

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Round 'Em Up p.131	Rounding to the Nearest 1000 p.133	Adding Larger Numbers p.135	Addition Practice p.136	Math Games
Hints 3-digit Addition https://youtu.be/Hc9mcx739js Rounding to 10 and 100 https://youtu.be/jvp0mtr1kFM	Hints Rounding to 1000 https://youtu.be/q8YUGigDxDI Rounding to 10, 100, 1000 https://youtu.be/Gg-GD5QfbB4	Hints Adding Larger Numbers https://youtu.be/fOXo4p4WDKM	Hints Numbers in Writing Form https://youtu.be/eLRMI2ZX5Qw	Hints 1-2 Nim https://youtu.be/f_5Pq3PBbho
Next Steps: *explain your addition for #1 *show another strategy for #1 *combine two or more original values <u>and</u> <u>then</u> round to the nearest 10 or 100 #2 and/or 3 EX: 2a(47) combined with 2b(52) has a sum of 99, rounded to the nearest 10 will be 100 (ten groups of 10) **Math Game of choice EX: 1-2 Nim, Target Number, etc.	Next Steps: *explain your thinking for #____ *find the distance between your home and _____ then round the distance to the nearest 10, nearest 100, nearest 1000 miles/kilometers EX: Tiffany Park is exactly 9 miles from my house, which is about 10 miles away **Math Game of choice EX: 1-2 Nim, Target Number, etc.	Next Steps: *Challenge question *Challenge question with three new numbers EX: numbers 2,6,7 *Challenge question with four new numbers EX: numbers 3,4,7,9 **Math Game of choice EX: 1-2 Nim, Target Number, etc.	Next Steps: *explain your addition for #1,2 *show another strategy for #1,2 *combine two or more values <u>and then</u> round to the nearest 10, 100, 1000 **Math Game of choice EX: 1-2 Nim, Target Number, etc.	Next Steps: *Variation of Target Number https://youtu.be/sby2Bvs0MEA https://youtu.be/psQSOKhlw9A https://youtu.be/RZgkr5Xn58 **Math Game of choice EX: 1-2 Nim, Target Number, etc.

Math Games:

1-2 NIM

By: Dan Finkel, *Math For Love*

mathforlove.com

<https://mathforlove.com/lesson/1-2-nim>

How to Play

1-2 Nim is a two-player game. You start with a pile of counters. On your turn, remove one or two counters from the pile. You must take at least one token on your turn, but you may not take more than two. Whoever takes the last token is the winner.

https://youtu.be/f_5Pq3PBbho - watch the game to learn to play (student spoilers, teacher preview)

Example Game

We start with 8 counters in the pile.

Player 1 takes one counter, leaving 7.

Player 2 takes two counters, leaving 5.

Player 1 takes one counter, leaving 4.

Player 2 takes one counter, leaving 3.

Player 1 takes one counter, leaving 2.

Player 2 takes two counters, leaving 0 and winning the game.

Hints and Essential Focus/Questions

1. Demonstrate the game until you are certain the rules are understood.
2. When demonstrating 1-2 Nim, narrate the game out loud and leave empty space for response: "My opponent just took 2 leaving... [wait for response] !5 in the pile! [resume] Who has advice for what I should do next?"
3. Remind players that they will lose many games as they play, and that every loss is an opportunity to learn. Can they steal the strategy of the person who just beat them?
4. As the game is played watch for strategies that are developing.
5. Encourage thinking, but do not call them as true or false. Challenge all players to break their own thinking.
6. The term "the 3 trap" describes what happens when you give your opponent a pile of three counters. Understanding how to win boils down to understanding what pile sizes you want to leave your opponent with.
8. There are two incredibly powerful approaches to solving 1-2 Nim.
 - a. The first is to simplify. How could the game be easier? What if the pile had only one counter? From this place of almost absurd simplicity, we slowly raise the difficulty. What about two counters? Three counters?
 - b. The second approach is to organize the data in a coherent way. A ratio table does this very nicely.
9. If you want to play three-player, keep in mind that is discouraged. Normally trying out different numbers of players is a great impulse. In 1-2 Nim, it leads to spoilers, like a player who can't win, but can choose who does win.

TARGET NUMBER

By: Dan Finkel, *Math For Love*

mathforlove.com

mathforlove.com/lesson/target-number

How to Play

Teacher writes a “target” number that can be seen by student.

Student writes as many equations as possible with the target number as the answer.

--AND/OR--

Student draws different pictures of ways to see/understand the target number.

Example

Teacher writes 7 as the “target” number.

Student answers could be any combination of numbers that create the “target” 7.

$$6 + 1 = 7 \quad 3 + 4 = 7 \quad 1\frac{1}{2} + 5\frac{1}{2} = 7 \quad (2 \times 3) + 1 = 7 \quad (4 \times 3) - 5 = 7$$

CHALLENGE

Set constraints for your answer to push the thinking deeper!

- If we only add 2 numbers, how many answers can we find?
- What if we add 3 numbers, or 4 numbers, how many answers can we find?
- What if we only subtract? only multiply? only divide?
- What’s the longest number sequence you can find that hits the target number?
- Can you hit the target number if you only use a single number in your equation?

Don’t praise answers with many steps as “smart.” This activity gives everyone a chance to contribute and be valued. You can describe those answers as “long,” or as having many parts.

If answers are wrong or unclear, you can take the opportunity to do the arithmetic with the class. On the other hand, if a student uses terms (like square root) that the class isn’t ready for yet, you can write down their answer but move on to other solutions.

One opportunity this lesson gives you is the chance to emphasize equivalency.

If one student knows that $6+1 = 7$, and someone else knows that $(3 \times 4) - 5 = 7$, then that means that $6 + 1 = (3 \times 4) - 5$. It’s nice to underline the point that there are many ways to equal 7, and that these ways are all equal to each other.

Let’s say someone says that $7 = 5 + 3$. Rather than just saying “wrong,” say that $5 + 3$ gets us close to 7, but we need to do something else to get all the way there, then challenge students to find what still needs to be done.

If someone can explain that $5 + 3$ is 8, and so you need to take 1 away, you have the number sentence $7 = 5 + 3 - 1$. This is both more sophisticated and accepts the original student’s wrong answer as a path toward a better, accurate answer, rather than a dead end.

Unit 4, Module 1 Session 2

Round 'Em Up!

Solve the problems below. Show all your work.

324	648	535
+ 538	+ 397	202
+ 169		

- 2** Round the numbers below to the nearest ten. When you round to the nearest ten, look at the number in the ones place. If it is 5 or higher, round up to the next highest ten. If it is less than 5, keep the number in the tens place the same.

ex <small>63</small> 60	ex <small>186</small> 190	a 47	b 52
c 35	d 94	e 122	f 856
g 267	h 993	i 1,247	j 2,052

- 3** Round the numbers below to the nearest hundred. When you round to the nearest hundred, look at the number in the tens place. If it is 5 or higher, round up to the next highest hundred. If it is less than 5, keep the number in the hundreds place the same.

ex <small>163</small> 200	ex <small>627</small> 600	ex <small>82</small> 100	a 203
b 254	c 822	d 439	e 67
f 153	g 764	h 449	i 657

- 4** **CHALLENGE** Write two different numbers that round up or down to each number shown.

ex <small>400</small> 438 384	a 20	b 80
c 100	d 300	e 700

862 Rounding to the Nearest Thousand

What is 6,780 rounded to the nearest thousand? Fill in the bubble to show.

N 5,000

N 6,000

N 7,000

N 8,000

2 What is 5,438 rounded to the nearest thousand? Fill in the bubble to show.

N 5,000

N 6,000

N 7,000

N 8,000

3 It is 4,991 kilometers from Vancouver, BC, to Montreal. What is 4,991 rounded to the nearest thousand?

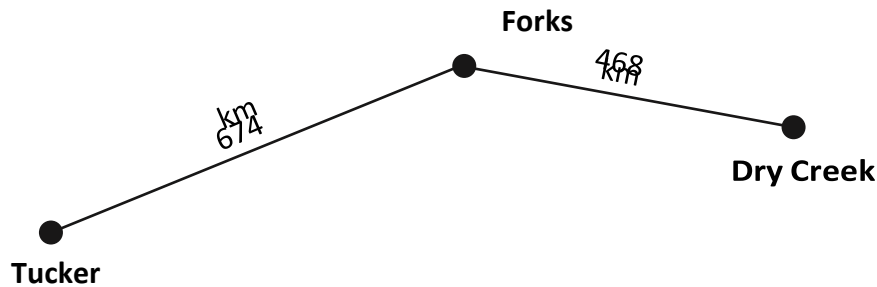
N 5,000

N 6,000

N 41,000

N 49,000

4 People in Canada measure long distances in kilometers instead of miles. Tera and her family drove from Tucker to Dry Creek last weekend. About how many kilometers did they drive? Fill in the bubble to show the best estimate.



N 1,050 kilometers

N 1,100 kilometers

N 1,150 kilometers

5 It is 1,164 kilometers from Vancouver, BC, to Edmonton. What is 1,164 rounded to the nearest thousand? Fill in the answer below.

1,164 kilometers rounded to the nearest thousand is _____.

6 It is 2,668 kilometers from Winnipeg to Kitimat. What is 2,668 rounded to the nearest thousand? Fill in the answer below.

2,668 kilometers rounded to the nearest thousand is _____.

863 Adding Larger Numbers

Solve each problem below. Show your work.

392	612	475	1,045
+ 248	+189	+336	+ 760
<hr/>			

- 2** Keiko has to add 3,996 and 4,204. What is an easy way for Keiko to add these two numbers? Solve the problem and show your work.
- 3** Max is playing Add, Round & Compare with a partner. He got a 3, an 8, and a 4 on his first turn. He decided to use those numbers to make 348 and 843.
- a** What are his rounded numbers? _____ and _____ **b** What is the sum of his rounded numbers? _____
- c** What is the sum of his actual numbers? Show your work.
- d** What is the difference between the sum of his rounded numbers and the sum of his actual numbers? Show your work.
- e** **CHALLENGE** Think of a way to arrange the three numbers Max got (3, 8, and 4) so there's less difference between his actual and rounded scores. Show your work.

864 Addition Practice

Solve the addition problems below using any strategy that works well for you.

$$\begin{array}{r} 254 \\ + 168 \\ \hline \end{array} \qquad \begin{array}{r} 381 \\ + 227 \\ \hline \end{array} \qquad \begin{array}{r} 129 \\ + 386 \\ \hline \end{array} \qquad \begin{array}{r} 1,234 \\ + 765 \\ \hline \end{array}$$

2 Solve the addition problems below using the standard algorithm.

$$\begin{array}{r} 388 \\ + 165 \\ \hline \end{array} \qquad \begin{array}{r} 276 \\ + 348 \\ \hline \end{array} \qquad \begin{array}{r} 509 \\ + 297 \\ \hline \end{array} \qquad \begin{array}{r} 168 \\ + 539 \\ \hline \end{array}$$

3 Write this number in words: 627,391.

4 Write two hundred fifty-three thousand, eight hundred eighteen in numbers.

5 Write this number in expanded form: 56,789.

ex $32,569 = 30,000 + 2,000 + 500 + 60 + 136$

Unit 4 Module 1 Session 2 ¡Redondéalos!

Resuelve los siguientes problemas. Muestra todo tu trabajo.

324	648	535
+ 538	+ 397	202
+ 169		

- 2** Redondea los números a continuación a la decena más cercana. Cuando redondees a la decena más cercana, observa el número en la posición de las unidades. Si es 5 o mayor, redondéalo a la siguiente decena. Si es menor que 5, deja igual el número de las decenas.

ej 63 60	ej 186 190	a 47	b 52
c 35	d 94	e 122	f 856
g 267	h 993	i 1,247	j 2,052

- 3** Redondea los números a continuación a la centena más cercana. Para redondear a la centena más próxima, observa el número en el lugar de las decenas. Si es 5 o mayor, redondéalo a la siguiente centena. Si es menor que 5, deja igual el número de la centena.

ej 163 200	ej 627 600	ej 82 100	a 203
b 254	c 822	d 439	e 67
f 153	g 764	h 449	i 657

- 4** **RETO** Escribe dos números diferentes que se pueden redondear hacia arriba o hacia abajo para obtener el número que se muestra.

ej 400 438 384	a 20	b 80
c 100	d 300	e 700

865 Redondear al millar más cercano

¿Cuánto es 6,780 redondeado al millar más cercano? Llena la burbuja para mostrarlo.

N 5,000

N 6,000

N 7,000

N 8,000

2 ¿Cuánto es 5,438 redondeado al millar más cercano? Llena la burbuja para representarlo.

N 5,000

N 6,000

N 7,000

N 8,000

3 Hay 4,991 kilómetros de Vancouver, BC a Montreal. ¿Cuánto es 4,991 redondeado al millar más cercano?

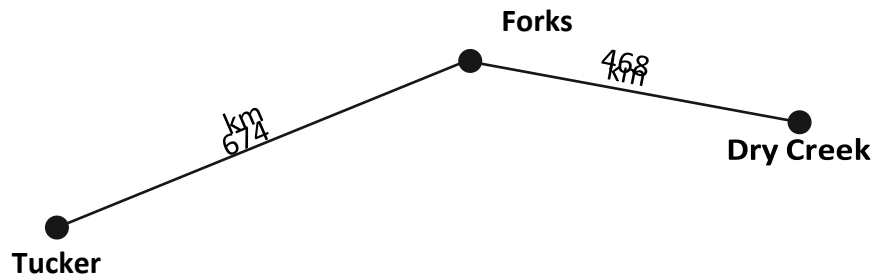
N 5,000

N 6,000

N 41,000

N 49,000

4 Las personas en Canadá miden las largas distancias en kilómetros en vez de millas. Tera y su familia condujeron de Tucker a Dry Creek el fin de semana pasado. Aproximadamente, ¿cuántos kilómetros manejaron? Llena la burbuja para mostrar la mejor estimación.



N 1,050 kilómetros

N 1,100 kilómetros

N 1,150 kilómetros

5 Hay 1,164 kilómetros de Vancouver, BC a Edmonton. ¿Cuánto es 1,164 redondeado al millar más cercano? Completa la respuesta a continuación.

1,164 kilómetros redondeados al millar más cercano es _____.

6 Hay 2,668 kilómetros de Winnipeg a Kitimat. ¿Cuánto es 2,668 redondeado al millar más cercano? Completa la respuesta a continuación.

2,668 kilómetros redondeados al millar más cercano es _____.

866 Sumar números más grandes

Resuelve cada problema a continuación. Muestra tu trabajo.

392

612

475

1,045

+ 248

+189

+336

+ 760

2 Keiko tiene que sumar 3,996 y 4,204. ¿Cuál es una manera fácil para que Keiko sume estos dos números? Resuelve el problema y muestra tu trabajo.

3 Max está jugando Suma, redondea y compara con un compañero. Él obtuvo un 3, un 8 y un 4 en su primer turno. Decidió usar esos números para formar 348 y 843.

a ¿Cuáles son sus números redondeados? _____ y _____ **b** ¿Cuál es la suma de sus números redondeados? _____

c ¿Cuál es la suma de sus números reales? Muestra tu trabajo.

d ¿Cuál es la diferencia entre la suma de sus números redondeados y la suma de sus números reales? Muestra tu trabajo.

e **RETO** Piensa en alguna manera de ordenar los tres números que Max obtuvo (3, 8 y 4) de manera que haya menos diferencia entre sus puntuaciones reales y las redondeadas. Muestra tu trabajo.

867 Práctica de suma

Resuelve los problemas de suma a continuación usando cualquier estrategia que funcione bien para ti.

254
+ 168

381
+227

129
+386

1,234
+ 765

2 Resuelve los problemas de suma a continuación usando el algoritmo convencional.

$$\begin{array}{r} 388 \\ +165 \\ \hline \end{array}$$

$$\begin{array}{r} 276 \\ +348 \\ \hline \end{array}$$

$$\begin{array}{r} 509 \\ +297 \\ \hline \end{array}$$

$$\begin{array}{r} 168 \\ +539 \\ \hline \end{array}$$

3 Escribe este número en palabras: 627,391.

4 Escribe doscientos cincuenta y tres mil, ochocientos dieciocho en números.

5 Escribe este número en forma desarrollada: 56,789.

ej $32,569 = 30,000 + 2,000 + 500 + 60 + 9$

Round 'Em Up!

Solve the problems below. Show all your work. **Work will vary.**

324	648	535
+ 538	+ 397	+ 169
862	1,045	906

2 Round the numbers below to the nearest ten. When you round to the nearest ten, look at the number in the ones place. If it is 5 or higher, round up to the next highest ten. If it is less than 5, keep the number in the tens place the same.

ex ⁶³ 60	ex ¹⁸⁶ 190	a ⁴⁷ 50	b ⁵² 50
c ³⁵ 40	d ⁹⁴ 90	e ¹²² 120	f ⁸⁵⁶ 860
g ²⁶⁷ 270	h ⁹⁹³ 990	i ^{1,247} 1,250	j ^{2,052} 2,050

3 Round the numbers below to the nearest hundred. When you round to the nearest hundred, look at the number in the tens place. If it is 5 or higher, round up to the next highest hundred. If it is less than 5, keep the number in the hundreds place the same.

ex ¹⁶³ 200	ex ⁶²⁷ 600	ex ⁸² 100	a ²⁰³ 200
b ²⁵⁴ 300	c ⁸²² 800	d ⁴³⁹ 400	e ⁶⁷ 100
f ¹⁵³ 200	g ⁷⁶⁴ 800	h ⁴⁴⁹ 400	i ⁶⁵⁷ 700

4 CHALLENGE Write two different numbers that round up or down to each number shown.

ex ⁴⁰⁰ 438 384	a ²⁰ 24 18	b ⁸⁰ 82 75
c ¹⁰⁰	d ³⁰⁰	e ⁷⁰⁰

104 96

349 288

725 698

Answers will vary. Examples shown.

Rounding to the Nearest Thousand

What is 6,780 rounded to the nearest thousand? Fill in the bubble to show.

N 5,000

N 6,000

N 7,000

N 8,000

2 What is 5,438 rounded to the nearest thousand? Fill in the bubble to show.

N 5,000

N 6,000

N 7,000

N 8,000

3 It is 4,991 kilometers from Vancouver, BC, to Montreal. What is 4,991 rounded to the nearest thousand?

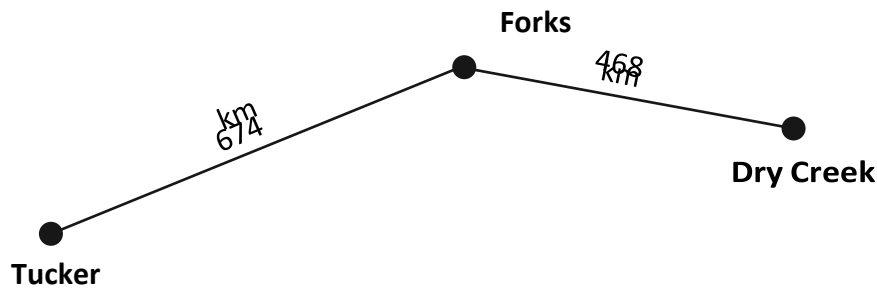
N 5,000

N 6,000

N 41,000

N 49,000

4 People in Canada measure long distances in kilometers instead of miles. Tera and her family drove from Tucker to Dry Creek last weekend. About how many kilometers did they drive? Fill in the bubble to show the best estimate.



N 1,050 kilometers

N 1,100 kilometers

N 1,150 kilometers

5 It is 1,164 kilometers from Vancouver, BC, to Edmonton. What is 1,164 rounded to the nearest thousand? Fill in the answer below.

1,164 kilometers rounded to the nearest thousand is _____ **1,000**

6 It is 2,668 kilometers from Winnipeg to Kitimat. What is 2,668 rounded to the nearest thousand? Fill in the answer below.

2,668 kilometers rounded to the nearest thousand is _____ **3,000**

Adding Larger Numbers

Solve each problem below. Show your work.

$$\begin{array}{r} 392 \\ + 248 \\ \hline \end{array}$$

640

$$\begin{array}{r} 612 \\ + 189 \\ \hline \end{array}$$

801

$$\begin{array}{r} 475 \\ + 336 \\ \hline \end{array}$$

811

$$\begin{array}{r} 1,045 \\ + 760 \\ \hline \end{array}$$

1,805

- 2** Keiko has to add 3,996 and 4,204. What is an easy way for Keiko to add these two numbers? Solve the problem and show your work.

8,200; work will vary. Example: Take 4 from the 4,204 and give it to the 3,996, like this

$$\begin{aligned} 3,996 + 4,204 &= 4,000 + 4,200 \\ &= 8,200 \end{aligned}$$

- 3** Max is playing Add, Round & Compare with a partner. He got a 3, an 8, and a 4 on his first turn. He decided to use those numbers to make 348 and 843. **a** What are his rounded numbers? _____ and _____ **300**

800 **b** What is the sum of his rounded numbers? _____ **1,100** **c** What is the sum of his actual numbers? Show your work.

1,191; work will vary.

- d** What is the difference between the sum of his rounded numbers and the sum of his actual numbers? Show your work.

91; work will vary.

- e** **CHALLENGE** Think of a way to arrange the three numbers Max got (3, 8, and 4) so there's less difference between his actual and rounded scores. Show your work.

**Responses will vary. Example:
He could make 384 and 834.**

If you round those to the nearest 100, it's $400 + 800 = 1,200$. The actual sum is $384 + 834 = 1,218$ so the difference is only 18.

Addition Practice

Solve the addition problems below using any strategy that works well for you.

$$\begin{array}{r} 254 \\ + 168 \\ \hline \end{array}$$

422

$$\begin{array}{r} 381 \\ + 227 \\ \hline \end{array}$$

608

$$\begin{array}{r} 129 \\ + 386 \\ \hline \end{array}$$

515

$$\begin{array}{r} 1,234 \\ + 765 \\ \hline \end{array}$$

1,999

- 2 Solve the addition problems below using the standard algorithm.

$$\begin{array}{r} 388 \\ + 165 \\ \hline \end{array}$$

553

$$\begin{array}{r} 276 \\ + 348 \\ \hline \end{array}$$

624

$$\begin{array}{r} 509 \\ + 297 \\ \hline \end{array}$$

806

$$\begin{array}{r} 168 \\ + 539 \\ \hline \end{array}$$

707

- 3 Write this number in words: 627,391.

Six hundred twenty-seven thousand, three hundred ninety-one.

- 4 Write two hundred fifty-three thousand, eight hundred eighteen in numbers.

253, 818

- 5 Write this number in expanded form: 56,789.

ex $32,569 = 30,000 + 2,000 + 500 + 60 + 9$

$56,789 = 50,000 + 6,000 + 700 + 80 + 9$



BridgesHomeLearnin
g 131.133.135.136 CM



BridgesHomeLearnin
g 131.133.135.136 Sp



BridgesHomeLearnin
gKey 131.133.135.136