# At Home Learning Resources

## Grade 2 - Week 8

<table>
<thead>
<tr>
<th>Content</th>
<th>Time Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Literacy Instruction</strong></td>
<td>10-20 minutes daily</td>
</tr>
<tr>
<td>(Watch a mini lesson, and/or complete online learning)</td>
<td></td>
</tr>
<tr>
<td><strong>Reading</strong></td>
<td>At least 20 minutes daily</td>
</tr>
<tr>
<td>(Read books, watch books read aloud, listen to a book)</td>
<td>(Could be about science, social studies, etc)</td>
</tr>
<tr>
<td><strong>Writing or Word Work or Phonics/Vocabulary</strong></td>
<td>20-30 minutes daily</td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td>30 minutes daily</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>45 minutes per week</td>
</tr>
<tr>
<td><strong>Social Studies</strong></td>
<td>30 minutes per week</td>
</tr>
<tr>
<td><strong>Arts, Physical Education, or Social Emotional Learning</strong></td>
<td>30 minutes daily</td>
</tr>
</tbody>
</table>

These are some time recommendations for each subject. We know everyone’s schedule is different, so do what you can. These times do not need to be in a row/in order, but can be spread throughout the day.
Grade 2 ELA Week 8

Your child can complete any of the activities in weeks 1-7. These can be found on the Lowell Public Schools website:  [https://www.lowell.k12.ma.us/site/Default.aspx?PageID=3798](https://www.lowell.k12.ma.us/site/Default.aspx?PageID=3798)

This week continues a focus on informational or nonfiction reading and writing. Your child should be reading, writing, talking and writing about reading, and working on learning and using compound words this week.

**Reading:** Students need to read each day. They can read the articles included in this packet and/or read any of the nonfiction/informational books that they have at home, or can access online at Epic Books, Tumblebooks, Raz Kids, or other online books. All resources are on the LPS website. There is something for everyone.

**Talking and Writing about Reading:** As students are reading, they can think about their reading, then talk about their reading with a family member and/or write about their reading using the prompts/questions included.

**Writing:** Students will continue to work on informational books for the next few weeks. The resources in this packet will be the same for next week for writing as well. These resources are charts with examples to help your child write. They are available online in an interactive form with video tutorials here:  [Grade 2 Nonfiction Writing Choice Board](https://www.lowell.k12.ma.us/site/Default.aspx?PageID=3798). Click on the images to watch the video tutorials. This writing should occur over multiple days. Students will be planning their writing, then writing, then making it even better by revising, writing some more, and at the end, fixing it up by editing. Your child might write 1 informational book and work to make it better, or might write multiple books, getting better each time.

**Phonics/Word Work:** Students can play compound word concentration and then write sentences using the compound words they learned in the game, or coming up with their own compound words.
Nonfiction Questions You Might Ask Your Children During and After Reading Aloud

Grade 2 Students

1. Can you tell me how you know you’re reading a non-fiction book?

2. What is the main idea of the topic or a section of your book?

3. Think about all of the parts in your book. How do all of the parts fit together?

4. How do all of the texts features help you to understand your book?
5. Look at the different headings in your book. How do these headings help you understand the section? How do the headings help you to identify the main idea?

6. Look at the front cover of your book. Look at the table of contents. Take a quick look at the pictures in your book. Can you make a prediction of what you think your book will be about?
The blue whale is the biggest animal to ever live on Earth. The biggest female ever measured weighed 200 tons. That is about how much 15 school buses weigh. The whale was 97 feet long. That is longer than a basketball court. How big is a blue whale baby?

“Big!” is the answer. A mother whale gives birth to one baby at a time. The baby is called a calf. A newborn calf weighs between 6,000 and 8,000 pounds. That is as much as three or four elephants weigh! It can be up to 25 feet long. That is about how long two cars are if you line them up.

A calf nurses, or drinks, its mother’s milk. The milk is very rich. It is full of nutrients. A calf will gain about 200 pounds a day. It gains that much every day for a year! It will nurse for up to
12 months. The calf will be about 50 feet long when it stops nursing.

Although whales live in the water, they breathe air. The air comes in through the blowholes at the top of their heads. A newborn calf depends on its mother to help it breathe. The mother pushes the calf up to the surface. The calf breathes out, then takes another breath. Blue whales can stay underwater for about 15 to 20 minutes. Then they need to breathe again.

Blue whales are one of the species of mammals that migrate. They may travel 3,000 miles to find food, but mother whales and their calves do not go as far.

Scientists have a theory. They think it is because the calves cannot bear the cold water as much as their mothers can.

A blue whale has no predators other than humans. Humans hunted many kinds of whales to near extinction. So what is the biggest danger a mother whale must protect her calf from? A large ocean liner filled with people.
Do you like to watch the polar bears at the zoo? They are friendly and funny. Some people think polar bear babies are the cutest and most playful mammals of all.

A polar bear that is pregnant eats all she can in August and September. She gains about 400 pounds! She builds a den in the snow when she is done eating. The den has tunnels and chambers. The mother-to-be then crawls in the den. She does not eat or drink the whole time she is there. She does not come out again until her babies are born.

It is important that a pregnant polar bear gets rest. She lowers her body activity. This is called torpor. During this time, a pregnant polar bear’s temperature drops but not much.
Her body has to stay warm to help her babies grow. She sleeps, but not very deeply.

Like other species of bears, polar bear babies are called cubs. A female has a litter of cubs every two to three years. The cubs are born in early January. They weigh about a pound each. They are about 12 inches long. That is the size of a ruler!

The cubs nurse, or drink their mother’s milk. They grow quickly. Her milk has all the nutrients they need. The family comes out of the den in March or April. The mother leads her cubs to the sea. Now she can eat again!

The cubs nurse for at least twenty months. During that time, the mother teaches them how to hunt. Seals are their favorite meal. Polar bears have no natural predators but can be killed by wolves. A mother polar bear does her best to keep her offspring safe. She is very protective. Her cubs stay with her until they are between four and eight years old. They leave when they are ready to have families of their own.

DID YOU KNOW?

Pictures that show polar bears and penguins together are wrong. Polar bears live only in the Arctic, which is the North Pole. Penguins live in the Antarctic, which is the South Pole.
After reading *Blue Whales* and *Polar Bears*, describe how blue whales and polar bears are similar and different.
Writing Craft Moves

Use this anchor chart to help you write your own nonfiction books. The online version has links and video tutorials.

**Nonfiction Structures**

- **Stories that teach**
  - Compare-and-Contrast
  - Question-and-answer books

- **How-to books**
  - A day at the Bakery
  - One day... Did you know?
  - Step 1: Tips, how, shows
  - Step 2: How to find the best bakery

- **Exercise**
# Topics for Nonfiction Writing

<table>
<thead>
<tr>
<th>Things I do</th>
<th>Places I've been</th>
<th>Sports I play</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Drawing of a person painting" /></td>
<td><img src="image2" alt="Drawing of a museum" /></td>
<td><img src="image3" alt="Drawing of sports equipment" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topics I've studied</th>
<th>Topics for Information Writing</th>
<th>Collections I cherish</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image4" alt="Drawing of books" /></td>
<td><img src="image5" alt="Drawing of crystals" /></td>
<td><img src="image6" alt="Drawing of珠子" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occasions I celebrate</th>
<th>Pop culture I fan over</th>
<th>Stuff people rely on me for</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image7" alt="Drawing of a person celebrating" /></td>
<td><img src="image8" alt="Drawing of a Pop culture item" /></td>
<td><img src="image9" alt="Drawing of a person with a dog" /></td>
</tr>
</tbody>
</table>
Add a new voice in a different size or color.

Use arrows to show how something works.

Add captions to pictures.

Make a comparison.

Use your senses to make a description.

What do I...

see?

taste?

hear?

smell?
Nonfiction writers can make...

Nonfiction chapter books

Stories that teach

How-to books

Question-and-answer books
Compound words are words that are made by joining two words together to make a new word with a new meaning. One example is snow + man = snowman.

Play this game with your family, then write sentences using compound words.
bath
tub

birth
day

butter
fly

door
knob
foot
ball
race
horse
bare
foot
rain
storm
Instructions: Color in the word that completes the compound word from the game. Then, write the compound word on the line below.

<table>
<thead>
<tr>
<th>butter (fly storm man)</th>
<th>sand (box horse flowers)</th>
<th>bath (tub knob day)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>snow (stairs foot man)</th>
<th>sun (fly ground light)</th>
<th>water (box melon ball)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>door (knob bone day)</th>
<th>birth (fire day flowers)</th>
<th>fire (bug box fighter)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>play (ground ball stairs)</th>
<th>race (melon horse box)</th>
<th>sun (fire bone glasses)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Instructions: Use two of the compound words from the game in a sentence.

Write as many sentences with compound words as you can.
Addition and Subtraction Within 200 with Word Problems to 100

In this 31-lesson module, students will work on fluency in addition and subtraction up to 100. They will also build conceptual understanding of adding and subtracting multi-digit numbers to 200, and will apply their skills when solving problems.

Building the number 234 with place value cards showing the following:
2 = 2 hundreds = 200
3 = 3 tens = 30
4 = 4 ones = 4
So 234 = 200 + 30 + 4!

This is a picture of the method known as “totals below”, in which students decompose multi-digit numbers into like place-value groups as they add.

What Came Before this Module: Students expanded their understanding of unit and of place value by bundling ones, tens, and hundreds with sticks.

What Comes After this Module: In Module 5, we will continue to strengthen and deepen our conceptual understanding of addition and subtraction, working with numbers up to 1000.

Key Common Core Standards:
- Represent and solve problems involving addition and subtraction
- Use place value understanding and properties of operations to add and subtract, including:
  - Fluently add and subtract within 100
  - Add and subtract within 200, using concrete models or drawings and strategies based on place value, and explaining chosen strategies in writing

Key Vocabulary:
- Minuend: A quantity or number from which another number is to be subtracted
- Subtrahend: A quantity or number being subtracted from another
- Difference: The solution to a subtraction problem
- Place value: Referring to the unit value of each digit in a given number
- Place Value Chart: (see reverse): A graphic organizer that students can use to see the coherence of place value and operations between different units.

How you can help at home:
- Continue to ask how many ones, tens, and hundreds are in numbers that you and your student come across
- When possible, encourage your student to explain their mathematical thinking by drawing a diagram or picture that links to their addition and subtraction problems
**Eureka Math, A Story of Units**

**Grade 2**
**Module 4**

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**Spotlight on Math Models:**

**Place Value Charts**

You will see this mathematical representation throughout the grades in *A Story of Units*.

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*A Story of Units* has several key mathematical “models” that will be used throughout a student’s elementary years.

The place value chart is a graphic organizer that students can use to see the coherence of place value and operations between different units. It enables students to discover the value of each digit in a given number at the concrete level, as they represent numbers with place value disks or bundles. Use of the place value chart begins in Grade 1 as students learn about tens and ones, and continues through the use of decimals in Grade 5. The place value chart is a flexible tool.

Young students can place chips on the chart, and physically move them as they bundle and group numbers. Older students can quickly create their own place value charts to illustrate their thinking for a problem and show their understanding of more complex numbers. In second grade, students use the chart extensively as they work to build their understanding of numbers up to 1000, and will often be asked to use the chart to illustrate how to compose and decompose numbers.

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**Module 4 Sample Problem** (Lesson 15): Model 172 - 48 using the place value chart.

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From the non-profit Great Minds
For more information visit greatminds.net
**Sumar y restar dentro de 200 con problemas verbales hasta 100**

En este módulo de 31 lecciones, los estudiantes trabajarán en la fluidad de sumas y restas hasta 100. También desarrollarán la comprensión conceptual de sumar y restar números de varios dígitos hasta 200, y aplicarán sus habilidades al resolver problemas.

Esta es una ilustración del método conocido como “totals below” (“totales abajo”), en el que los estudiantes descomponen números de varios dígitos como en grupos de valor posicional conforme van sumando.

**Cómo puede ayudar en casa:**

- Pregunte cuántas unidades, decenas y centenas hay en los números que usted y su estudiante se encuentren.
- Cuando sea posible, anime a su hijo a explicar su pensamiento matemático dibujando un diagrama o imagen que se vincule a sus problemas de sumas y restas.

**Lo que vimos antes de este Módulo:** Los estudiantes ampliaron su conocimiento acerca del concepto de unidad y del valor posicional al agrupar unidades, decenas y centenas en paquetes.

**Qué veremos después de este Módulo:** En el Módulo 5, seguiremos reforzando y profundizando nuestro conocimiento conceptual de sumas y restas, trabajando con números hasta 1000.

**Vocabulario clave:**

- **Minuend (minuendo):** Una cantidad o número desde el que otro número se va a restar.
- **Subtrahend (sustraendo):** Una cantidad o número que se resta de otro.
- **Difference (diferencia):** La solución a un problema de resta.

**Common Core:**

- **Representar y resolver problemas de sumas y restas**
- **Usar el conocimiento del valor posicional y de las propiedades de las operaciones para sumar y restar,** incluyendo:
  - Sumar y restar con fluidez dentro de 100
  - Sumar y restar dentro de 200, utilizando modelos concretos o dibujos y estrategias basadas en el valor posicional, y explicar por escrito las estrategias seleccionadas.

**Claves de las Normas Académicas**

**Place value (valor posicional):** Al referirse al valor unitario de cada dígito en un número dado.

**Place Value Chart (tabla de valor posicional):** (ver al reverso): El organizador gráfico que los estudiantes pueden usar para ver la coherencia del valor posicional y las operaciones entre las distintas unidades.
**A Story of Units** tiene varios "modelos" matemáticos fundamentales que se utilizarán durante los años de primaria del estudiante.

La tabla de valor posicional es un organizador gráfico que los estudiantes pueden utilizar para ver la coherencia del valor posicional y las operaciones entre las distintas unidades. El uso de la tabla de valor posicional comienza en el primer grado, cuando los estudiantes aprenden sobre decenas y unidades, y continúa con el uso de decimales en 5º grado. La tabla de valor posicional es una herramienta flexible. Los estudiantes jóvenes pueden colocar fichas en la tabla, y físicamente moverlas conforme hacen paquetes (*bundles*) y agrupan números. Los estudiantes mayores pueden crear rápidamente sus propias tablas de valor posicional para ilustrar su pensamiento para un problema y demostrar su entendimiento de los números complejos. En el segundo grado, los estudiantes utilizan la tabla de manera constante a medida que trabajan para construir su comprensión de los números hasta 1000, y con frecuencia se les pedirá que usen la tabla para ilustrar cómo componer y descomponer números.

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**Ejemplo de un problema del Módulo 4** (tomado de la lección 15): Formar 172 - 48 utilizando la tabla de valor posicional.

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Lo más destacado en modelos matemáticos:  
*Place Value Charts*  
(Tablas de valor posicional)  
Usted verá esta representación matemática en todos los grados de *A Story of Units*. 
For every number you see, write the number that is 1 more. If you see 4, you write 5.

5
6
8
9
11
16
19
28
38
39
44
49
54
60

For every number you see, write the number that is 10 more. If you see 40, you write 50.

50
60
10
20
80
30
20
28
21
32
35
35
45
56
67
## Fluency Practice  
**More Than with Multiples of 10**

<table>
<thead>
<tr>
<th>START HERE</th>
<th>Write the unit form.</th>
<th>Write the number sentence.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 tens more than 2 tens</td>
<td>8 tens</td>
<td>20 + 60 = 80</td>
</tr>
<tr>
<td>7 tens more than 2 tens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 tens more than 4 tens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 tens more than 2 tens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 tens more than 3 tens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ten more than 5 tens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 tens more than 6 tens 8 ones</td>
<td>8 tens 8 ones</td>
<td>68 + 20 = 88</td>
</tr>
<tr>
<td>3 tens more than 2 tens 5 ones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 tens more than 3 tens 5 ones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 tens more than 5 tens 7 ones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 tens more than 4 tens 9 ones</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fluency Practice - Less Than: Multiples of 10

<table>
<thead>
<tr>
<th>START HERE</th>
<th>UNIT FORM</th>
<th>Subtraction number sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 tens less than 6 tens</td>
<td>4 tens</td>
<td>60 - 40 = 20</td>
</tr>
<tr>
<td>2 tens less than 8 tens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 tens less than 9 tens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 tens less than 7 tens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 tens less than 3 tens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 tens less than 8 tens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 tens less than 6 tens 8 ones</td>
<td>4 tens 8 ones</td>
<td>68 - 20 = 48</td>
</tr>
<tr>
<td>4 tens less than 7 tens 3 ones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 tens less than 8 tens 5 ones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 tens less than 5 tens 7 ones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 tens less than 4 tens 9 ones</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Mrs. Perry sold 24 raffle tickets on Monday and 4 fewer tickets on Tuesday. How many tickets did she sell in all on both days?
There are 136 students in the second grade at the Lincoln Elementary School. 27 of them brought bag lunches to school. The rest get the hot lunch. How many students are getting a hot lunch?
Lesson 16
Part, Part, Whole
ZEARN STUDENT NOTES

Name: __________________________ Date: __________
Complete: [ ] Class: __________

1. Thirty-six books are in the blue bin. The blue bin has 19 more books than the red bin.

   How many books are in the red bin?

   **YOUR DRAWING**
   
   [Drawing of a box to represent the red bin]

   **YOUR SOLUTION**
   
   There are _______ books in the red bin.
Build each number using Base Ten Blocks. Add by place value.

1. \(25 + 27\)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

\[
\begin{array}{c}
\text{10} \\
\text{25} \\
\text{27}
\end{array}
\]

\[
\begin{array}{c}
\text{52}
\end{array}
\]

\[
40 + 12 = 52
\]

2. \(51 + 44\)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

\[
\begin{array}{c}
\text{95}
\end{array}
\]

\[
\begin{array}{c}
\text{55}
\end{array}
\]

\[
____ + ____ = ____
\]

3. \(33 + 66\)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>66</td>
<td></td>
</tr>
</tbody>
</table>

\[
\begin{array}{c}
\text{99}
\end{array}
\]

\[
\begin{array}{c}
\text{99}
\end{array}
\]

\[
____ + ____ = ____
\]
Use Base-Ten Blocks to Add Two-Digit Numbers

Study the example showing how to use base-ten blocks to add two-digit numbers. Then solve Problems 1–7.

Example

Find $18 + 24$.

$$
\begin{array}{c}
\text{1 ten} \\
\text{8 ones}
\end{array}
+ 
\begin{array}{c}
\text{2 tens} \\
\text{4 ones}
\end{array}
= 
\begin{array}{c}
\text{3 tens} \\
\text{12 ones}
\end{array}
$$

$3$ tens $12$ ones $= 30 + 10 + 2$
$= 40 + 2$
$= 42$

They paint $42$ pictures.

Max has $29$ rocks. Then he finds $15$ more rocks.

1. Write the tens and ones. Then add the tens and ones.

$$
\begin{array}{c}
\text{3 tens} \\
\text{12 ones}
\end{array}
+ 
\begin{array}{c}
\text{1 ten} \\
\text{8 ones}
\end{array}
= 
\begin{array}{c}
\text{4 tens} \\
\text{2 ones}
\end{array}
$$

_____ tens _____ ones + _____ ten _____ ones = _____ tens _____ ones

2. How many tens and ones are in $14$?

$14 = _____$ ten and _____ ones, or $10 + _____$

3. Add the tens. Then add the ones.

$30 + 10 + 4 = _____ + _____$, or _____

Max has _____ rocks.
Solve.

Ms. Kottler has 27 black pens and 14 blue pens.

4 Write the tens and ones.

\[27 = 20 + \underline{\hspace{1cm}}\]
\[14 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}\]

5 Add the tens then add the ones from Problem 4. How many pens does Ms. Kottler have in all?

*Show your work.*

\[\text{Answer: } \underline{\hspace{1cm}} \text{ pens}\]

There are 36 girls with red shirts. There are 19 boys with red shirts. There are 16 girls with blue shirts.

6 How many girls are there?

*Show your work.*

\[\text{Answer: } \underline{\hspace{1cm}} \text{ girls}\]

7 How many children have red shirts?

*Show your work.*

\[\text{Answer: } \underline{\hspace{1cm}} \text{ red shirts}\]
Solve.

3 57 + 14 is the same as _____ + _____.

4 Fill in the missing numbers in the open number line. Then solve 57 + 14.

\[ 57 \quad \square \quad \square \quad 10 \quad \square \quad 1 \]

\[ 57 + 14 = _____ \]

5 Mia has 49 red beads and 36 yellow beads. How many beads does Mia have in all?

*Show your work.*

Answer: ____________________________

6 Write three different number sentences with a sum of 51.

\[ 22 + 29 = 51 \]

_________________________

_________________________

_________________________
1. Diego read 48 pages of a book one day. The next day he read 23 pages. How many pages did Diego read in all? Circle the correct answer.

   A  61  \hspace{1cm} C  71

   B  62  \hspace{1cm} D  75

Solve.

4. A fruit salad has 37 green grapes and 45 red grapes. How many grapes are in the fruit salad?

   A  72 \hspace{1cm} C  82

   B  81 \hspace{1cm} D  712

   Tim chose A. This is wrong. How did Tim get his answer?

   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
G2-M4-Lesson 8

Solve vertically. Draw and bundle place value disks on the place value chart.

1. $27 + 45 = 72$

```
  2 7
+ 4 5
-----
  7 2
```

I show each step I make with the place value disks vertically using new groups below.

I draw place value disks to show each addend. 7 ones plus 5 ones is 12 ones, or 1 ten 2 ones. I bundle 10 ones to make 1 ten. Now I just add the tens. 2 tens plus 4 tens plus 1 more ten is 7 tens. So 27 plus 45 is 72.

2. Santiago counted the number of people on two buses. Bus 1 had 29 people, and bus 2 had 34 people. How many people were on the two buses?

```
Bus 1  Bus 2
29     34
```

```
  2 9
+ 3 4
-----
  6 3
```

63 people were on the two buses.
Lesson 8: Use math drawings to represent the composition and relate drawings to a written method.

Name ___________________________ Date ______________

1. Solve vertically. Draw and bundle place value disks on the place value chart.
   a. \(26 + 35 = \) __________
      
      \[
      \begin{array}{c}
      \text{TENS} \\
      00 \\
      \hline
      \text{ONES} \\
      00000
      \end{array}
      \]
      
      \[
      \begin{array}{c}
      26 \\
      +35 \\
      \hline
      61
      \end{array}
      \]

   b. \(28 + 14 = \) __________
      
      __________

   c. \(35 + 27 = \) __________
      
      __________
Lesson 8
G:2 M:4
EXIT TICKET

Name:_____________________________   Date:__________
Complete:   Class:__________

1. Use place value language to explain Zane’s mistake. Then, solve using the vertical form. Draw and bundle place value disks on your place value chart.

ZANE’S ANSWER

1. 59 + 35 = __________

ZANE’S MISTAKE

YOUR ANSWER
1. Solve for the missing part. Use your place value chart and place value disks.

   a. 
   
   b. 

Check out the website below for inspiration for creating your own chain reaction machine like Rube Goldberg. Send a video of the results to your teacher!

RUBE GOLDBERG MACHINE
https://tinkerlab.com/engineering-kids-rube-goldberg-machine/

**THINGS THAT ROLL**
- Marbles
- Balls: Tennis, Baseball, Bowling, etc.
- Toy Cars
- Dominoes
- Skateboard
- Roller Skate

**RECYCLABLES**
- Cardboard
- Cereal Boxes
- Cardboard Rolls
- Plastic Water Bottles
- Cans
- Aluminum Foil

**THINGS THAT MOVE**
- Mousetrap
- Dominoes
- Toaster
- Fan

**EVERYDAY MATERIALS**
- Chopsticks
- Popsicle Sticks
- Ruler
- Wooden Blocks
- Bowl
- String
- Tape
- Sand
- Pins
- Hammer
- Balloons
- Water
- Fan
- Vinegar and Baking Soda

**RAMPS**
- Toy Train Tracks
- Marble Runs
- Books
- Trays
- PVC pipe
- Plastic tubing
- Gutters
Grade Two - Science

**How many different kinds of animals are there?**

Click on this link to learn how scientists organize animals into groups based on their characteristics. That helps scientists figure out how to make decisions about animals that don’t neatly fit into those categories.

https://mysteryscience.com/biodiversity/mystery-1/biodiversity-classification/174?code=NzYzNzlwNDg&t=student
**Penguin**
Has bones inside its body
Lays eggs
Has feathers

**Squirrel**
Has bones inside its body
Gives birth (doesn’t lay eggs)
Has hair or fur

**Spider**
Doesn’t have any bones at all
Lays eggs

**Turtle**
Has bones inside its body
Lays eggs
Has scales

**Ladybug**
Doesn’t have any bones at all
Lays eggs

**Pigeon**
Has bones inside its body
Lays eggs
Has feathers

**Snake**
Has bones inside its body
Lays eggs
Has scales

**Earthworm**
Doesn’t have any bones at all
Lays eggs

_MYSTERYscience_
<table>
<thead>
<tr>
<th>#1.</th>
<th>#2.</th>
<th>#3.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Hippo" /></td>
<td><img src="image" alt="Spider" /></td>
<td><img src="image" alt="Pangolin" /></td>
</tr>
</tbody>
</table>

**Challenge Cards**

<table>
<thead>
<tr>
<th>Name:</th>
<th>Name:</th>
<th>Name:</th>
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</thead>
<tbody>
<tr>
<td>bones / no bones</td>
<td>bones / no bones</td>
<td>bones / no bones</td>
</tr>
<tr>
<td>lays eggs / gives birth</td>
<td>lays eggs / gives birth</td>
<td>lays eggs / gives birth</td>
</tr>
<tr>
<td>hair / feather / scales / none</td>
<td>hair / feather / scales / none</td>
<td>hair / feather / scales / none</td>
</tr>
</tbody>
</table>
Animal Adventures
Mystery 1: How many different kinds of animals are there?

End of Mystery Assessment

1. Match the group of animals with its characteristics.
   ___ Invertebrates       a. Bones, scales, lays eggs
   ___ Reptiles           b. Bones, hair or fur, gives birth to live young
   ___ Birds              c. Bones, feathers, lays eggs
   ___ Mammals            d. Bones, moist skin, lays eggs
   ___ None of the above  e. No bones

2. Put an X next to the characteristics that scientists use to group animals.
   ___ Whether it has bones or no bones
   ___ What color it is
   ___ Whether it lays eggs or gives birth to live young
   ___ What it eats
   ___ Where it lives
   ___ Whether it has scales, feathers, or hair

3. TRUE or FALSE? (circle one) Scientists only look at the outsides of animals’ bodies to figure out which group they belong to.
4. Bats have wings and can fly, but scientists do not group them with birds. Why is that?

5. Tarantulas are covered in hair, but scientists do not group them with mammals. Why is that?
Can two different countries be home?

Last week you learned about a country outside the United States. Maybe you learned about many countries by sharing with your classmates.

Is it possible for two different countries to be home? In this week’s story, you’ll meet a character who lives in Japan for part of his life, and in California for part of his life. California is in the United States. Here’s a map showing where those two places are:

Watch this read-aloud of Grandfather’s Journey by Allen Say. [https://www.youtube.com/watch?v=P74W-JbcAjw](https://www.youtube.com/watch?v=P74W-JbcAjw)

While you listen to the story, write down what Grandfather loves about each country. You can use the chart on the next page.
<table>
<thead>
<tr>
<th>What grandfather loves about Japan</th>
<th>What grandfather loves about California</th>
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<tbody>
<tr>
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<tr>
<td>Monday</td>
<td>Tuesday</td>
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<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
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<tr>
<td>Choose a book page, magazine, or newspaper article. Tally how many times you find the words: The a or an Is</td>
<td>Go on a shape hunt. Find five things in your house for each shape: Circle Square Rectangle Triangle</td>
</tr>
<tr>
<td>Monday</td>
<td>Tuesday</td>
</tr>
<tr>
<td>Hide something in your home. Make a treasure map and let a family member try to find it.</td>
<td>Find four things in your home that are purple.</td>
</tr>
<tr>
<td>Find four things in your home that are orange.</td>
<td>Draw and label your zoo.</td>
</tr>
</tbody>
</table>