

Step 3
Two dimes and 1 nickel is _________. Do not use a nickel.

Step 4
Two dimes and 1 penny is _________. Two dimes and 2 pennies is _________. Use 2 pennies.
Try It Together

Make the amount. Use the fewest coins.

4  51¢

Work On Your Own

Make each amount. Use the fewest coins.

5  18¢

6  84¢

Solve the problem.

7  Max bought a pencil and an eraser. He paid 52¢. He used the fewest coins. What coins did he use?

_________________________________

_________________________________
Julia has saved 8 dollars. She wants to spend 75¢ to buy stickers. She paid with the coins shown. Are these the fewest coins she can use? Explain.

__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

Check Up

Fill in the bubble of each correct answer.

8. Evan has 65¢. Which shows 65¢ using the fewest coins?
   - 1 quarter and 4 dimes
   - 2 quarters and 3 nickels
   - 2 quarters, 1 dime, and 1 nickel

9. Anna wants to buy a bag of pretzels for 36¢. Which shows 36¢ using the fewest coins?
   - 3 dimes, 1 nickel, and 1 penny
   - 1 quarter, 1 dime, and 1 penny
   - 1 quarter and 11 pennies

10. What is the fewest coins that show 15¢? Is a quarter one of the coins? Talk it over.
Center 1: Show Me the Fewest Coins

1. Two students play this game. Shuffle the value cards.
2. The first player picks a card. Use the fewest coins to show the value on the card.
3. The second player looks at the coins to see if fewer coins can be used.
4. If the second player can use fewer coins, he or she gets 1 point. If not, the first player gets 1 point.
5. Switch roles and play again.
6. The first player to earn 5 points wins the game.

Points

<table>
<thead>
<tr>
<th></th>
<th>Eric</th>
<th>Sue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
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<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Winner!</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

45¢
Making Decisions about Money

Name ___________________________  Class _________________  Date _________________

Get Started

1

Maria has 1 quarter and 2 dimes. What item can she buy with this exact amount? _______________

2

Trevor has 2 quarters and 1 nickel. What item is he not able to buy? _______________ 

3

Luke has 3 quarters. Which item can he buy using all his coins? 

How To

Luke has 3 quarters. Which item can he buy using all his coins?

Step 1

Find the total value of the coins. The total value of the coins is ________.

Think: How can I find the value of 3 quarters?

Step 2

Look at the prices of the items. The item that costs 75¢ is the ________________.

Step 3

Answer the question. Luke can buy ________________ with 3 quarters.
DISTANCE LEARNING PACKET
MICI PROGRAM

MATH - HIGH SCHOOL

Weeks 4: May 4 – 8, 2020
Week of 5/4/20 to 5/8/20

**Directions:**
- Parent/Guardian will discuss measurement with students
- Parent/Guardian will discuss how measurement is used daily
- Parents will have students identify pictures on all pages in book (when they get to each page)
- Parents will explain vocabulary terms as necessary

**Module:** Module 4 - Lesson 1 and Lesson 2

**Topic:** Choosing the Appropriate Unit of Measure/Comparing Lengths

**Materials Needed:** Voyager Math Student Workbook, paper, pencil, ruler (optional)

<table>
<thead>
<tr>
<th>Day</th>
<th>Activity</th>
<th>Do</th>
<th>Extend</th>
</tr>
</thead>
<tbody>
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<td>Day 1</td>
<td>Lesson 1</td>
<td>Pages 9-10</td>
<td>Learn from Home Activity</td>
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<tr>
<td>Day 2</td>
<td>Lesson 1</td>
<td>Pages 11-12</td>
<td>Learn from Home Activity</td>
</tr>
<tr>
<td>Day 3</td>
<td>Lesson 2</td>
<td>Page 13</td>
<td>Learn from Home Activity</td>
</tr>
<tr>
<td>Day 4</td>
<td>Lesson 2</td>
<td>Pages 14-15</td>
<td>Learn from Home Activity</td>
</tr>
<tr>
<td>Day 5</td>
<td>Lesson 2</td>
<td>Page 16</td>
<td>Learn from Home Activity</td>
</tr>
</tbody>
</table>
### Lesson 1 and Lesson 2

<table>
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<tr>
<th>Video Link</th>
<th>Select a video or app from the Learn at Home Document</th>
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</thead>
<tbody>
<tr>
<td><strong>Guided Practice</strong></td>
<td>Student will complete pages 9-16 of Module 4 with guided support from a parent/guardian or family member.</td>
</tr>
<tr>
<td><strong>Closing</strong></td>
<td>Students will review this week’s assignments and activities. They will discuss their like, dislikes, and recommendations for new activities.</td>
</tr>
</tbody>
</table>
| **Extend**          | • Cooking or food preparation activity that corresponds with the lesson number and module.  
                       • Inside/Outside physical activity that corresponds with the lesson number and module. |
| **Intervention**    | • Any activity from the district provide ESE Resources. |
Measurement Activities Week 4:

**Day 1:** Discuss with students how measurement is used in their daily lives
When would we use measurement? What does it mean to measure something? Why is it important to measure? What would happen if we did not use measurements? Work on page 9 and discuss the different methods of measurement and have students select the appropriate measurement for the given items (crayon, large dog, football field).
Have students pick three items in the house to guess what type of measurement should be used.

**Day 2:** Page 11 (independently with reading assistance).  
Page 12: Work through this task with your student as their “partner” following the directions.

**Day 3:** Page 13 with assistance.

**Day 4:** Page 14 and 15 with assistance

**Day 5:** Page 16 Work through this task with your student as their “partner” following the directions
Choosing the Best Customary Unit of Length

Benchmarks for Measuring Customary Lengths

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>about 1 inch</td>
<td></td>
</tr>
<tr>
<td>about 1 foot</td>
<td></td>
</tr>
<tr>
<td>about 1 yard</td>
<td></td>
</tr>
</tbody>
</table>

1. length of a crayon  
2. height of a large dog  
3. length of a football field

Choose the best unit to measure the height of your desk.

**Step 1**
Compare the height of the desk with each benchmark.

**Step 2**
Choose the best unit of measure. Measure the height of the desk in ________________.

*Think: Which benchmark is not too long or too short?*
Try It Together

Choose the best unit to measure each object.

4. [Image of a train] 5. [Image of a fork]

Work On Your Own

Choose the best unit to measure each object.

6. [Image of a tennis racket] 7. [Image of a shoe]


Solve the problem.

10. Mel has a toy bus. A real bus is about 15 yards long. The toy bus is 10 units long. Which customary unit is the most reasonable unit of length for the toy bus?
Lesson 1

Check Up

Fill in the bubble of each correct answer.

11 Which is the best unit to measure the length of a hairbrush?

☐ inches  ☐ feet  ☐ yards

12 Which is the best unit to measure the length of a soccer field?

☐ inches  ☐ feet  ☐ yards

13 A tree is taller than Jamie’s dad but shorter than his house. Do you think the tree is 9 inches, 9 feet, or 9 yards tall? Talk it over.
Center 1: Measure Hunt

1. Work with a partner. You will measure the lengths or heights of objects.

2. Use paper clips to measure the length or height of an object.

3. Draw a picture of the object on one side of an index card.

4. Then write the number of paper clips you used on the back of the index card. Do not write the unit you used to measure with.

5. Repeat Steps 2–4 with a new object. Use sheets of notebook paper to measure the length or height of the object.

6. Cut pieces of string to match the length of a baseball bat.

7. Repeat Steps 2–4 with a new object. Use the pieces of string to measure the length or height of the object.

8. Exchange cards with another pair of students. Choose the unit that was used to measure each length or height.
Comparing Lengths

Name ___________________________  Class _________________  Date _________________

Get Started

1. Compare the lengths of the snail and the frog.

**How To**

**Step 1** Measure the length of each animal.

- **Snail:** _____ inches
- **Frog:** _____ inches

**Step 2** Subtract the lesser number from the greater number.

_____ – _____ = _____

The frog is _____ inches longer than the snail.

OR

The snail is _____ inches shorter than the frog.

**Think:** Which operation is used to compare lengths?
Try It Together

Compare the lengths of the objects.

The marker is ____ inches longer than the crayon.

The whistle is ____ inches shorter than the hat.

Work On Your Own

Compare the lengths of the objects.

The pinwheel is ____ inches longer than the rubber ball.

Solve the problem.

Ella needs a piece of yarn that is 4 inches longer than the blue yarn. How many inches of yarn does Ella need? ____ inches
Using a Ruler

How much longer is the paintbrush handle than the brush?

Find  
how much longer the handle is than the brush

How 
Use a ruler.

Solve  
Measure each part.
The brush starts at 0 inches and ends at _____ inches.
The brush is ____ inches long.
The handle starts at 2 inches and ends at _____ inches.
The handle is ____ inches long.
The handle is ____ inches longer than the brush.

Explain  
Does my answer make sense? Explain.

_________________________________________________
_________________________________________________

Check Up

Fill in the bubble of the correct answer.

6 How many inches longer is the spoon than the measuring cup?
  ⭕  2 inches      ⭘  3 inches
  ⭘  11 inches

7 Gina claims that the truck is 5 feet longer than the car. Matt claims that the car is 5 feet shorter than the truck. Who is correct? Talk it over.
Center 1: Comparing Lengths

1. Work with a partner. Find 5 different objects in the classroom.

2. Measure the length of each object in inches. Write the object’s name and length on an index card.

3. Choose two of the cards and compare the lengths of the objects. On a sheet of paper, write a sentence that compares the lengths.

4. Repeat Step 3 until you have compared the lengths of all of the objects.
DISTANCE LEARNING PACKET
MICI PROGRAM

MATH - HIGH SCHOOL
Weeks 5: May 11 – 15, 2020
VOYAGER: Math/Book C

WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

Week of 5/11/20 to 5/15/20

Directions:
• Parent/Guardian will discuss measurement with students
• Parent/Guardian will discuss how measurement is used daily
• Parents will have students identify pictures on all pages in book (when they get to each page)
• Parents will explain vocabulary terms as necessary

Module: Module 4 - Lesson 3 and Lesson 4
Topic: Choosing the Appropriate Unit of Measure/Comparing Lengths
Materials Needed: Voyager Math Student Workbook, paper, pencil, ruler (optional)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Do</th>
<th>Extend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Lesson 3</td>
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<td>Day 2</td>
<td>Lesson 3</td>
<td>Pages 19 - 20</td>
</tr>
<tr>
<td>Day 3</td>
<td>Lesson 4</td>
<td>Page 21</td>
</tr>
<tr>
<td>Day 4</td>
<td>Lesson 4</td>
<td>Pages 22 - 23</td>
</tr>
<tr>
<td>Day 5</td>
<td>Lesson 4</td>
<td>Page 24</td>
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</table>
## Lesson 3 and Lesson 4

<table>
<thead>
<tr>
<th>Video Link</th>
<th>Select a video or app from the Learn at Home Document</th>
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<tbody>
<tr>
<td><strong>Guided Practice</strong></td>
<td>Student will complete pages 17-24 of Module 4 with guided support from a parent/guardian or family member.</td>
</tr>
<tr>
<td><strong>Closing</strong></td>
<td>Students will review this week's assignments and activities. They will discuss their like, dislikes, and recommendations for new activities.</td>
</tr>
</tbody>
</table>
| **Extend** | • Cooking or food preparation activity that corresponds with the lesson number and module.  
• Inside/Outside physical activity that corresponds with the lesson number and module. |
| **Intervention** | • Any activity from the district provide ESE Resources. |
Measurement Activities Week 5:

**Day 1:** Discuss with students how measurement is used in their daily lives
When would we use measurement? What does it mean to measure something? Why is it important to measure? What would happen if we did not use measurements? Work on page 17 and discuss the different methods of measurement and have students select the appropriate measurement for the given items (length of school, length of a key).
Have students pick three items in the house to guess the length.

**Day 2:** Page 19 (independently with reading assistance).
Page 20: Work through this task with your student as their “partner” following the directions.

**Day 3:** Page 21 with assistance.

**Day 4:** Page 22 and 23 with assistance

**Day 5:** Page 24 Work through this task with your student as their “partner” following the directions
Estimating and Measuring Length Using a Metric Ruler

Benchmarks for Measuring Metric Lengths

<table>
<thead>
<tr>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>about 1 centimeter</td>
<td>about 1 meter</td>
</tr>
</tbody>
</table>

a. length of a key

b. height of our school

How To

Step 1

Use cap erasers to estimate the length.

Think: Where do I start to measure?

About _______ centimeters

Step 2

Use a ruler to measure the length.

_______ centimeters
Try It Together

Estimate the length of the table.

about ________ meters

Measure the length of the toy truck.

_______ centimeters

Work On Your Own

Estimate the height of the duck.

about ________ centimeters

Measure the length of the ribbon.

_______ meter

[Hint: 100 centimeters = 1 meter]

Solve the problem.

Rita is painting a picture. Is her paintbrush longer or shorter than 1 meter?

___________ than 1 meter
Using Benchmarks

Yosef has a pepper plant that is 25 centimeters tall. His tomato plant is 1 meter tall. Which plant is taller?

Find: the taller plant

How: Use benchmarks to compare the lengths.

Solve: Complete each picture.

1 ________________ 1 ________________

Think: Which is longer, 25 centimeters or 1 meter? The ____________ plant is taller.

Explain: Does my answer make sense? Explain.

_________________________________________________

_________________________________________________

Check Up

Fill in the bubble of the correct answer.

7 How long is the feather?

7 centimeters 13 centimeters 7 meters

8 Emily said that her dollhouse is about 15 meters tall. Is this height reasonable? Talk it over.
Center 1: Metric Measure Match

1. Work with a partner.

2. Find 3 objects that are shorter than 1 meter. Then find 3 objects that are longer than 1 meter.

3. One student will use cap erasers and string to measure the length of each object. The other student will use a centimeter ruler and meter stick.

4. Measure the length of each object. Write the object’s name on one side of an index card. Then write the length on the other side.

5. Trade index cards with the lengths facing up. Match each object with its measurement.
Choosing the Better Metric Unit of Length

Name ___________________________  Class __________________  Date _________________

Get Started

Benchmarks for Measuring Metric Lengths

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>about 1 centimeter</td>
<td>about 1 meter</td>
</tr>
</tbody>
</table>

1

2

How To

Choose the better unit to measure the length of an index card.

**Step 1**

Compare the length of the card with each benchmark.

**Step 2**

Choose the better unit of measure.

Measure the length of the index card in ____________________.

Think: Which benchmark is not too long or too short?
Try It Together

Choose the better unit to measure each object.

3. centimeters  meters

4. centimeters  meters

Work On Your Own

Choose the better unit to measure each object.

5. centimeters  meters

6. centimeters  meters

7. centimeters  meters

8. centimeters  meters

Solve the problem.

9. Amy needs to measure the length of her garden. Which metric unit should she use? ____________________
Raven and Phil measured the length of a piece of string. Raven used cap erasers. Her measurement was 19 centimeters. Phil used a centimeter ruler. His measurement was 20 centimeters. Why are the measurements different? Explain.

_____________________________________________________________
_____________________________________________________________
_____________________________________________________________
_____________________________________________________________
_____________________________________________________________

10 Which metric unit should you use to measure the length of a baseball field?
   ○ centimeters  ○ meters  ○ inches

11 Which metric unit should you use to measure the length of a caterpillar?
   ○ centimeters  ○ meters  ○ inches

12 Ms. Clark pushed a pushpin into a bulletin board. Which object is 2 centimeters long, the pushpin or the bulletin board? Talk it over.
Center 1: Metric Length Scavenger Hunt

1. Work with a partner. You will need 6 index cards.

2. On each index card you will write one number. Three cards should have a number less than 5 written on them. The other cards should have a number between 5 and 25 written on them.

3. The numbers on the cards represent lengths. The numbers less than 5 are lengths in meters. The numbers between 5 and 25 are lengths in centimeters.

4. Use cap erasers and pieces of string measuring about 1 meter from your teacher to find objects with lengths or heights that are close to the lengths on the cards.

5. On each index card, draw a picture of the object you found.
Office of Exceptional Student Education

Distance Learning Packet
MiCI Program

Math - High School

Weeks 6: May 18 – 22, 2020

Students Rise. We all Rise

DPSCD does not discriminate based on race, color, national origin, sex, disability and/or religion
Contact Compliance for more information at (313) 240-4377 or detroitk12.org/admin/compliance.
Week of 5/18/20 to 5/22/20

**Directions:**
- Parent/Guardian will discuss geometry with students
- Parent/Guardian will discuss how geometry is used daily
- Parents will have students identify pictures on all pages in book (when they get to each page)
- Parents will explain vocabulary terms as necessary

**Module:** Module 5 - Lesson 4 and Lesson 5
**Topic:** Knowing Solid Figures
**Materials Needed:** Voyager Math Student Workbook, paper, pencil

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# Lesson 4 and Lesson 5

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| Extend              | • Cooking or food preparation activity that corresponds with the lesson number and module.  
                        • Inside/Outside physical activity that corresponds with the lesson number and module. |
| Intervention        | • Any activity from the district provide ESE Resources. |
Geometry Activities Week 6:

**Day 1:** Discuss with students how geometry is used in their daily lives
What is geometry? What are different types of shapes? What is so special about each shape? Work on page 21 and discuss the different types of solid figures.
Have students pick three items in the house and explain their shape.

**Day 2:** Page 23 (independently with reading assistance).
Page 24: Work through this task with your student as their “partner” following the directions.

**Day 3:** Page 25 with assistance.

**Day 4:** Page 26 with assistance

**Day 5:** Page 27 with assistance
Knowing Solid Figures

Name ___________________________  Class _________________  Date _________________

Get Started

1. What type of solid figure is the box?

- Step 1: Name the shape of the faces.
The faces are ________________________.

- Step 2: Count the faces and corners.
The box has _______ faces and _______ corners.

- Step 3: Name the solid figure.
The box is a _______________________.

Step 2: Think: What faces and corners can’t be seen?

Academic Vocabulary

- square
- circle
- triangle
- rectangle
- solid figure
- face
- pyramid
- corner
- cylinder
- rectangular prism

- cone
- sphere
- cube
Try It Together

Match each solid figure with its name.

3

cone   cylinder   cube   pyramid   rectangular prism   sphere

Name the solid figure. Count the faces and corners.

4

________

_______ face

_______ corners

Work On Your Own

Match each solid figure with its name.

5

cylinder   cone   cube   sphere   pyramid   rectangular prism

Solve the problem.

6

Mr. Casey puts a new pencil holder on his desk. The pencil holder is in the shape of what figure? How many faces and corners does the figure have?

________

_______ faces

_______ corners
Using a Picture

Lucia made a doll for her sister. She used solid figures. What solid figures did she use?

Find
the solid figures Lucia used

How
Use the picture.

Solve
Color each kind of solid figure a different color. Then name the solid figures.
Lucia used ________ cone, ________ sphere, ________ cylinder, and ________ rectangular prisms.

Explain
Does my answer make sense? Explain.
_________________________________________________
_________________________________________________
_________________________________________________

Check Up ✅

Fill in the bubble of the correct answer.

7 What is the name of the solid figure?
   - ☐ cone
   - ☐ cylinder
   - ☐ rectangular prism

8 Yancey and Felix compare a cone and a cylinder. How are they the same? How are they different? Talk it over.
Center 1: Solids Bingo

1. You need 3 students to play. Each student should cut out the Solids Bingo Board and pieces on page 61. Cover each square on the board with a piece. Each player needs 9 color tiles or counters.

2. Write the words cube, rectangular prism, pyramid, cylinder, cone, and sphere on slips of paper. Fold the slips and put them in a bag.

3. One student picks a slip and reads the name of the solid. Use the solids cards to keep track of which solid figure was called. Return slips to the bag before picking again.

4. The other students search for the correct solid and mark it with a color tile or counter on their boards.

5. When a player has three tiles or counters in a row, column, or diagonal on the board, the player says “Bingo.” The first player to say “Bingo” gets 1 point.

6. Clear the boards and continue play until one player has 3 points and wins the game. Students should take turns picking the slips.
Can a sphere roll, stack, or slide?

**Step 1**
Try to roll a sphere.

**Step 2**
Try to stack 2 spheres.

**Step 3**
Try to slide a sphere.

Think: Is sliding the same as rolling?

A sphere can ________________, but it cannot
____________________ or _________________.

Properties of Solid Figures

Think:
Is sliding the same as rolling?
Try It Together

Use blue to color each solid figure that will roll.

6

Use green to color each solid figure that will stack and slide.

7

Work On Your Own

Use yellow to color each solid figure that will slide.

8

Use purple to color each solid figure that will stack and roll.

9

Solve the problem.

10 Avril is buying a paperweight. She wants the paperweight to slide but not roll. Draw a ring around the paperweight she should buy.
Blake cuts a sphere in 2 pieces. Now he is able to slide each piece of the sphere. Why? Explain.

_____________________________________
_____________________________________
_____________________________________
_____________________________________
_____________________________________
Center 1: Sort the Solids

1. Use the Solids Bingo Board and pieces from Lesson 4. Cover each square on the board with a piece.

2. Draw a small red dot on each piece with a solid that can roll.

3. Draw a small blue dot on each piece with a solid that can stack.

4. Draw a small green dot on each piece with a solid that can slide.

5. Find all the solids on the cards that have red, blue, and green dots. How are these solids alike?

__________________________________________

6. Find all the solids on the cards that have only green and red dots. How are these solids alike?

__________________________________________
DISTANCE LEARNING PACKET

MICI PROGRAM

MATH - HIGH SCHOOL

Weeks 7: May 26 – 29, 2020

Students Rise. We all Rise
Week of 5/25/20 to 5/29/20

Directions:
- Parent/Guardian will discuss geometry with students
- Parent/Guardian will discuss how geometry is used daily
- Parents will have students identify pictures on all pages in book (when they get to each page)
- Parents will explain vocabulary terms as necessary

Module: Module 5 - Lesson 6 and Lesson 7
Topic: Knowing Plane Figures
Materials Needed: Voyager Math Student Workbook, paper, pencil

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| Extend                         | • Cooking or food preparation activity that corresponds with the lesson number and module.  
                                  • Inside/Outside physical activity that corresponds with the lesson number and module. |
| Intervention                   | • Any activity from the district provide ESE Resources. |
Geometry Activities Week 7:

**Day 1:** Discuss with students how geometry is used in their daily lives
What is geometry? What are different types of shapes? What is so special about each shape? Work on page 29 and discuss the different types of solid figures.
Have students pick three items in the house and explain their shape.

**Day 2:** Page 31 (independently with reading assistance).
Page 32: Work through this task with your student as their “partner” following the directions.

**Day 3:** Page 33 with assistance.

**Day 4:** Page 34 with assistance
Page 35: Work through this task with your student as their “partner” following the directions.

**Day 5:** Page 36 with assistance
What are the shapes of the faces of a cube?

**Think:** Are all the faces the same?

The shapes of the faces of a cube are all ____________________________.
Try It Together
Name the blue shape on each solid figure.

6

7

Work On Your Own
Name the blue shape on each solid figure.

8

9

10

11

Solve the problem.
12 Emily wants to make a box for her movies. What two shapes will she need for the sides?

______________________________

______________________________

______________________________

______________________________
Using a Diagram

Lucia made a solid figure from this shape. She cut it out. Then she folded along the dotted lines and taped the sides together. What solid figure did Lucia make?

Find the solid figure made by Lucia

How Use a diagram.

Solve

The shape of the blue face is a _____________________.
The shape of each yellow face is a _____________________.
The solid figure is a _________________________________.

Explain Does my answer make sense? Explain.

________________________________________________
________________________________________________

Check Up

Fill in the bubble of the correct answer.

13 Which solid figure has a circle as a face?
- [ ]
- [ ]
- [ ]

14 A cone, a cylinder, and a sphere are solid figures that roll. Do all these solid figures have faces that are circles? Talk it over.
Center 1: Sketch the Faces

1. Look at the block. Trace each face of the block on a sheet of paper.

2. Look at the cereal box. Trace each face of the box on a sheet of paper.

3. Look at the can. Trace both faces of the can on a sheet of paper.

4. Look at the cone. Trace the face of the cone on a sheet of paper.

5. Get together with other students. Compare your drawings. The shapes and number of faces for each solid should be the same.

Center 2: Shape Scavenger Hunt

1. Work with a partner. Find 5 different solid figures in your classroom.

2. Draw a picture of each solid figure. Write the names of the shapes of the faces under each picture.
Get Started

Think: Is each blue face closed? Does each face have straight sides?

Trace each blue face.

A polygon is ________________ and has straight ________________.

1

2

3

4

Properties of Polygons

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Try It Together

Use blue to color the polygons with 5 corners and 5 sides.

5

Use yellow to color the polygons with 4 corners and 4 sides.

6

Work On Your Own

Use green to color the polygons with 3 corners and 3 sides.

7

Use red to color the polygons with 6 corners and 6 sides.

8

Solve the problem.

9 A sign at the fair points in the direction of the rides. The sign is in the shape of a polygon. What is the name of the polygon?
Viola drew a polygon in the shape of the letter L. What is the name of the polygon? Explain.

________________________________
________________________________
________________________________
________________________________

Check Up ✔

Fill in the bubble of each correct answer.

10 Which polygon has 5 sides and 5 corners?

11 Which polygon has the same number of sides and the same number of corners as a square?

12 This polygon has 4 sides and 4 corners. Is the polygon a rectangle? Is it a square? Talk it over.
Center 1: Shape Cards

1. Work with a partner. Each student needs 5 index cards. On each card, draw a different polygon: a triangle, a square, a rectangle, a pentagon, and a hexagon.

2. Swap cards with your partner.

3. Write the number of sides and the number of corners of the polygons on each card. Then write the name of the polygon.

4. Compare completed cards with each other.

Center 2: Polygon Scavenger Hunt

1. Work with a partner. Find as many polygons as you can from this list: square, rectangle, triangle, pentagon, and hexagon.

2. Draw a picture of each polygon.

3. Write the name of the polygon under the picture. Then write the number of sides and the number of corners.
DISTANCE LEARNING PACKET
MICI PROGRAM

MATH - HIGH SCHOOL
Weeks 8: June 1 – 5, 2020

Students Rise. We all Rise

DPSCD does not discriminate based on race, color, national origin, sex, disability and/or religion
Contact Compliance for more information at (313) 240-4377 or detroitk12.org/admin/compliance.
Week 8

5/18/20 - 5/22/20

Directions:
- Parent/Guardian will discuss Lesson Vocabulary terms for each lesson with student
- Parent/Guardian will discuss the relationship between adding and multiplication. Example: 2+2+2=6 and 2X3=6
- Parents will assist with identifying digits and groups in picture math exercises
- Parents will assist students with completing each section of the lesson including: Get Started, Build the Concept, Try it Together, Work on Your Own, Skill Building: New & Review, Problem Solving and CHECK UP!

Goals/Objectives: SEE BELOW

Module: Module 4 - Lesson 1 and Lesson 2
Topic: Multiplication
Materials Needed: Voyager Math Student Workbook, paper, pencil, calculator (optional)

Lesson Plan Schedule

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### VMATH – LEVEL D MODULE 4

**WEEK 8 Lesson 2 - Lesson 4**

| **Objectives** | 1. Student will be able to identify lesson vocabulary: multiples, factors and product  
2. Student will be able to compute multiple digit problems  
3. Student will be able to use visual/ picture problems to identify factors and groups when multiplying |
| **Video Link** | Select a video or app from the Learn at Home Document |
| **Guided Practice** | Students will complete the following lessons in VMATH Level D, Module 4 with the assistance of a parent/ guardian or relative: **Get Started, Build the Capacity, Try it Together, Work on Your Own, Skill Building: New and Review, Problem Solving and CHECK UP!** |
| **Closing** | Students will review this week’s assignments and activities. Discuss their learning, difficulties and successes- remember Math takes practice and practice makes perfect! |
| **Extend** | • Play a game of multiplication baseball: The game is played like a game of baseball the player may ask for a single (1 point), double (2 points), triple (3 points) or homerun (4 points) Players score when they correctly answer the problem. The player with the highest points after nine endings wins the game! |
| **Intervention** | • Any activity from the district provide ESE Resources. |
More Understanding Multiplication

Name _______________________________________  Class __________________________  Date _________________

**GET STARTED**

1. 3 groups of 4 circles = $4 + 4 + 4 = _____$

2. $3 \times 4 = _____ + _____ + _____ = _____$

3. $2 \times 5 = _____ + _____ = _____$

4. $4 \times 5 = _____ + _____ + _____ + _____ = _____$

**BUILD THE CONCEPT**

Multiplying is adding equal groups to find a total.

What is the total number of stars?

- _____ groups of _____ stars
  - $6 + 6 + 6 = _____$
- number of groups $\times$ number in each group = product
- _____ $\times$ _____ = _____

There are _____ stars.
Find each product.

1. \(3 \times 5 = \square + \square + \square = \square\)
2. \(4 \times 6 = \square + \square + \square + \square = \square\)
3. \(5 \times 7 = \square + \square + \square + \square + \square = \square\)

**Multiply Using Repeated Addition**

**Using Symbols**

1. Multiply: \(4 \times 3\)
   \[3 + 3 + 3 + 3 = 12\]

2. So, \(4 \times 3 = \square\)

**Using Words**

1. Add the second factor the number of times given by the first factor.
2. Write the product.
SKILL BUILDING: NEW AND REVIEW

Find each sum or product.

8 \( 8 + 8 + 8 \)  9 \( 3 \times 8 \)  10 \( 9 + 9 + 9 + 9 \)
11 \( 4 \times 9 \)  12 \( 5 \times 3 \)  13 \( 7 \times 5 \)
14 \( 6 \times 4 \)  15 \( 7 \times 3 \)  16 \( 5 \times 4 \)

Write the multiplication fact for each model.

\[
\begin{array}{c}
\begin{array}{c}
\square \square \\
\square \square \\
\square \square \\
\end{array}
= \\
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\]

Drawing a Picture

There are 4 rows of trees in the park. Each row has 6 trees. How many trees are in the park?

a. **Find:** how many trees are in the park  
   _____ trees

b. **How?** Draw a picture.

c. **Solve.** Use the facts given in the problem to draw a picture of the trees in the park.

   _____ rows of trees

   Count the total number of trees.

   There are _____ trees in the park.

d. **Is the answer reasonable? Explain.**
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
PROBLEM-SOLVING:
NEW AND REVIEW
Solve each problem.

19 There are 5 rows of stickers on Melissa’s folder. Each row has 3 stickers. How many stickers are on Melissa’s folder?

20 There are 6 rows of flowers in Rita’s garden. There are 5 flowers in each row. Write a multiplication problem and solve it to show how many flowers are in Rita’s garden.

21 Trevor bought 12 oranges and 9 apples. How many pieces of fruit did Trevor buy?

22 Vicki has 4 shelves. She put 8 books on each shelf. Write a multiplication fact to show how many books Vicki put on her shelves.

CHECK UP
Answer each question.

1 Which multiplication problem describes the number of circles?

- a. 6 × 6
- b. 3 + 6
- c. 3 × 6
- d. 3 × 3

2 Carla put 2 rows of candles on a birthday cake. She put 4 candles in each row. Which problem describes the number of candles Carla put on the cake?

- a. 4 × 4
- b. 2 × 4
- c. 2 + 4
- d. 2 × 2

3 Which answer choice in problem 1 is the least reasonable? Explain. 

4 Explain when multiplication can be used instead of addition to find a total number of items.
Multiplying Using Doubles

Name _______________________________________  Class __________________________  Date _________________

GET STARTED

1

2 groups of 5 circles = 5 + 5 = ______

2

2 × 5 = _____ + _____ = ______

3

2 × 4 = _____ + _____ = ______

4

2 × 7 = _____ + _____ = ______

Dominoes can show doubles.

6 + 6 = _____

2 × 6 = ______

Other doubles:

2 × 2 = ______

2 × 3 = ______

2 × 4 = ______

2 × 5 = ______
Find each double.

5. \(2 \times 10 = \underline{_____} + \underline{_____} = \underline{_____}\)

6. \(6 \times 2 = \underline{_____} + \underline{_____} = \underline{_____}\)

7. \(2 \times 8 = \underline{_____} + \underline{_____} = \underline{_____}\)

8. \(12 \times 2 = \underline{_____} + \underline{_____} = \underline{_____}\)

**Multiply Using Doubles**

**Using Symbols**

1. Multiply: \(7 \times 2\)

**Using Words**

1. Identify that one factor is 2.

2. \(7 + 7 = 14\)

3. \(7 \times 2 = 14\)

2. Add the other factor to itself.

3. Write that sum for the product.
SKILL BUILDING: NEW AND REVIEW

Find each double.

9. $8 \times 2$
10. $2 \times 3$
11. $2 \times 9$

12. $2 \times 6$
13. $15 \times 2$
14. $2 \times 20$

15. $2 \times 18$
16. $2 \times 31$
17. $45 \times 2$

18. $2 \times 7$
19. $2 \times 19$
20. $33 \times 2$

Use repeated addition to find each product.

21. $3 \times 7$
22. $4 \times 4$
23. $5 \times 5$

PROBLEM-SOLVING: NEW AND REVIEW

Solve each problem.

24. There are 2 rows of 8 chairs in the classroom. How many chairs are there?

25. Lanny read 15 pages yesterday. He read 18 pages today. How many pages did Lanny read yesterday and today?

26. Kia ran 2 miles. Trevor ran double the number of miles Kia ran. How many miles did Trevor run?

27. A cookie recipe calls for 5 cups of flour. Tim doubles the recipe. How many cups of flour does Tim use?
Answer each question.

1. Which is the double of 32?
   a. 64  
   b. 63  
   c. 34  
   d. 30  

2. There are 6 oranges in a small bag. The number of oranges in a large bag is double the number of oranges in a small bag. How many oranges are in a large bag?
   a. 4 oranges  
   b. 8 oranges  
   c. 11 oranges  
   d. 12 oranges

3. When can doubles be used to find a product?
   ____________________________________________________
   ____________________________________________________
   ____________________________________________________

   Explain how to use doubles to find the product of 2 and 13.
   ____________________________________________________
   ____________________________________________________
   ____________________________________________________
   ____________________________________________________

4. Find the next number. Explain the pattern.
   5, 10, 20, 40, 80, _______
GET STARTED

1 3, 6, 9, _______, 15, _______, _______, 24

2 There are 3 books on the top shelf. There are 6 books on the second shelf. There are 9 books on the third shelf. If this pattern continues, how many books are on the sixth shelf?

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</table>

a. **Find:** ______________________________________________________

b. **How?** ______________________________________________________

c. **Solve.** The rule is ____________________________________________.

   _______, _______, _______, _______, _______, _______

There are ______ books on the sixth shelf.

d. **Is the answer reasonable? Explain.** ____________________________

3 Mary planted 4 flowers in the first flower box, 8 flowers in the second box, and 12 flowers in the third box. If this pattern continues, how many flowers will Mary plant in the fifth flower box?

a. **Find:** ______________________________________________________

b. **How?** ______________________________________________________

c. **Solve.** The rule is ____________________________________________.

   _______, _______, _______, _______, _______

Mary will plant ______ flowers in the fifth box.

d. **Is the answer reasonable? Explain.** ____________________________
Solve the problem by finding a pattern.

There are 6 seats in the first row and 12 seats in the second row. There are 6 more seats in each row. How many seats are in the fifth row?

a. **Find:** ______________________________________________________________________

b. **How?** ______________________________________________________________________

c. **Solve.** The rule is ___________________________________________________________.

   ____, _____, _____, _____, _____

   There are ______ seats in the fifth row.

d. **Is the answer reasonable? Explain.** ____________________________________________

---

**Solve a Problem by Finding a Pattern**

The first 4 lockers in a row are numbered 5, 10, 15, and 20. If this pattern continues, what will be the number of the eighth locker in the row?

1. **Find:** the number of the eighth locker

2. **How?** Find a pattern.

3. **Solve.** Look at the numbers in the pattern: 5, 10, 15, 20. Describe the pattern rule. Start at 5 and skip count by 5. Use the rule to continue the pattern.

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<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
</tr>
</tbody>
</table>

The number of the eighth locker in the row will be 40.

4. **Is the answer reasonable? Explain.**

   Yes, $5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = 40$. The eighth number in the pattern is 40.
**SKILL BUILDING: NEW AND REVIEW**

Solve each problem by finding a pattern.

5. Jana earned $2 the first week. She earned $4 the second week and $6 the third week. If this pattern continued, how much did Jana earn the seventh week?

6. Larry walked 5 blocks the first day. He walked 10 blocks the second day. He walked 5 more blocks each day. How many blocks did Larry walk on the fourth day?

7. Diana saw 4 birds her first day at the park and 8 birds the second day. She saw 4 more birds each day. How many birds did Diana see her eighth day at the park?

Skip count to find each missing number.

8. 3, 6, _____, _____, 15, 18, _____, _____

9. 6, 12, _____, _____, 30, _____, 42, _____

**PROBLEM-SOLVING: NEW AND REVIEW**

Solve each problem.

10. Amy read 10 pages of her book the first night. She read double the number of pages the second night. How many pages did Amy read the second night?

11. Theo put 2 nickels in his bank the first day. He put 4 nickels in his bank the second day. He put 2 more nickels in his bank each day. How many nickels did Theo put in his bank on the ninth day?

12. A display has 3 cans in the first row, 6 cans in the second row, and 9 cans in the third row. If the pattern continues, how many cans will be in the fifth row of the display? Explain.

13. The first 4 houses on Ben’s street are numbered 4, 8, 12, and 16. If this pattern continues, what will be the number of the seventh house on Ben’s street?
Answer each question.

1. Rob read for 15 minutes the first day. He read for 20 minutes the second day. Each day he read 5 minutes longer. How many minutes did Rob read on the fourth day?
   a. 5 minutes  
   b. 20 minutes  
   c. 30 minutes  
   d. 35 minutes

2. There are 8 pictures in the first photo album and 12 pictures in the second album. There are 4 more pictures in each album. How many pictures are in the tenth album?
   a. 4 pictures  
   b. 12 pictures  
   c. 40 pictures  
   d. 44 pictures

3. Look at the pattern.
   10, 20, 30, 40, 50
   Describe the pattern rule in two different ways.
   ____________________________________________________
   ____________________________________________________
   ____________________________________________________

4. Niko is training for a bike race. He rides 6 miles the first week. He rides 12 miles the second week. He rides 18 miles the third week. If this pattern continues, how many miles will Niko ride the sixth week? Explain. ____________________________________________________
   ____________________________________________________
   ____________________________________________________
   ____________________________________________________

5. Create a pattern with 5 numbers using a skip counting rule. Explain the rule used. ____________________________________________________
   ____________________________________________________
   ____________________________________________________

6. Write Math
DISTANCE LEARNING PACKET
MICI PROGRAM

MATH - HIGH SCHOOL

Weeks 9: June 8 – 12, 2020

Students Rise. We all Rise

DPSCD does not discriminate based on race, color, national origin, sex, disability and/or religion
Contact Compliance for more information at (313) 240-4377 or detroitk12.org/admin/compliance.
VOYAGER: Math/Book D

WEEKLY DISTANCE LEARNING STUDENT SCHEDULE

Week of 6/13/20 to 6/17/20

Directions:
• Parent/Guardian will discuss division with students
• Parent/Guardian will discuss how division is used daily
• Parents will have students identify pictures on all pages in book (when they get to each page)
• Parents will explain vocabulary terms as necessary

Module: Module 5 - Lesson 3, Lesson 4, and Lesson 5
Topic: Division with Whole Numbers
Materials Needed: Voyager Math Student Workbook, paper, pencil

<table>
<thead>
<tr>
<th>Activity</th>
<th>Do</th>
<th>Extend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Lesson 3</td>
<td>Pages 13 - 15</td>
</tr>
<tr>
<td>Day 2</td>
<td>Lesson 3/4</td>
<td>Pages 16 - 18</td>
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<tr>
<td>Day 3</td>
<td>Lesson 4</td>
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<td>Day 4</td>
<td>Lesson 4/5</td>
<td>Pages 21 - 23</td>
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<tr>
<td>Day 5</td>
<td>Lesson 5</td>
<td>Page 24</td>
</tr>
</tbody>
</table>
## Lesson 3, Lesson 4, and Lesson 5

<table>
<thead>
<tr>
<th>Video Link</th>
<th>Select a video or app from the Learn at Home Document</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Guided Practice</strong></td>
<td>Students will complete pages 21-27 of Module 4 with guided support from a parent/guardian or family member.</td>
</tr>
<tr>
<td><strong>Closing</strong></td>
<td>Students will review this week’s assignments and activities. They will discuss their like, dislikes, and recommendations for new activities.</td>
</tr>
</tbody>
</table>
| **Extend** | • Cooking or food preparation activity that corresponds with the lesson number and module.  
• Inside/Outside physical activity that corresponds with the lesson number and module. |
| **Intervention** | • Any activity from the district provide ESE Resources. |
**Division Facts: 1, 2, and 5**

GET STARTED

1. 5, 10, _____, 20, _____, _____, 35, _____, 45

2. 8 T-shirts in 4 packages with 2 T-shirts in each package
   _____ ÷ _____ = _____

3. 4 ÷ 1 = _____

4. 6 ÷ 2 = _____

5. 15 ÷ 5 = _____

Michelle has 12 socks. How many pairs of socks does she have?

How many socks does Michelle have? _____
How many socks are in 1 pair? _____
How many pairs are there? _____
12 ÷ 2 = _____ Michelle has _____ pairs of socks.
Try It Together

Find each quotient.

6  6 ÷ 1 = _____  
7  8 ÷ 2 = _____  
8  10 ÷ 5 = _____

9  16 ÷ 2 = _____  
10  20 ÷ 5 = _____  
11  9 ÷ 1 = _____

Work on Your Own

Divide by 1, 2, and 5

Using Symbols

6 ÷ 1 = 6

Using Words

When a number is divided by 1, the quotient is always that number.

8 ÷ 2 = 4

When a number is divided by 2, the quotient is the number of groups of 2 that can be formed.

8 is divided into 4 groups of 2.

15 ÷ 5 = 3

When a number is divided by 5, the quotient is the number of groups of 5 that can be formed.

15 is divided into 3 groups of 5.
SKILL BUILDING:
NEW AND REVIEW

Find each quotient.

12. \(2 \div 1\)
13. \(14 \div 2\)
14. \(25 \div 5\)
15. \(5 \div 5\)
16. \(8 \div 1\)
17. \(10 \div 2\)
18. \(7 \div 1\)
19. \(30 \div 5\)
20. \(4 \div 2\)

Write a division sentence for each problem.

21. 6 binders in 3 packs with 2 binders in each pack
22. 36 roses in 4 vases with 9 roses in each vase

Finding a Pattern

George has 12 flowers. Each day he plants 2 flowers. How many days will it take George to plant all the flowers?

a. Find: how many days it will take to plant 12 flowers

c. Solve. Make a table. Then find a pattern. Continue the pattern.

<table>
<thead>
<tr>
<th>Day</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>_____</th>
<th>_____</th>
<th>_____</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plants</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>_____</td>
<td>_____</td>
<td>_____</td>
</tr>
</tbody>
</table>

It will take George _____ days to plant 12 flowers.

d. Is the answer reasonable? Explain. ________________________________
   ________________________________
   ________________________________
   ________________________________
PROBLEM-SOLVING: NEW AND REVIEW
Solve each problem.

23. Christy has 15 books. She will put 3 books on each shelf. How many shelves will Christy use?

24. Julio has 30 marbles. He gives 5 marbles to each player. How many players can play marbles?

25. Shauna has 12 sandwiches. She has enough to give each of her guests 2 sandwiches. How many guests does she have?

26. Rona counts pennies and puts 5 in each stack. If she makes 9 stacks, how many pennies does she have?

CHECK UP

Answer each question.

1. There are 18 students working in groups of 2 students. How many groups are there?
   a. 9 groups    b. 36 groups    c. 10 groups    d. 8 groups

2. Jack spent $18 on notebooks. Each notebook costs $1. How many notebooks did he buy?
   a. 12 notebooks    b. 18 notebooks    c. 108 notebooks    d. 4 notebooks

3. In problem 2, if each notebook cost $2, how many notebooks could Jack buy? Explain. ____________________
   ____________________
   ____________________

4. Fill in the missing number.
   \[ \square \div 5 = 9 \]
A tire factory made 20 new car tires. A car has 4 tires. How many cars will get new tires?

How many groups of 4 are there? ______

20 ÷ 4 = ______  ____________ cars will get new tires.
Find each quotient.

7. \(6 \div 3 = \underline{\quad}\)
8. \(12 \div 4 = \underline{\quad}\)
9. \(18 \div 6 = \underline{\quad}\)
10. \(20 \div 4 = \underline{\quad}\)
11. \(24 \div 6 = \underline{\quad}\)
12. \(27 \div 3 = \underline{\quad}\)

Divide by 3, 4, and 6

**Using Symbols**

<table>
<thead>
<tr>
<th>(15 \div 3 = 5)</th>
<th>15 is divided into 5 groups of 3.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 (\div 4 = 3)</td>
<td>12 is divided into 3 groups of 4.</td>
</tr>
<tr>
<td>18 (\div 6 = 3)</td>
<td>18 is divided into 3 groups of 6.</td>
</tr>
</tbody>
</table>

**Using Words**

- When a number is divided by 3, the quotient is the number of groups of 3 that can be formed.
- When a number is divided by 4, the quotient is the number of groups of 4 that can be formed.
- When a number is divided by 6, the quotient is the number of groups of 6 that can be formed.
**SKILL BUILDING: NEW AND REVIEW**

**Find each quotient.**

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>13</td>
<td>12 ÷ 3</td>
<td>14</td>
</tr>
<tr>
<td>16</td>
<td>36 ÷ 6</td>
<td>17</td>
</tr>
<tr>
<td>19</td>
<td>18 ÷ 3</td>
<td>20</td>
</tr>
<tr>
<td>22</td>
<td>14 ÷ 2</td>
<td>23</td>
</tr>
<tr>
<td>24</td>
<td>7 ÷ 1</td>
<td></td>
</tr>
</tbody>
</table>

**PROBLEM-SOLVING: NEW AND REVIEW**

**Solve each problem.**

25. There are 32 cows in a contest. Each farmer enters 4 cows in the contest. How many farmers enter cows in the contest?

26. A third-grade class learns 30 spelling words. The students learn 5 spelling words a week. How many weeks does it take the class to learn the spelling words?

27. Mark earned $42 mowing lawns. He was paid $6 per lawn. How many lawns did he mow?

28. Samantha is studying for a spelling bee. She studies 6 words each day for 8 days. How many words does Samantha study in all?
Answer each question.

1. There are 28 campers. There are 4 campers in each car. How many cars are there?
   a. 7 cars       b. 6 cars
   c. 112 cars    d. 9 cars

2. Adrianna picked 18 flowers. She put 3 flowers in each vase. How many vases did she use?
   a. 4 vases       b. 8 vases
   c. 54 vases     d. 6 vases

3. Which answer choice in problem 1 is the least reasonable? Explain.
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

How can Martha use skip counting to divide 42 by 6?
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

Complete the statement using always, sometimes, or never.
   When dividing whole numbers, the quotient is ________________ greater than the dividend.
Division Facts: 7, 8, and 9

Name ________________________________  Class __________________________  Date ________________

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GET STARTED

1. 7, 14, _____, _____, _____, 42, 49, _____, 63
2. 8, _____, 24, _____, _____, 48, _____, _____, 72
3. 9, 18, _____, 36, _____, _____, 63, _____, _____

4. 14 ÷ 7 = _____

5. 24 ÷ 8 = _____

6. 18 ÷ 9 = _____

Keira made 27 muffins for a bake sale. She will put 9 muffins in each box. How many boxes will Keira need?

How many groups of 9 are there? ______

27 ÷ 9 = ______  Keira will need ______ boxes.
TRY IT TOGETHER

Find each quotient.

7  21 ÷ 7 = ______  
8  32 ÷ 8 = ______  
9  36 ÷ 9 = ______  
10 45 ÷ 9 = ______  
11 56 ÷ 7 = ______  
12 48 ÷ 8 = ______

WORK ON YOUR OWN

Divide by 7, 8, and 9

Using Symbols

28 ÷ 7 = 4

Using Words

When a number is divided by 7, the quotient is the number of groups of 7 that can be formed.

28 is divided into 4 groups of 7.

16 ÷ 8 = 2

16 is divided into 2 groups of 8.

27 ÷ 9 = 3

27 is divided into 3 groups of 9.
SKILL BUILDING:
NEW AND REVIEW

Find each quotient.

<p>| | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>13</td>
<td>16 ÷ 8</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>54 ÷ 9</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>81 ÷ 9</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>40 ÷ 8</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>63 ÷ 7</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>28 ÷ 7</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>72 ÷ 9</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>64 ÷ 8</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>48 ÷ 6</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>24 ÷ 3</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>16 ÷ 4</td>
<td></td>
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</tbody>
</table>

**Choosing an Operation**

The third-graders are selling raffle tickets. During the first hour of ticket sales, they made $72. Each ticket costs $8. How many tickets were sold during the first hour?

a. **Find:** how many tickets were sold during the first hour

b. **How?** Choose an operation.

c. **Solve.** Is multiplication or division needed to solve this problem? ______________

Find how many groups of 8 are in 72.

72 ÷ 8 = _____ tickets

_____________ tickets were sold during the first hour.

d. **Is the answer reasonable? Explain.** ______________________________

______________________________

______________________________

______________________________

______________________________
PROBLEM-SOLVING: NEW AND REVIEW

Solve each problem.

25. Landon bought 27 toy cameras. He put 9 toy cameras in each box. How many boxes did he use?

26. What is 54 divided by 6?

27. Mr. Chang made 56 baskets. He made 8 baskets each day. How many days did it take him to make the baskets?

28. Trina rode her bicycle every day for 28 days. How many weeks did she ride her bicycle? [Hint: Use the fact that there are 7 days in 1 week.]

CHECK UP

Answer each question.

1. Brittany cuts a 36-inch length of ribbon into strips. Each strip is 9 inches long. How many strips does she cut?
   a. 7 strips  b. 5 strips  c. 4 strips  d. 324 strips

2. Sydney has 42 tickets. If each pencil costs 7 tickets, how many pencils can Sydney buy?
   a. 294 pencils  b. 6 pencils  c. 8 pencils  d. 5 pencils


4. Rebecca divides a number by 9 and gets a quotient of 6. What is the number?