

5th Grade
Week 7: May 11-15
Math

Parent/Student Directions - Instrucciones para padres / estudiantes

Math: May 11th – May 15th 2020

Monday:

- Today you're going to read and work through **Lesson 10.5: Metric Measures** on pages 611-613.
- Here is a YouTube video that will help you with this lesson!
- <https://www.youtube.com/watch?v=5BHfkLcm-e4>
- Complete practice page 615.

Lunes:

- Hoy leerá y trabajará en la **Lección 10.5: Medidas métricas** en las páginas 611-613.
- ¡Aquí hay un video de YouTube que lo ayudará con esta lección!
- <https://www.youtube.com/watch?v=5BHfkLcm-e4>
- Completa la página de práctica 615.

Tuesday:

- Today you're going to read and work through **Lesson 10.6: Problem Solving: Customary and Metric Conversions** on pages 617-619.
- Here is a YouTube video that will help you with this lesson!
- <https://www.youtube.com/watch?v=azicWV5o8vU>
- Complete practice page 621.

Martes:

- Hoy leerá y trabajará en la **Lección 10.6: Resolución de problemas: conversiones habituales y métricas** en las páginas 617-619.
- ¡Aquí hay un video de YouTube que lo ayudará con esta lección!
- <https://www.youtube.com/watch?v=azicWV5o8vU>
- Complete la página de práctica 621.

Wednesday:

- Today you're going to read and work through **Lesson 10.7: Elapsed Time** on pages 623-625.
- Here is a YouTube video that will help you with this lesson!
- https://www.youtube.com/watch?v=4_9pAj7jQn4
- Complete practice page 627.

Miércoles:

- Hoy leerá y trabajará en la **Lección 10.7: Tiempo transcurrido** en las páginas 623-625.
- ¡Aquí hay un video de YouTube que lo ayudará con esta lección!
- https://www.youtube.com/watch?v=4_9pAj7jQn4
- Completa la página de práctica 627.

Thursday:

- This is a catch-up day. Students can use the day to complete any unfinished assignments and get any questions answered they may have by their teacher. You can ask me questions through Class Dojo, email, text message, or phone call. Use the rest of your day to “**sharpen the saw!**”

Jueves:

- Este es un día de recuperación. Los estudiantes pueden usar el día para completar cualquier tarea no terminada y obtener cualquier pregunta que su maestro pueda responder. Puede hacerme preguntas a través de Class Dojo, correo electrónico, mensaje de texto o llamada telefónica. Use el resto de su día para “**afilarse la sierra**”.

Friday:

- Today you are going to learn and test your knowledge on **Prime and Composite Numbers** which you have practiced throughout the Galileo dialog! Answer the Galileo questions. You can use any information and resources in your packet to help you. Take your time! You’ve got this!

Viernes:

- ¡Hoy aprenderás y probarás tus conocimientos sobre **números primos y compuestos** que has practicado a lo largo del diálogo de Galileo! Responde las preguntas de Galileo. Puede usar cualquier información y recursos en su paquete para ayudarlo. ¡Tome su tiempo! ¡Tienes esto!

Name _____

Metric Measures

Essential Question How can you compare and convert metric units?

Common Core Measurement and Data—
5.MD.A.1
MATHEMATICAL PRACTICES
MP2, MP6, MP7

Unlock the Problem *Real World*

Using a map, Alex estimates the distance between his house and his grandparent's house to be about 15,000 meters. About how many kilometers away from his grandparent's house does Alex live?

- Underline the sentence that tells you what you are trying to find.
- Circle the measurement you need to convert.

The metric system is based on place value. Each unit is related to the next largest or next smallest unit by a power of 10.

One Way Convert 15,000 meters to kilometers.

kilo- (k)	hecto- (h)	deka- (da)	meter (m) liter (L) gram (g)	deci- (d)	centi- (c)	milli- (m)
Power of 10		Power of 10	Power of 10			

STEP 1 Find the relationship between the units.
Meters are _____ powers of 10 smaller than kilometers.
There are _____ meters in 1 kilometer.

STEP 2 Determine the operation to be used.
I am converting from a _____ unit to a _____ unit, so I will _____.

STEP 3 Convert.

number of meters	meters in 1 kilometer	number of kilometers
↓	↓	↓
15,000	○ _____	- _____

So, Alex's house is _____ kilometers from his grandparent's house.

Math Talk **MATHEMATICAL PRACTICES 7**

Look for a Pattern Choose two units in the chart. Explain how you use powers of 10 to describe how the two units are related.

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Another Way Use a diagram.

Jamie made a bracelet 1.8 decimeters long.
How many millimeters long is Jamie's bracelet?



Convert 1.8 decimeters to millimeters.

				1	8	
kilo-	hecto-	deka-	meter liter gram	deci-	centi-	milli-

STEP 1 Show 1.8 decimeters.

Since the unit is decimeters, place the decimal point to show decimeters as the unit.

STEP 2 Convert.

Cross out the decimal point and place it to show millimeters as the unit. Write zeros to the left of the decimal point as needed.

STEP 3 Record the value with the new units.

1.8 dm = _____ mm

So, Jamie's bracelet is _____ millimeters long.

Try This! Complete the equation to show the conversion.

A Convert 247 milligrams to centigrams, decigrams, and grams.

Are the units being converted to a larger unit or a smaller unit? _____

Should you multiply or divide by powers of 10 to convert? _____

247 mg 10 = _____ cg

247 mg 100 = _____ dg

247 mg 1,000 = _____ g

B Convert 3.9 hectoliters to dekaliters, liters, and deciliters.

Are the units being converted to a larger unit or a smaller unit? _____

Should you multiply or divide by powers of 10 to convert? _____

3.9 hL 10 = _____ daL

3.9 hL 100 = _____ L

3.9 hL 1,000 = _____ dL

**Share and Show**

Complete the equation to show the conversion.

1. $8.47 \text{ L} \bigcirc 10 - \text{ } \underline{\hspace{1cm}} \text{ dL}$

$8.47 \text{ L} \bigcirc 100 - \text{ } \underline{\hspace{1cm}} \text{ cL}$

$8.47 \text{ L} \bigcirc 1,000 - \text{ } \underline{\hspace{1cm}} \text{ mL}$

**Think:** Are the units being converted to a larger unit or a smaller unit?

2. $9,824 \text{ dg} \bigcirc 10 - \text{ } \underline{\hspace{1cm}} \text{ g}$

$9,824 \text{ dg} \bigcirc 100 - \text{ } \underline{\hspace{1cm}} \text{ dag}$

$9,824 \text{ dg} \bigcirc 1,000 - \text{ } \underline{\hspace{1cm}} \text{ hg}$



Convert.



3. $4,250 \text{ cm} - \text{ } \underline{\hspace{1cm}} \text{ m}$



4. $6,000 \text{ mL} - \text{ } \underline{\hspace{1cm}} \text{ L}$



5. $4 \text{ dg} - \text{ } \underline{\hspace{1cm}} \text{ cg}$

**Math Talk****MATHEMATICAL PRACTICES 2****Reason Quantitatively** How can you compare the lengths 4.25 dm and 4.25 cm without converting?**On Your Own**

Convert.

6. $7 \text{ g} - \text{ } \underline{\hspace{1cm}} \text{ mg}$

7. $5 \text{ km} - \text{ } \underline{\hspace{1cm}} \text{ m}$

8. $1,521 \text{ mL} - \text{ } \underline{\hspace{1cm}} \text{ dL}$

Compare. Write $>$, $<$, or $=$.

9. $32 \text{ hg} \bigcirc 3.2 \text{ kg}$

10. $6 \text{ km} \bigcirc 660 \text{ m}$

11. $525 \text{ mL} \bigcirc 525 \text{ cL}$

12. **MATHEMATICAL PRACTICE 2** **Use Reasoning** Are there less than 1 million, exactly 1 million, or greater than 1 million milligrams in 1 kilogram? Explain how you know.

13. **GO DEEPER** Parker ran 100 meters, 1 kilometer, and 5,000 centimeters. How many meters did he run all together?

Name _____

Metric Measures



COMMON CORE STANDARD—5.MD.A.1
Convert like measurement units within a given measurement system.

Convert.

1. $16 \text{ m} = \underline{16,000} \text{ mm}$

number of meters	millimeters in 1 meter		number of millimeters
↓	↓		↓
16	1,000	=	16,000
$16 \text{ m} = 16,000 \text{ mm}$			

2. $6,500 \text{ cL} = \underline{\hspace{2cm}} \text{ L}$ 3. $15 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$
4. $3,200 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$ 5. $12 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$ 6. $200 \text{ cm} = \underline{\hspace{2cm}} \text{ m}$
7. $70,000 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$ 8. $100 \text{ dL} = \underline{\hspace{2cm}} \text{ L}$ 9. $60 \text{ m} = \underline{\hspace{2cm}} \text{ mm}$

Compare. Write <, >, or =.

10. $900 \text{ cm} \bigcirc 9,000 \text{ mm}$ 11. $600 \text{ km} \bigcirc 5 \text{ m}$ 12. $5,000 \text{ cm} \bigcirc 5 \text{ m}$
13. $18,000 \text{ g} \bigcirc 10 \text{ kg}$ 14. $8,456 \text{ mL} \bigcirc 9 \text{ L}$ 15. $2 \text{ m} \bigcirc 275 \text{ cm}$

Problem Solving



16. Bria ordered 145 centimeters of fabric. Jayleen ordered 1.5 meters of fabric. Who ordered more fabric?
17. Ed fills his sports bottle with 1.2 liters of water. After his bike ride, he drinks 200 milliliters of the water. How much water is left in Ed's sports bottle?

18. **WRITE** *Math* Explain the relationship between multiplying and dividing by 10, 100, and 1,000 and moving the decimal point to the right or to the left.

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Name _____

Problem Solving • Customary and Metric Conversions

Essential Question How can you use the strategy make a table to help you solve problems about customary and metric conversions?

Common Core Measurement and Data—**5.MD.A.1**
MATHEMATICAL PRACTICES
MP2, MP4, MP7

Unlock the Problem **Real World**

Aaron is making fruit punch for a family reunion. He needs to make 120 cups of punch. If he wants to store the fruit punch in gallon containers, how many gallon containers will Aaron need?

Use the graphic organizer below to help you solve the problem.

Conversion Table

	gal	qt	pt	c
1 gal	14	4	8	16
1 qt	$\frac{1}{4}$	1	2	4
1 pt	$\frac{1}{8}$	$\frac{1}{2}$	1	2
1 c	$\frac{1}{16}$	$\frac{1}{4}$	$\frac{1}{2}$	1

Read the Problem

What do I need to find?

I need to find _____

What information do I need to use?

I need to use _____

How will I use the information?

I will make a table to show the relationship between the number of _____ and the number of _____.

Solve the Problem

There are _____ cups in 1 gallon. So, each cup is _____ of a gallon. Complete the table below

c	1	2	3	4	120
gal	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	

Multiply by _____.

So, Aaron needs _____ gallon containers to store the punch.

- MATHEMATICAL PRACTICE 2 Use Reasoning** Will all of the gallon containers Aaron uses be filled to capacity? Explain. _____

Try Another Problem



Sharon is working on a project for art class. She needs to cut strips of wood that are each 1 decimeter long to complete the project. If Sharon has 7 strips of wood that are each 1 meter long, how many 1-decimeter strips can she cut?



Conversion Table

	m	dm	cm	mm
1 m	1	10	100	1,000
1 dm	$\frac{1}{10}$	1	10	100
1 cm	$\frac{1}{100}$	$\frac{1}{10}$	1	10
1 mm	$\frac{1}{1,000}$	$\frac{1}{100}$	$\frac{1}{10}$	1

Read the Problem



What do I need to find?



What information do I need to use?



How will I use the information?

Solve the Problem



So, Sharon can cut _____ 1-decimeter lengths to complete her project.



Look for a Pattern What relationship did the table you made show? _____



Math Talk

MATHEMATICAL PRACTICES 4

Use Diagrams How could you use a diagram to solve this problem?

Name _____



Share and Show



1. Edgardo has a drink cooler that holds 10 gallons of water. He is filling the cooler with a 1-quart container. How many times will he have to fill the quart container to fill the cooler?



First, make a table to show the relationship between gallons and quarts. You can use a conversion table to find how many quarts are in a gallon.

gal	1	2	3	4	10
qt	4				



Then, look for a rule to help you complete your table.

number of gallons \times _____ = number of quarts



Finally, use the table to solve the problem.

Edgardo will need to fill the quart container _____ times.



2. **THINK SMARTER** What if Edgardo fills the cooler with only 32 quarts of water. How can you use your table to find how many gallons that is?



3. How would the number of times Edgardo uses a container to fill the 10-gallon cooler change if he uses a 1-cup container? Explain.



WRITE Math Show Your Work

Name _____

Problem Solving • Customary and Metric Conversions



COMMON CORE STANDARD—5.MD.A.1
Convert like measurement units within a given measurement system.

Solve each problem by making a table.

- 1. Thomas is making soup. His soup pot holds 8 quarts of soup. How many 1-cup servings of soup will Thomas make?

Number of Quarts	1	2	3	4	8
Number of Cups	4	8	12	16	32

32 1-cup servings

- 2. Paulina works out with a 2.5-kilogram mass. What is the mass of the 2.5-kilogram mass in grams?

- 3. Alex lives 500 yards from the park. How many inches does Alex live from the park?

- 4. A flatbed truck is loaded with 7,000 pounds of bricks. How many tons of brick are on the truck?

- 5. **WRITE** *Math* Explain how you could use the conversion table on page 618 to convert 700 centimeters to meters.

Name _____

Elapsed Time

Essential Question How can you solve elapsed time problems by converting units of time?

Common Core Measurement and Data—**5.MD.A.1**
MATHEMATICAL PRACTICES
 MP6, MP7

Unlock the Problem

A computer company claims its laptop has a battery that lasts 4 hours. The laptop actually ran for 200 minutes before the battery ran out. Did the battery last 4 hours?



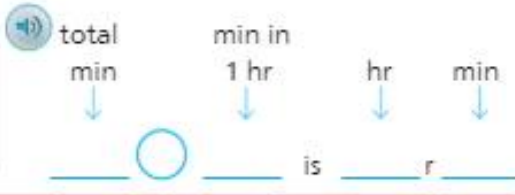
1 hour = _____ minutes

Think: The minute hand moves from one number to the next in 5 minutes.



 Convert 200 minutes to hours and minutes.

STEP 1 Convert minutes into hours and minutes.



200 min = _____ hr _____ min

STEP 2 Compare. Write <, >, or =.

_____ hr _____ min ○ 4 hr

Since _____ hours _____ minutes is _____ 4 hours, the battery _____ last as long as the computer company claims.

Try This! Convert to mixed measures.

Jill spent much of her summer away from home. She spent 10 days with her grandparents, 9 days with her cousins, and 22 days at camp. How many weeks and days was she away from home?

STEP 1 Find the total number of days away.

10 days + 9 days + 22 days = _____ days

STEP 2 Convert the days into weeks and days.

_____ ÷ 7 is _____ r _____

So, Jill was away from home _____ weeks and _____ days.

Units of Time

60 seconds (s) = 1 minute (min)
60 minutes = 1 hour (hr)
24 hours = 1 day (d)
7 days = 1 week (wk)
52 weeks = 1 year (yr)
12 months (mo) = 1 year
365 days = 1 year



One Way Use a number line to find elapsed time.

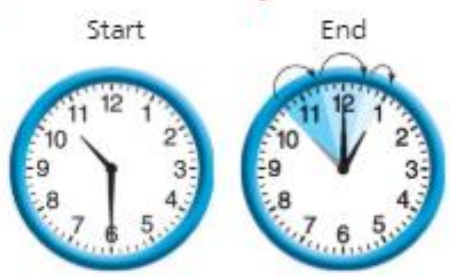
Monica spent $2\frac{1}{2}$ hours working on her computer. If she started working at 10:30 A.M., what time did Monica stop working?



Think $\frac{1}{2}$ hour = 30 minutes



Another Way Use a clock to find elapsed time.



So, Monica stopped working at _____.



Try This! Find a start time.



Robert's soccer team needs to be off the soccer field by 12:15 P.M. Each game is at most $1\frac{3}{4}$ hours long. What time should the game begin to be sure that the team finishes on time?

$\frac{1}{4}$ hour = 15 minutes, so $\frac{3}{4}$ hour = _____ minutes



STEP 1 Subtract the minutes first.



45 minutes earlier is _____.

So, the game should begin at _____.



STEP 2 Then subtract the hour.



1 hour and 45 minutes earlier is _____.



MATHEMATICAL PRACTICES 6

Explain how you could convert 3 hours 45 minutes to minutes.

Name _____

Share and Show

Convert.



1. 540 min = _____ hr

2. 8 d = _____ hr



3. 110 hr = _____ d _____ hr



Find the end time.



4. Start time: 9:17 A.M.

Elapsed time: 5 hr 18 min

End time: _____



Math Talk

MATHEMATICAL PRACTICES 1

Make Sense of Problems
How can you find how long a movie lasts if it starts at 1:35 P.M. and ends at 3:40 P.M.?

On Your Own



Find the start, elapsed, or end time.



5. Start time: 11:38 A.M.

Elapsed time: 3 hr 10 min

End time: _____



6. Start time: _____

Elapsed time: 2 hr 37 min

End time: 1:15 P.M.



7. Start time: _____

Elapsed time: $2\frac{1}{4}$ hr

End time: 5:30 P.M.



8. Start time: 7:41 P.M.

Elapsed time: _____

End time: 8:50 P.M.



9. **WRITE** *Math Explain* how you could find the number of seconds in a full 24-hour day. Then solve.



Name _____

Elapsed Time



COMMON CORE STANDARD—5.MD.A.1
Convert like measurement units within a given measurement system.

Convert.



1. 5 days = 120 hr

2. 8 hr = _____ min

3. 30 min = _____ s

Think: 1 day = 24 hours
 $5 \times 24 = 120$

4. 15 hr = _____ min

5. 5 yr = _____ d

6. 7 d = _____ hr

7. 24 hr = _____ min

8. 600 s = _____ min

9. 60,000 min = _____ hr



Find the start, elapsed, or end time.



10. Start time: 11:00 A.M.



Elapsed time: 4 hours 5 minutes

End time: _____



11. Start time: 6:30 A.M.

Elapsed time: 2 hours 18 minutes

End time: _____



12. Start time: _____

Elapsed time: $9\frac{3}{4}$ hours

End time: 6:00 A.M.



13. Start time: 2:00 A.M.

Elapsed time: _____

End time: 8:30 A.M.



Problem Solving



14. Kiera's dance class starts at 4:30 A.M. and ends at 6:15 A.M. How long is her dance class?





15. Julio watched a movie that started at 11:30 P.M. and ended at 2:12 A.M. How long was the movie?



16. **WRITE** *Math* Write a real-world word problem that can be solved using elapsed time. Include the solution.

Prime and Composite Numbers

slide 1

What You Will Learn

In this dialog you will learn about prime and composite numbers.

slide 2

Some Words We Are Going to Use

In this lesson we are going to use only **counting numbers** — 1, 2, 3, 4, 5, and so on.

Mathematicians often call them **natural numbers**.

We will talk a lot about multiplication.

Product: the outcome of multiplying is called product.

Factors: The numbers you multiply to make the product are called factors.

Example: $3 \times 2 = 6$. The numbers 3 and 2 are factors of 6.

slide 4

Interval Jumping (animated)

Next, he lands in every **third** and then every **fifth** square.

Start

1	2	3	4	5	6	7	8	9	10	11	12	13	14
---	---	---	---	---	---	---	---	---	----	----	----	----	----

slide 5

Kyle landed on square 14. Which exercise from the list below was he doing?

- a) every 3rd square
 - b) every 4th square
 - c) every 6th square
 - d) every 7th square
-

slide 6

Not All Squares Are Created Equal

After trying more skipping patterns, Kyle noticed that some squares he visited more often than others. He tried **all** the patterns: every square, every second square, every third, and so on all the way to every fourteenth. Which square did he land on most?

Warming Up (animated)

slide 3

Kyle practices his pogo stick skills by jumping along the line of numbered squares. First, as a warm up, he moves one square at a time visiting them all.

Touching every square

Start

1	2	3	4	5	6	7	8	9	10	11	12	13	14
---	---	---	---	---	---	---	---	---	----	----	----	----	----

slide 7
Popular Numbers

Some squares Kyle visited several times — **more than twice**. For example, he landed on square 4 while doing every square (1, 2, 3, 4, ...) and every fourth square (4, 8, 12) routines. On top of that, he also marked 4 during the every other square exercise (2, 4, 6, 8, ...).

Kyle jumped onto square 6 four times. When did it happen?

What square other than number 4 did Kyle land on three times?

slide 8
Not So Popular Numbers

Then there were numbers like 2, 3, and 5. Kyle landed on those squares twice. First time it happened during the warm up, when he landed on each square. Second time it happened during the every 2nd (for square 2), 3rd (for square 3), and 5th (for square 5) exercises.

Finally, there was number **1**. The pogo stick touched that square only once, when Kyle was jumping onto every square.

Make a list of all the **popular** squares.

Make a list of all the squares Kyle landed on exactly two times.

slide 9
Giving Numbers Proper Names

The numbers that we so far called popular and not so popular have special names in mathematics.

Popular numbers are called **composite**.

The numbers of squares that Kyle visited *exactly twice* are called **prime**.

slide 10
A Special Number

"What about **1**?" You may ask. "It definitely was not a popular number. Is it a prime number too?"

Remember, number 1 was **the only** square that Kyle landed in **exactly once**. Because number 1 is so different, we do not call it prime or composite. It is neither.

Zero is also neither prime nor composite.

slide 11
Dividing Prime Numbers

All prime numbers have one thing in common. Each of them is **divisible** (can be divided evenly) **only** by 1 and by itself.

$$2 \div 1 = 2$$

$2 \div 2 = 1$ Nothing else goes into 2. $3 \div 1 = 3$ $3 \div 3 = 1$ Nothing else goes into 3. $11 \div 1 = 11$ $11 \div 11 = 1$ Nothing else goes into 11. $29 \div 1 = 29$ $29 \div 29 = 1$ Nothing else goes into 29.

slide 12
Dividing Composite Numbers

Like prime numbers, composite numbers are also divisible by 1 and themselves. In addition, they are **always** divisible by some other number. For example:

4 is divisible by 1, 4, and also by 2.

12 is divisible by 1, 12, and also by 2, 3, 4, and 6.

There is **only one composite odd number** between 1 and 14. What number is that?

Slide 13

Which of the numbers below is prime?

- A) 1
- B) 19
- C) 28
- D) 33

Slide 14

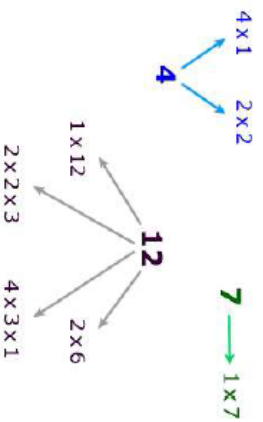
Which number is composite?

- A) 7
- B) 17
- C) 27
- D) 37

Slide 15

Using Factors To Make Numbers

You **factor** a number when you represent it as a product. The numbers you multiply to get the product are called **factors**. Here are some examples of **factoring**:



Remember, only natural numbers can be factors. Although $2 \times 0.5 = 1$, we do **not** call 2 and 0.5 factors of 1.

Slide 16

Talking About Factors

We say:

1, 2, and 4 are factors of 4.

7 has two factors: 1 and 7.

The factors of 12 are 1, 2, 3, 4, 6, and 12.

15 has 1, 3, 5, and 15 as its factors.

The number 1 is a factor of every number.

Every number is its own factor.

Slide 17

Dividing Numbers by Factors

Do you remember that multiplication and division are inverse operations? Since we multiply factors to produce a number, the factors divide the product evenly.

$7 \div 1 = 7$	$4 \div 1 = 4$	$12 \div 1 = 12$	$12 \div 12 = 1$
$7 \div 7 = 1$	$4 \div 2 = 2$	$12 \div 2 = 6$	$12 \div 6 = 2$
	$4 \div 1 = 4$	$12 \div 3 = 4$	$12 \div 4 = 3$

Number 12 has six factors. This is why Kyle landed on square 12 six times — more than any other square.

Write a sentence that connects factors and the number of times Kyle landed on a square.

Slide 18

Prime and Composite Numbers Defined (animated)

Now we can state rules that prime and composite numbers obey.

We call a **natural number**

prime if it has exactly two factors.

Do you remember which counting number does not follow either of the rules?

Slide 19

Why Do We Use These Names?

The name **prime** tells us that these numbers are at the base of our number system. Think of primary grades where you have learned basic skills like reading and times tables.

You can produce any **composite** number by multiplying prime numbers.

$$21 = 3 \times 7$$

For example: $30 = 2 \times 3 \times 5$

$$16 = 2 \times 2 \times 2 \times 2$$

You can say, we compose composite numbers by multiplying prime numbers.

Slide 20

Why Does It Matter? Part I

What if you are not interested in jumping over numbered squares on a pogo stick? Will prime and composite numbers still matter?

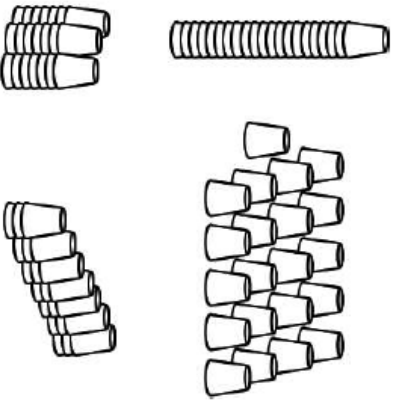
Let's say you are getting ready for a party and want to arrange cups in equal stacks. If you have a prime number of cups (for example, 5), there are only two ways to arrange them evenly. You either pile **all** of them in one stack, or place every cup separately.



Why Does It Matter? Part II

With composite numbers (like 21), you again have the two options of all the cups in one big stack and all the cups being separate. In addition, you always can arrange them in at least one more way. For 21, you can either make 3 stacks of 7 cups each, or you can make 7 stacks of 3 cups each.

When else is it important to know in what ways you can divide things into equal groups? Write a short paragraph describing your idea.



Slide 22

Joanne can arrange all her cups in three equal stacks. She can also arrange them in four equal stacks.

How many cups does Joanne have?

- A) 22
- B) 28
- C) 32
- D) 36

Things to Remember

All natural numbers greater than 1 are either prime or composite.

0 and 1 are neither prime nor composite.

2 is the only even prime number.

Kind of number	Prime	Composite
Divisible by	only 1 and itself	1, itself, and something else
Number of factors	exactly 2	3 or more

Factors are closely related to multiples (you will learn about them soon).

Slide 24

Prime Numbers Smaller Than 100

2	3	5	7	11
13	17	19	23	29
31	37	41	43	47
53	59	61	67	71
73	79	83	89	97

Composite Numbers Smaller Than 100

4	6	8	9	10	12	14	15	1
18	20	21	22	24	25	26	27	2
30	32	33	34	35	36	38	39	4
42	44	45	46	48	49	50	51	5
54	55	56	57	58	60	62	63	6
67	68	69	70	72	74	75	76	7
78	80	81	82	84	85	86	87	8
90	91	92	93	94	95	96	98	9

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Extra Questions to Think About

- Did every exercise have squares with popular numbers?
- Did every exercise have squares with not so popular numbers?

Write a short paragraph about what you have found while answering these questions.

Slide 27

You can arrange cups in equal stacks in exactly three different ways.

How many cups do you have?

- A) 15
- B) 16
- C) 17
- D) 18

Prime and Composite Numbers Test

1) The number 1 is what type of number?

- A) composite
 - B) prime
 - C) both composite and prime
 - D) neither composite nor prime
-

2) Which statement is true?

- A) The only factors of 4 are 1 and 4.
- B) The only factors of 6 are 1 and 6.
- C) The only factors of 7 are 1 and 7.
- D) The only factors of 9 are 1 and 9.