Mathematics

Grade 3



Dear DPSCD Families,

The Office of Mathematics is partnering with families to support Distance Learning while students are home. As your child's first teacher, we empower you to utilize the resources provided to foster a deeper understanding of grade-level mathematics.

Students in grades K-8 will work from our core curriculum, Eureka Math, utilizing this Academic Packet supported by Knowledge on the Go recorded videos. The videos have a Eureka Math instructor presenting a lesson for students to engage in grade-level mathematics. The instructor will guide students to work through the lesson by completing problems simultaneously with your child and/or asking them to pause the video for independent solving and then check. As the instructor demonstrates sample problems in the Problem Set, Application Problems, Fluency Activities, Examples and/or Exercises, parents feel free to engage your child in this work. Ask students to show work and explain their answers. When appropriate have students add models or drawings to help them solve and record answers in complete sentences.



Daily lesson guidance can be found on the pages that follow. Each day has been designed to provide you access to materials from the Eureka Math Knowledge on the Go website https://gm.greatminds.org/en-us/knowledgeonthego . After you have accessed the site, click your child's grade level, and scroll down to find the desired lesson. The resources are found at the

bottom of the page and we recommend the lessons be completed in order.



Eureka Math is our core curriculum, but we also recognize it is necessary to differentiate mathematics instruction to meet all students' needs. Students took the **i-Ready** diagnostic earlier this year and it created a Learning Path for students to follow. Students work weekly on the goals set on the i-Ready Learning Path. After their core math lesson, if able, we ask that students continue to work on their Learning Path by logging on to www.clever.com and selecting the i-

Ready icon. In addition, students may also access the i-Ready Teacher-Assigned Lessons which would be an enrichment to grade-level content and should be utilized if extension activities are needed.



If one-on-one, live support is required, please feel free to call the **Homework Hotline** at **1-833-466-3978**. Please check the <u>Homework Hotline page</u> for operating hours. We have DPSCD mathematics teachers standing by and are ready to assist.

I SCAN ME If students need additional help, and parents have internet access, please refer to the **Homework Helper** document and sign up for an account. Homework Helper provides step by step explanations of how to work the Eureka Math problems. Also, provided on the Eureka Math Knowledge on the Go website is a plethora of **Additional Resources** that consists of Templates, Homework, Parent Tip Sheets, and more. We appreciate your continued dedication, support and partnership with Detroit Public Schools Community District and with your assistance we can press forward with our priority: Outstanding Achievement. Be safe. Be well!

Mony R. Hank

Deputy Executive Director of K-12 Mathematics

Notice of Non-Discrimination

DPSCD does not discriminate on the basis of race, color, national origin, sex, sexual orientation, transgender identity, disability, age, religion, height, weight, citizenship, marital or family status, military status, ancestry, genetic information, or any other legally protected category, in its educational programs and activities, including employment and admissions Questions? Concerns? contact the Civil Rights Coordinator at (313) 240-4377 or dpscd.compliance@detroitk12.org or 3011 West Grand Boulevard, 14th Floor, Detroit MI 48202.

Parents,

Find additional resources aligned to Eureka Math here:



ACCESSING HOMEWORK HELPER eBOOKS

STEP 1: CREATE AN ACCOUNT

Sign up for a free account at GreatMinds.org/store/signup.

STEP 2: ACCESS YOUR DASHBOARD

Once you have created an account at GreatMinds.org, you will be taken to your Dashboard.

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After you have logged in you can also access your Dashboard by clicking "MY DASHBOARD" in the upper right-hand corner of the site.

STEP 3: ENTER YOUR PRODUCT KEY

In your Dashboard you will see several buttons, select "PRODUCT KEY" and enter **H00688525** to access your Homework Helper eBook.

RECENT RESOURCES	PRODUCT KEY	REFINE	~
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STEP 4: ACCESS YOUR HOMEWORK HELPER eBOOK

After you've entered your Product Key, select a grade-level, and the Homework Helper eBook will be added to your Dashboard. Click "LAUNCH PRODUCT" to navigate into the eBook. Note: if you are viewing the Homework Helper eBooks on a mobile device or tablet, we recommend using landscape view.

Questions? Contact us at info@GreatMinds.org.

GreatMinds.org

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Clever—How to access DPSCD Curriculum Applications through Clever.com



1	Click on the Clever desktop shortcut or open Google Chrome and go to clever.com/in/dpscd	1	Clever	OR	Clever.com,	/in/dpscd
2	Click "Log in with Active Directory" Teacher's will use the same credentials that they use to login to their email. Student's will follow the following forma listed below	2 t	Not your district?	Ic School Distri-	ct Clever Clever Clever Clever Clever Clever Clever Clever Clever Clever	Login
3	Enter student's username in the space identified. The username will consist of the students ID # with @thedps.org appended on. For example 12345678@thedps.org	3	Sign in Fmail Ba	C SCHOOLS DISTRICT	Next	
4	Enter the student's password. The password will consist of the following: First letter of first name in upper case First letter of last name in lower case 2 digit of their birth month 2 digit of their birth year O1 (male) or O2 (female) For example: Jane Doe's birthday is May 13, 200 Her password is Jd050402	4	Password		5678@thedps.org Sign in	Ř
5	Click on the application 5 you are interested in accessing	I-Ready	M	myON () Edulastic	Office 365 Microsoft Office 365	Pearson Plus Pearson Easy Bridge typing.com

Grade 3 Mathematics weekly distance learning student schedule

Parents: Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons.Students: Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.		
3.G.A.2		
Module 5: Fractions as Numbers on the Number Line Topic A; Partitioning a Whole into Equal Parts		
 Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. Clever Access for i-Ready (see links and QR codes below) Paper, Pencil, Academic Packet including Problem Sets 		
	student's progress where the daily Problem S mplete Teacher-Assig 5: Fractions as Numb Partitioning a Whole ccess to Knowledge on the Homework Helpers which sson. lever Access for i-Ready aper, Pencil, Academic F	student's progress while working on the Click or watch the "Knowledge on the te the daily Problem Set. Visit i-ready the mplete Teacher-Assigned lessons. 5: Fractions as Numbers on the Numbers partitioning a Whole into Equal Parts ccess to Knowledge on the Go Lesson Vider Homework Helpers which provide guidance sson. lever Access for i-Ready (see links and QR cc aper, Pencil, Academic Packet including Pro- pro- aper, Pencil, Academic Packet including Pro- Caper, Pencil, Academic Packet including Pro- Caper Access for i-Ready (see links and QR cc aper, Pencil, Academic Packet including Pro- Caper Access for i-Ready (see links and QR cc aper, Pencil, Academic Packet including Pro- Caper Access for i-Ready (see links and QR cc aper, Pencil, Academic Packet including Pro- Caper Access for i-Ready (see links and QR cc aper Access for i-Ready (see links and CC aper Access for i-Ready (see

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Day	Knowledge on the Go Video for Module 5,	i-Ready	i-Ready
1	Lesson 1	"Teacher	"My Path"
	Module 5, Problem Set 1 (<u>English</u> / <u>Spanish</u>)	Assigned"	Lesson
		Lesson	<u>clever.com</u>
		<u>clever.com</u>	
Day	<u>Knowledge on the Go Video for Module 5,</u>	i-Ready	i-Ready
2	Lesson 2	"Teacher	"My Path"
	Module 5, Problem Set 2 (English /Spanish)	Assigned" Lesson	Lesson
Day	<u>Knowledge on the Go Video for Module 5,</u>	i-Ready	i-Ready
3	Lesson 3	"Teacher	"My Path"
	Module 5, Problem Set 3 (English /Spanish)	Assigned" Lesson	Lesson
Day	Knowledge on the Go Video for Module 5,	i-Ready	i-Ready
4	Lesson 4	"Teacher	"My Path"
	Module 5, Problem Set 4 (English /Spanish)	Assigned" Lesson	Lesson

Click on the Knowledge on the Go Lesson Materials Link or Scan the QR Reader Code in the Materials needed section, Scroll down and Click the Corresponding Module and Lesson. Problem sets are included in this academic packet.

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

		Lesson 1		
Standard	3.G.A.2			
Learning Target	Specify and partition a whole into equal parts, identifying and counting unit fractions using concrete models.			
Launch *	Recommended: Students will view the <u>Knowledge</u> on the Go video for <u>Module 5</u> , <u>Lesson 1</u> . Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" video			
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 1 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 1 Problem Set			
Closing	Students v Lesson 1.	vill reflect and share their learning from Module 5,		
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.			
Intervention		nded : Students will work on their individual Learning (ath) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

Standard	3.G.A.2			
Learning Target	Specify and partition a whole into equal parts, identifying and counting unit fractions by folding fraction strips.			
Launch		Recommended : Students will view the <u>Knowledge</u> on the Go video for Module 5, Lesson 2 Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.		
Guided Practice	SCAN ME	Recommended: Students will complete the Problem Set for Module 5 , Lesson 2 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can		
	he access	ed here: Module 5, Lesson 2 Problem Set		
Closing	Students will reflect and share their learning from Module 5, Lesson 2.			
Extend		Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		
Intervention		ended: Students will work on their individual Learning Path) in i-ReadyVisit <u>Clever.com</u> to access i-Ready.		

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

Standard	3.G.A.2			
Learning Target	Specify and partition a whole into equal parts, identifying and counting unit fractions by drawing pictorial area models.			
Launch	 Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 3 Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos. 			
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson3 from the "Knowledge on the Go" video along with the instructor.			
	These are included in this academic packet or can be accessed here: <u>Module 5, Lesson 3 Problem Set</u>			
Closing	Students will reflect and share their learning from Module 5, Lesson 3.			
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.			
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.			

Mathematical Fluencies:

	Lesson 4		
Standard	3.G.A.2		
Learning Target	Represent and identify fractional parts of different wholes.		
Launch	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 4 Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.		
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 4 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 4 Problem Set		
Closing	Students will reflect and share their learning from Module 5, Lesson 4.		
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		

Grade 3 Mathematics weekly distance learning student schedule

	<u>4/20/20 to 4/24/20 Week 2 (5days)</u>		
7Directions:	Parents: Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. Students: Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.		
Standard(s)	3.NF.A.1		
Module Topic Materials Needed:	 3.NF.A.1 Module 5: Fractions as Numbers on the Number Line Topic B: Unit Fractions and Their Relation to the Whole Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. Clever Access for i-Ready (see links and QR codes below) Paper, Pencil, Academic Packet including Problem Sets 		

	Daily Lesson	Extension	Intervention
	(50 Minutes)	(10-15 minutes)	(10 minutes)
Day	<u>Knowledge on the Go Video for Module 5,</u>	i-Ready	i-Ready
5	Lesson 5	"Teacher Assigned"	"My Path"
	Module 5, Problem Set 5 (<u>English /Spanish)</u>	Lesson	Lesson
	Homework Helper <u>(English /Spanish)</u>	<u>clever.com</u>	<u>clever.com</u>
Day	<u>Knowledge on the Go Video for Module 5,</u>	i-Ready	i-Ready
6	Lesson 6	"Teacher Assigned"	"My Path"
	Module 5, Problem Set 6 (<u>English /Spanish)</u>	Lesson	Lesson
	Homework Helper <u>(English /Spanish)</u>		
Day	<u>Knowledge on the Go Video for Module 5,</u>	i-Ready	i-Ready
7	Lesson 7	"Teacher Assigned"	"My Path"
	Module 5, Problem Set 7 (<u>English /Spanish)</u>	Lesson	Lesson
	Homework Helper <u>(English /Spanish)</u>		
Day	<u>Knowledge on the Go Video for Module 5,</u>	i-Ready	i-Ready
8	Lesson 8	"Teacher Assigned"	"My Path"
	Module 5, Problem Set 8 (<u>English /Spanish)</u>	Lesson	Lesson
	Homework Helper <u>(English /Spanish)</u>		
Day	Knowledge on the Go Video for Module 5,	i-Ready	i-Ready
9	Lesson 9	"Teacher Assigned"	"My Path"
	Module 5, Problem Set 9 (<u>English /Spanish)</u>	Lesson	Lesson
	Homework Helper (English /Spanish)		

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

	Lesson 5			
Standard	3.NF.A.1			
Learning Target	Partition a whole into equal parts and define the equal parts to identify the unit fraction numerically.			
Launch	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson5 Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.			
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 5 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 5 Problem Set			
Closing	Students will reflect and share their learning from Module 5, Lesson 5.			
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.			
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.			

Mathematical Fluencies:

	Lesson 6	
Standard	3.NF.A.1	
Learning Target	Build non-unit fractions less than one whole from unit fractions.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 6. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5 , Lesson 6 from the "Knowledge on the Go" video along with the instructor.	
	() scan me These are included in this academic packet or can be accessed here: <u>Module 5, Lesson 6 Problem Set</u>	
Closing	Students will reflect and share their learning from Module 5, Lesson 6.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 7	
Standard	3.NF.A.1	
Learning Target	Identify and represent shaded and non-shaded parts of one whole as fractions.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 7. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assis students with accessing and engaging with the "Knowledge on the Go" videos.	÷
Guided Practice	Recommended: Students will complete the Problem Set for Module 5 , Lesson 7 from the "Knowledge on the Go" video along with the instructor.	
	() scan me These are included in this academic packet or call be accessed here: <u>Module 5, Lesson 7 Problem Set</u>	n
Closing	Students will reflect and share their learning from Module 5, Lesson 7.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 8	
Standard	3.NF.A.1	
Learning Target	Represent parts of one whole as fractions with number bonds.	
Launch *	Recommended: Students will view the " <u>Knowledge</u> on the Go" video for Module 5 , Lesson 8. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5 , Lesson 8 from the "Knowledge on the Go" video along with the instructor.	
	(D) SCAN ME These are included in this academic packet or can be accessed here: Module 5, Lesson 8 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 8.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 9	
Standard	3.NF.A.1	
Learning	Build and write fractions greater than one whole using unit	
Target	fractions.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 9. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 9 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: e Module 5, Lesson 9 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 9.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

	4/27/20 to 5/1/20 Week 3 (5 days)	
Directions:	Parents: Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons.Students: Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.	
Target Standard(s)	3.NF.A.1 3.NF.A.3 3.NF.A.3.d	
Module	Module 5: Fractions as Numbers on the Number Line	
Торіс	Topic C: Comparing Unit Fractions and Specifying the Whole Topic D: Fractions on a Number Line	
Materials Needed:	 Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. Clever Access for i-Ready (see links and QR codes below) Paper, Pencil, Academic Packet including Problem Sets 	
	Image: Scan me Image: Scan me Image: Scan me Knowledge on the Go Videos Clever.com Additional Resources	

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Devi			
Day	Knowledge on the Go Lesson	i-Ready	i-Ready
10	<u>Materials for Module 5, Lesson 10</u>	"Teacher Assigned"	"My Path"
		Lesson	Lesson
		<u>clever.com</u>	<u>clever.com</u>
Day	Knowledge on the Go Lesson	i-Ready	i-Ready
11	Materials for Module 5, Lesson 11	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Lesson	i-Ready	i-Ready
12	Materials for Module 5, Lesson 12	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Lesson	i-Ready	i-Ready
13	Materials for Module 5, Lesson 13	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Lesson	i-Ready	i-Ready
14	Materials for Module 5, Lesson 14	"Teacher Assigned"	"My Path"
		Lesson	Lesson

Click on the Knowledge on the Go Lesson Materials Link or Scan the QR Reader Code in the Materials needed section, Scroll down and Click the Corresponding Module and Lesson. Problem sets are included in this academic packet.

Mathematical Fluencies:

	Lesson 10	
Standard	3.NF.A.3.d	
Learning Target	Compare unit fractions by reasoning about their size using fraction strips.	
Launch *	Recommended: Students will view the " <u>Knowledge</u> on the Go" video for Module 5 , Lesson10. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 10 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 10 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 10.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 11	
Standard	3.NF.A.3.d	
Learning Target	Compare unit fractions with different-sized models representing the whole.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 11. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 11 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: e Module 5, Lesson 11 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson11.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 12	
Standard	3.NF.A.1	
Learning Target	Specify the corresponding whole when presented with one equal part.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 12. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 12 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 12 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 12.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 13	
Standard	3.NF.A.3.d	
Learning Target	Identify a shaded fractional part in different ways depending on the designation of the whole.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 13. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 13 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 13 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson13.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 14	
Standard	3.NF.A.1	
Learning Target	Build and write fractions greater than one whole using unit fractions.	
Launch *	 Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 14. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos. 	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 14 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 14 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson14.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

	5/4/20 to 5/8/20 Week 4 (5 days)	
Directions:	Parents:Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons.Students:Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.	
Target Standard(s)	3.NF.A.2 3.NF.A.3 3.NF.A.3.c 3.NF.A.3.d	
Module Topic	Module 5: Fractions as Numbers on the Number Line Topic D; Fractions on a Number Line	
Materials Needed:	 Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. Clever Access for i-Ready (see links and QR codes below) Paper, Pencil, Academic Packet including Problem Sets Scan ME Knowledge on the Go Videos 	

	Daily Lesson	Extension	Intervention
	(50 Minutes)	(10-15 minutes)	(10 minutes)
Day	Knowledge on the Go Video for	i-Ready	i-Ready
15	Module 5, Lesson 15	"Teacher Assigned"	"My Path"
		Lesson	Lesson
		<u>clever.com</u>	<u>clever.com</u>
Day	Knowledge on the Go Video for	i-Ready	i-Ready
16	Module 5, Lesson 16	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
17	Module 5, Lesson 17	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
18	Module 5, Lesson 18	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
19	Module 5, Lesson 19	"Teacher Assigned"	"My Path"
		Lesson	Lesson

Click on the Knowledge on the Go Lesson Materials Link or Scan the QR Reader Code in the Materials needed section, Scroll down and Click the Corresponding Module and Lesson. Problem sets are included in this academic packet.

Mathematical Fluencies:

	Lesson 15	
Standard	3.NF.A.2 3.NF.A.3.c	
Learning Target	Place any fraction on a number line with endpoints 0 and 1.	
Launch *	 Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 15. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos. 	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 15 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 15 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson15.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 16	
Standard	3.NF.A.2.b 3.NF.A.3.c	
Learning Target	Place whole number fractions and fractions between whole numbers on the number line.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 16. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 16 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 16 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 16.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 17	
Standard	3.NF.A.2.b 3.NF.A.3.c	
Learning Target	Practice placing various fractions on the number line.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 17. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 17 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 17 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 17.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 18	
Standard	3.NF.A.2.b 3.NF.A.3.d	
Learning Target	Compare fractions and whole numbers on the number line by reasoning about their distance from 0.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 18. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 18 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 18 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 18.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

	Lesson 19	
Standard	3.NF.A.1	
Learning	Build and write fractions greater than one whole using unit	
Target	fractions.	
Launch *	 Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 19. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos. 	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 19 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 19 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 19.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

5/11/20 to 5/15/20 Week 5 (5 days)		
Parents:Assist students with accessing the "Knowledge on the Go"videos, Problem Sets in this packet, and i-Ready through the Cleverapp.Also, monitor student's progress while working on the videosand/or online lessons.Students:Click or watch the "Knowledge on the Go" video eachday and complete the daily Problem Set.your learning path and complete Teacher-Assigned lessons.		
3.NF.A.3 3.NF.A.3.a 3.NF.A.3.b 3.NF.A.3.c		
Module 5: Fractions as Numbers on the Number Line Topic D; Equivalent Fractions		
 Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. Clever Access for i-Ready (see links and QR codes below) Paper, Pencil, Academic Packet including Problem Sets Clever Access for the Go Videos Scan ME Clever.com 		

	Daily Lesson	Extension	Intervention
	(50 Minutes)	(10-15 minutes)	(10 minutes)
Day	Knowledge on the Go Video for	i-Ready	i-Ready
20	Module 5, Lesson 20	"Teacher Assigned"	"My Path"
		Lesson	Lesson
		<u>clever.com</u>	<u>clever.com</u>
Day	Knowledge on the Go Video for	i-Ready	i-Ready
21	Module 5, Lesson 21	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
22	Module 5, Lesson 22	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
23	Module 5, Lesson 23	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
24	Module 5, Lesson 24	"Teacher Assigned"	"My Path"
		Lesson	Lesson

Click on the Knowledge on the Go Lesson Materials Link or Scan the QR Reader Code in the Materials needed section, Scroll down and Click the Corresponding Module and Lesson. Problem sets are included in this academic packet.

Mathematical Fluencies:

	Lesson 20	
Standard	3.NF.A.3.a	
Learning Target	Recognize and show that equivalent fractions have the same size, though not necessarily the same shape.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 20. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 20 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 20 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 20	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 21	
Standard	3.NF.A.3.a 3.NF.A.3.b 3.NF.A.3.c	
Learning Target	Recognize and show that equivalent fractions refer to the same point on the number line.	
Launch *	 Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 21. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos. 	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 21 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 21 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 21.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

	Lesson 22	
Standard	3.NF.A.3.a 3.NF.A.3.b	
Learning Target	Generate simple equivalent fractions by using visual fraction models and the number line.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 22. Go We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 22 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: e Module 5, Lesson 22 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 22.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 23	
Standard	3.NF.A.3.a 3.NF.A.3.b 3.NF.A.3.c	
Learning Target	Generate simple equivalent fractions by using visual fraction models and the number line.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 23. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 23 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 23 Problem Set	
Closing	Students will reflect and share their learning from Module 5, Lesson 23.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 24		
Standard	3.NF.A.3.a 3.NF.A.3.b 3.NF.A.3.c		
Learning Target	Express whole numbers as fractions and recognize equivalence with different units.		
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 24. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.		
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 24 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 24 Problem Set		
Closing	Students will reflect and share their learning from Module 5, Lesson 24.		
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.		
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		

5/18/20 to 5/22/20 Week 6 (5 days)				
Directions:	Parents:Assist students with accessing the "Knowledge on the Go" videos,Problem Sets in this packet, and i-Ready through the Clever app. Also,monitor student's progress while working on the videos and/or onlinelessons.Students:Click or watch the "Knowledge on the Go" video each day andcomplete the daily Problem Set. Visit i-ready to continue your learning pathand complete Teacher-Assigned lessons.			
Target Standard(s)	3.NF.A.3 3.NF.A.3.a 3.NF.A.3.b 3.NF.A.3.c			
Module Topic	Module 5: Fractions as Numbers on the Number Line Topic E: Equivalent Fractions Topic F: Comparison, Order and Size of Fractions			
Materials Needed:	 Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. Clever Access for i-Ready (see links and QR codes below) Paper, Pencil, Academic Packet including Problem Sets Scan ME Scan ME Clever.com 			

	Daily Lesson	Extension	Intervention
	(50 Minutes)	(10-15 minutes)	(10 minutes)
Day	Knowledge on the Go Video for	i-Ready	i-Ready
25	Module 5, Lesson 25	"Teacher Assigned"	"My Path"
		Lesson	Lesson
		<u>clever.com</u>	<u>clever.com</u>
Day	Knowledge on the Go Video for	i-Ready	i-Ready
26	Module 5, Lesson 26	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
27	Module 5, Lesson 27	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
28	Module 5, Lesson 28	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
29	Module 5, Lesson 29	"Teacher Assigned"	"My Path"
		Lesson	Lesson

Click on the Knowledge on the Go Lesson Materials Link or Scan the QR Reader Code in the Materials needed section, Scroll down and Click the Corresponding Module and Lesson. Problem sets are included in this academic packet.

Mathematical Fluencies:

Lesson 25					
Standard	3.NF.A.3.a 3.NF.A.3.c				
Learning	Express whole number fractions on the number line w				
Target	the unit interval is 1.				
Launch *	 Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 25. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos. 				
Guided Practice		Recommended: Students will complete the Problem Set for Module 5 , Lesson 25 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or ccessed here: <u>Module 5</u> , <u>Lesson 25 Problem Set</u>			
Closing	Students will reflect and share their learning from Module 5, Lesson 25.				
Extend		Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit <u>Clever.com</u> to access i-Ready.			
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.				
Mathematical Fluencies:

	Lesson 26		
Standard	3.NF.A.3.a 3.NF.A.3.c		
Learning Target	Decompose whole number fractions greater than 1 using whole number equivalence with various models.		
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 26. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.		
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 26 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 26 Problem Set		
Closing	Students will reflect and share their learning from Module 5, Lesson 26.		
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.		
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

Lesson 27			
Standard	3.NF.A.3.a 3.NF.A.3.b		
Learning Explain equivalence by manipulating units and reaso			
Target	about their size.		
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 27. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.		
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 27 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 27 Problem Set		
Closing	Students will reflect and share their learning from Module 5, Lesson 27.		
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.		
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		

Lesson 27

Mathematical Fluencies:

	Lesson 28		
Standard	3.NF.A.3.d		
Learning Target	Compare fractions with the same numerator pictorially.		
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 28. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.		
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 28 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 28 Problem Set		
Closing	Students will reflect and share their learning from Module 5, Lesson 28		
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.		
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		

Mathematical Fluencies:

	Lesson 29		
Standard	3.NF.A.3.d		
Learning Target	Compare fractions with the same numerator using <, >, or =, and use a model to reason about their size.		
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 29. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.		
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 29 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 29 Problem Set		
Closing	Students will reflect and share their learning from Module 5, Lesson 29.		
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		

Grade 3 Mathematics weekly distance learning student schedule

5/18/20 to 5/22/20 Week 7 (4 days)				
Directions:	Parents: Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. Students: Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.			
Target Standard(s)	3.NF.A.3 3.NF.A.3.a 3.NF.A.3.b 3.NF.A.3.c			
Module Topic	Module 5: Fractions as Numbers on the Number Line Topic F: Comparison, Order and Size of Fractions Module 6: Collecting and Displaying Data Topic A: Generate and Analyze Categorical Data			
Materials Needed:	 Iopic A: Generate and Analyze Categorical Data Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. Clever Access for i-Ready (see links and QR codes below) Paper, Pencil, Academic Packet including Problem Sets 			
	Knowledge on the Go Videos Clever.com Additional Resources			

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Day	Knowledge on the Go Video for	i-Ready	i-Ready
30	Module 5, Lesson 30	"Teacher Assigned"	"My Path"
		Lesson	Lesson
		<u>clever.com</u>	<u>clever.com</u>
Day	Knowledge on the Go Video for	i-Ready	i-Ready
31	Module 6, Lesson 1	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
32	Module 6, Lesson 2	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
33	Module 6, Lesson 3	"Teacher Assigned"	"My Path"
		Lesson	Lesson

Click on the Knowledge on the Go Lesson Materials Link or Scan the QR Reader Code in the Materials needed section, Scroll down and Click the Corresponding Module and Lesson. Problem sets are included in this academic packet.

Mathematical Fluencies:

Lesson 30			
Standard	33.NF.A.2.a		
Learning Target	Partition various wholes precisely into equal parts using a number line method.		
Launch *	 Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 30. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos. 		
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 30 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 5, Lesson 30 Problem Set		
Closing	Students will reflect and share their learning from Module 5, Lesson 30.		
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

	Lesson 31		
Standard	3.MD.B.3		
Learning Target	Generate and organize data.		
Launch *	 Recommended: Students will view the "Knowledge on the Go" video for Module 6, Lesson 1. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos. 		
Guided Practice	Recommended: Students will complete the Problem Set for Module 6, Lesson 1 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 6, Lesson 1 Problem Set		
Closing	Students will reflect and share their learning from Module 6, Lesson 1.		
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.		
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

	Lesson 32		
Standard	3.MD.B.3		
Learning Target	Rotate tape diagrams vertically.		
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 6, Lesson 2. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.		
Guided Practice	Recommended: Students will complete the Problem Set for Module 6, Lesson 2 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 6, Lesson 2 Problem Set		
Closing	Students will reflect and share their learning from Module 6, Lesson 2.		
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.		
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

	Lesson 33		
Standard	3.MD.B.3		
Learning Target	Create scaled bar graphs.		
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 6, Lesson 3. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.		
Guided Practice	Recommended: Students will complete the Problem Set for Module 6, Lesson 3 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 6, Lesson 3 Problem Set		
Closing	Students will reflect and share their learning from Module 6, Lesson 3.		
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.		
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.		

6/1/20 to 6/5/20 Week 8 (5 days)			
Directions:	Parents: Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. Students: Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.		
Target Standard(s)	3.NF.A.3 3.NF.A.3.a 3.NF.A.3.b 3.NF.A.3.c		
Module Topic	Module 6: Collecting and Displaying Data Topic A: Generate and Analyze Categorical Data		
Materials Needed:	 Topic B: Generate and Analyze Measurement Data Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. Clever Access for i-Ready (see links and QR codes below) Paper, Pencil, Academic Packet including Problem Sets 		
	Knowledge on the Go Videos Clever.com Additional Resources		

	Daily Lesson	Extension	Intervention
	(50 Minutes)	(10-15 minutes)	(10 minutes)
Day	Knowledge on the Go Video for	i-Ready	i-Ready
34	Module 6, Lesson 4	"Teacher Assigned"	"My Path"
		Lesson	Lesson
		<u>clever.com</u>	<u>clever.com</u>
Day	Knowledge on the Go Video for	i-Ready	i-Ready
35	Module 6, Lesson 5	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
36	Module 6, Lesson 6	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
37	Module 6, Lesson 7	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
38	Module 6, Lesson 8	"Teacher Assigned"	"My Path"
		Lesson	Lesson

Click on the Knowledge on the Go Lesson Materials Link or Scan the QR Reader Code in the Materials needed section, Scroll down and Click the Corresponding Module and Lesson. Problem sets are included in this academic packet.

Mathematical Fluencies:

	Lesson 34	
Standard	3.MD.B.3	
Learning Target	Solve one- and two-step problems involving graphs.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 6, Lesson 4. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 6, Lesson 4 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 6, Lesson 4 Problem Set	
Closing	Students will reflect and share their learning from Module 6, Lesson 4.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 35	
Standard	3.MD.B.4	
Learning Target	Create ruler with 1-inch, 1/2-inch, and 1/4-inch intervals, and generate measurement data.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 6, Lesson 5. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 6, Lesson 5 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 6, Lesson 5 Problem Set	
Closing	Students will reflect and share their learning from Module 6, Lesson 5.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

	Lesson 36	
Standard	3.MD.B.4	
Learning Target	Interpret measurement data from various line plots.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 6, Lesson 6. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 6, Lesson 6 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 6, Lesson 6 Problem Set	
Closing	Students will reflect and share their learning from Module 6, Lesson 6.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

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Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

	Lesson 37	
Standard	3.MD.B.4	
Learning Target	Represent measurement data with line plots.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 6, Lesson 7. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 6, Lesson 7 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 6, Lesson 7 Problem Set	
Closing	Students will reflect and share their learning from Module 6, Lesson 7.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 38	
Standard	3.MD.B.4	
Learning Target	Represent measurement data with line plots.	
Launch *	 Recommended: Students will view the "Knowledge on the Go" video for Module 6, Lesson 8. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos. 	
Guided Practice	Recommended: Students will complete the Problem Set for Module 6, Lesson 8 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 6, Lesson 8 Problem Set	
Closing	Students will reflect and share their learning from Module 6, Lesson 8.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

	6/8/20 to 6/12/20 Week 9 (5 days)
Directions:	<u>Parents:</u> Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons. <u>Students:</u> Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.
Target Standard(s)	3.OA.D.8
Module Topic	Module 7: Geometry and Measurement Word Problems Topic A: Solve word problems in varied contexts using a letter to represent the unknown.
Materials Needed:	 Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. Clever Access for i-Ready (see links and QR codes below) Paper, Pencil, Academic Packet including Problem Sets
	Knowledge on the Go Videos Clever.com Additional Resources

	Daily Lesson	Extension	Intervention
	(50 Minutes)	(10-15 minutes)	(10 minutes)
Day	Knowledge on the Go Video for	i-Ready	i-Ready
39	Module 6, Lesson 9	"Teacher Assigned"	"My Path"
		Lesson	Lesson
		<u>clever.com</u>	<u>clever.com</u>
Day	Knowledge on the Go Video for	i-Ready	i-Ready
40	Module 7, Lesson 1	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
41	Module 7, Lesson 2	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
42	Module 7, Lesson 3	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
43	Module 7, Lesson 4	"Teacher Assigned"	"My Path"
		Lesson	Lesson

Click on the Knowledge on the Go Lesson Materials Link or Scan the QR Reader Code in the Materials needed section, Scroll down and Click the Corresponding Module and Lesson. Problem sets are included in this academic packet.

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

	Lesson 39	
Standard	3.MD.B.4	
Learning Target	Analyze data to problem solve.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 6, Lesson 9 Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 6, Lesson 9 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 6, Lesson 9 Problem Set	
Closing	Students will reflect and share their learning from Module 6, Lesson 9.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

	Lesson 40	
Standard	3.OA.D.8	
Learning	Solve word problems in varied contexts using a letter to	
Target	represent the unknown.	
Launch *	 Recommended: Students will view the "Knowledge on the Go" video for Module 7, Lesson 1. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos. 	
Guided Practice	Recommended: Students will complete the Problem Set for Module 7, Lesson 1 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 7, Lesson 1 Problem Set	
Closing	Students will reflect and share their learning from Module 7, Lesson 1.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

	Lesson 41	
Standard	3.OA.D.8	
Learning	Solve word problems in varied contexts using a letter to	
Target	represent the unknown.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module7, Lesson 2. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 7, Lesson 2 from the "Knowledge on the Go" video along with the instructor. SCAN ME These are included in this academic packet or can be accessed here: Module 7, Lesson 2 Problem Set	
Closing	Students will reflect and share their learning from Module 7, Lesson 2.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Lesson 41

Mathematical Fluencies:

In Grade 3, students are expected to multiply/divide within 100 and by end of year, know from memory all products of two one-digit numbers. This is a great time to practice these skills.

	Lesson 42	
Standard	3.OA.D.8	
Learning Target	Share and critique peer solution strategies to varied word problems.	
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 7, Lesson 3. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.	
Guided Practice	Recommended: Students will complete the Problem Set for Module 7, Lesson 3 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 7, Lesson 3 Problem Set	
Closing	Students will reflect and share their learning from Module 7, Lesson 3.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

Lessen 10

Mathematical Fluencies:

	Lesson 43	
Standard	3.G.A.1	
Learning Target	Compare and classify quadrilaterals.	
Launch *	 Recommended: Students will view the "Knowledge on the Go" video for Module 7, Lesson 4. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos. 	
Guided Practice	Recommended: Students will complete the Problem Set for Module 7, Lesson 4 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 7, Lesson 4 Problem Set	
Closing	Students will reflect and share their learning from Module 7, Lesson 4.	
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.	
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.	

	6/15/20 to 6/19/20 Week 10 (4 days)				
Directions:	Parents: Assist students with accessing the "Knowledge on the Go" videos, Problem Sets in this packet, and i-Ready through the Clever app. Also, monitor student's progress while working on the videos and/or online lessons Students: Click or watch the "Knowledge on the Go" video each day and complete the daily Problem Set. Visit i-ready to continue your learning path and complete Teacher-Assigned lessons.				
Target Standard(s)	3.G.A.1				
Module Topic	Module 7: Geometry and Measurement Word Problems Topic B: Attributes of Two-Dimensional Figures				
Materials Needed:	 Access to Knowledge on the Go Lesson Videos & Resources including Templates & Homework Helpers which provide guidance with worked examples for each lesson. Clever Access for i-Ready (see links and QR codes below) Paper, Pencil, Academic Packet including Problem Sets 				
	Image: Scan ME Image: Scan ME Knowledge on the Go Videos Clever.com				

	Daily Lesson (50 Minutes)	Extension (10-15 minutes)	Intervention (10 minutes)
Day	Knowledge on the Go Video for	i-Ready	i-Ready
44	Module 7, Lesson 5	"Teacher Assigned"	"My Path"
		Lesson	Lesson
		<u>clever.com</u>	<u>clever.com</u>
Day	Knowledge on the Go Video for	i-Ready	i-Ready
45	Module 7, Lesson 6	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
46	Module 7, Lesson 7	"Teacher Assigned"	"My Path"
		Lesson	Lesson
Day	Knowledge on the Go Video for	i-Ready	i-Ready
47	Module 7, Lesson 8	"Teacher Assigned"	"My Path"
		Lesson	Lesson

Click on the Knowledge on the Go Lesson Materials Link or Scan the QR Reader Code in the Materials needed section, Scroll down and Click the Corresponding Module and Lesson. Problem sets are included in this academic packet.

Mathematical Fluencies:

	Lesson 44
Standard	3.G.A.1
Learning Target	Express whole number fractions on the number line when the unit interval is 1.
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 25. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 25 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 7, Lesson 5 Problem Set
Closing	Students will reflect and share their learning from Module 5, Lesson 25.
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.

Mathematical Fluencies:

	Lesson 45
Standard	3.G.A.1
Learning Target	Decompose whole number fractions greater than 1 using whole number equivalence with various models.
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 26. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 26 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 7, Lesson 6 Problem Set
Closing	Students will reflect and share their learning from Module 5, Lesson 26.
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.

Mathematical Fluencies:

	Lesson 46
Standard	3.G.A.1
Learning Target	Explain equivalence by manipulating units and reasoning about their size.
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 5, Lesson 27. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	Recommended: Students will complete the Problem Set for Module 5, Lesson 27 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 7, Lesson 7 Problem Set
Closing	Students will reflect and share their learning from Module 5, Lesson 27.
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.

Mathematical Fluencies:

	Lesson 47
Standard	3.G.A.1
Learning Target	Create a tangram puzzle and observe relationships among the shapes.
Launch *	Recommended: Students will view the "Knowledge on the Go" video for Module 7, Lesson 8. Scan the Knowledge on the Go QR code or click the link to access the videos We encourage parents to assist students with accessing and engaging with the "Knowledge on the Go" videos.
Guided Practice	Recommended: Students will complete the Problem Set for Module 7, Lesson 8 from the "Knowledge on the Go" video along with the instructor. These are included in this academic packet or can be accessed here: Module 7, Lesson 8 Problem Set
Closing	Students will reflect and share their learning from Module 7, Lesson 8.
Extend	Recommended: Students will complete the "Teacher Assigned" lesson in i-Ready. Visit Clever.com to access i-Ready.
Intervention	Recommended : Students will work on their individual Learning Path (My Path) in i-Ready. Visit <u>Clever.com</u> to access i-Ready.

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Measure the length of your math book using a ruler in inches. Then measure it again in centimeters.

a. Which is a larger unit, an inch or a centimeter?

b. Which would yield a greater number when measuring the math book, inches or centimeters?



Draw

Write



Lesson 1: Specify and partition a whole into equal parts, identifying and counting unit fractions using concrete models.

c. Measure at least 2 different items in both inches and centimeters. What do you notice?

Read

Draw

Write

Lesson 1:

Specify and partition a whole into equal parts, identifying and counting unit fractions using concrete models.

Name	Date	

Lesson 1 Problem Set

3•5

1. A beaker is considered full when the liquid reaches the fill line shown near the top. Estimate the amount of water in the beaker by shading the drawing as indicated. The first one is done for you.



2. Juanita cut her string cheese into equal pieces as shown in the rectangles below. In the blanks below, name the fraction of the string cheese represented by the shaded part.





A STORY OF UNITS

- 3. a. In the space below, draw a small rectangle. Estimate to split it into 2 equal parts. How many lines did you draw to make 2 equal parts? What is the name of each fractional unit?
 - b. Draw another small rectangle. Estimate to split it into 3 equal parts. How many lines did you draw to make 3 equal parts? What is the name of each fractional unit?
 - c. Draw another small rectangle. Estimate to split it into 4 equal parts. How many lines did you draw to make 4 equal parts? What is the name of each fractional unit?
- 4. Each rectangle represents 1 sheet of paper.
 - a. Estimate to show how you would cut the paper into fractional units as indicated below.



- b. What do you notice? How many lines do you think you would draw to make a rectangle with 20 equal parts?
- 5. Rochelle has a strip of wood 12 inches long. She cuts it into pieces that are each 6 inches in length. What fraction of the wood is one piece? Use your strip from the lesson to help you. Draw a picture to show the piece of wood and how Rochelle cut it.



Anu needs to cut a piece of paper into 6 equal parts. Draw at least 3 pictures to show how Anu can cut her paper so that all the parts are equal.

	R	ead	Draw	Write	
EUREKA MATH	© 2018 Great Min		partition a whole into equa t fractions by folding fraction		9

Ν	а	m	e

Date _____

1. Circle the strips that are folded to make equal parts.



2.

a. There are ______ equal parts in all. ______ are shaded.

b. There are ______ equal parts in all. _____ are shaded.

c. There are ______ equal parts in all. ______ are shaded.

d. There are ______ equal parts in all. ______ are shaded.



Lesson 2: Specify and partition a whole into equal parts, identifying and counting unit fractions by folding fraction strips.

Use your fraction strips as tools to help you solve the following problems.

3. Noah, Pedro, and Sharon share a whole candy bar fairly. Which of your fraction strips shows how they each get an equal part? Draw the candy bar below. Then, label Sharon's fraction of the candy bar.

- 4. To make a garage for his toy truck, Zeno bends a rectangular piece of cardboard in half. He then bends each half in half again. Which of your fraction strips best matches this story?
 - a. What fraction of the original cardboard is each part? Draw and label the matching fraction strip below.

b. Zeno bends a different piece of cardboard in thirds. He then bends each third in half again. Which of your fraction strips best matches this story? Draw and label the matching fraction strip in the space below.



Marcos has a 1-liter jar of milk to share with his mother, father, and sister. Draw a picture to show how Marcos must share the milk so that everyone gets the same amount. What fraction of the milk does each person get?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 3:		partition a whole into equal parts, identifying and t fractions by drawing pictorial area models.		15
	© 2018 Great Mir				

Name	Date

A STORY OF UNITS

Lesson 3 Problem Set

3•5

1. Each shape is a whole divided into equal parts. Name the fractional unit, and then count and tell how many of those units are shaded. The first one is done for you.

Fourths	 	
2 fourths are shaded.	 	

2. Circle the shapes that are divided into equal parts. Write a sentence telling what *equal parts* means.



3. Each shape is 1 whole. Estimate to divide each into 4 equal parts. Name the fractional unit below.


4. Each shape is 1 whole. Divide and shade to show the given fraction.



5. Each shape is 1 whole. Estimate to divide each into equal parts (do not draw fourths). Divide each whole using a different fractional unit. Write the name of the fractional unit on the line below the shape.



6. Charlotte wants to equally share a candy bar with 4 friends. Draw Charlotte's candy bar. Show how she can divide her candy bar so everyone gets an equal share. What fraction of the candy bar does each person receive?

Each person receives _____

Specify and partition a whole into equal parts, identifying and counting unit fractions by drawing pictorial area models.



Mr. Ramos sliced an orange into 8 equal pieces. He ate 1 slice. Draw a picture to represent the 8 slices of an orange. Shade in the slice Mr. Ramos ate. What fraction of the orange did Mr. Ramos eat? What fraction did he not eat?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 4:	Represent an	nd identify fractional parts	of different wholes.	21
MATH®	© 2018 Great Min	ds®. eureka-math.org			

Name	Date	

1. Draw a picture of the yellow strip at 3 (or 4) different stations. Shade and label 1 fractional unit of each.

2. Draw a picture of the brown bar at 3 (or 4) different stations. Shade and label 1 fractional unit of each.

3. Draw a picture of the square at 3 (or 4) different stations. Shade and label 1 fractional unit of each.



4. Draw a picture of the clay at 3 (or 4) different stations. Shade and label 1 fractional unit of each.

5. Draw a picture of the water at 3 (or 4) different stations. Shade and label 1 fractional unit of each.

6. Extension: Draw a picture of the yarn at 3 (or 4) different stations.



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Ms. Browne cut a 6-meter rope into 3 equal-size pieces to make jump ropes. Mr. Ware cut a 5-meter rope into 3 equal size pieces to make jump ropes. Which class has longer jump ropes?

Extension: How long are the jump ropes in Ms. Browne's class?



Draw

Write



Lesson 5: Partition a whole into equal parts and define the equal parts to identify the unit fraction numerically.

Name ______

Date _____

1. Fill in the chart. Each image is one whole.

	Total Number of Equal Parts	Total Number of Equal Parts Shaded	Unit Form	Fraction Form
a.				
b.				
c.				
d.				
e.				
f.				



2. Andre's mom baked his 2 favorite cakes for his birthday party. The cakes were the exact same size. Andre cut his first cake into 8 pieces for him and his 7 friends. The picture below shows how he cut it. Did Andre cut the cake into eighths? Explain your answer.



3. Two of Andre's friends came late to his party. They decide they will all share the second cake. Show how Andre can slice the second cake so that he and his nine friends can each get an equal amount with none leftover. What fraction of the second cake will they each receive?



4. Andre thinks it's strange that $\frac{1}{10}$ of the cake would be less than $\frac{1}{8}$ of the cake since ten is bigger than eight. To explain to Andre, draw 2 identical rectangles to represent the cakes. Show 1 tenth shaded on one and 1 eighth shaded on the other. Label the unit fractions and explain to him which slice is bigger.



Chloe's dad partitions his garden into 4 equal-sized sections to plant tomatoes, squash, peppers, and cucumbers. What fraction of the garden is available for growing tomatoes?

Extension: Chloe talked her dad into planting beans and lettuce, too. He used equal-sized sections for all the vegetables. What fraction do the tomatoes have now?



Draw

Write



Lesson 6: Build non-unit fractions less than one whole from unit fractions.

A C	TODY	0		1.1.77	~
AS	TORY	OF	Ur	111	2

Neree	Data
Name	Date

1. Complete the number sentence. Estimate to partition each strip equally, write the unit fraction inside each unit, and shade the answer.

Sample:

	2
2 thirds =	—
	3

1	1	1
3	3	3

a. 3 fourths =

b.	z	sevenths =
υ.	2	Seventis –

с.	4 fifths =	

d. 2 sixths =

1		

- 2. Mr. Stevens bought 8 liters of soda for a party. His guests drank 1 liter.
 - a. What fraction of the soda did his guests drink?

b. What fraction of the soda was left?



3. Fill in the chart.

	Total Number of Equal Parts	Total Number of Shaded Equal Parts	Unit Fraction	Fraction Shaded
Sample:	4	3	$\frac{1}{4}$	$\frac{3}{4}$
a.				
b.				
C.				
d.				
e.				



Robert ate half of the applesauce in a container. He split the remaining applesauce equally into 2 bowls for his mother and sister. Robert said, "I ate 1 half, and each of you gets 1 half." Is Robert right? Draw a picture to prove your answer.

Extension:

1. What fraction of the applesauce did his mother get?



Draw

Write



Lesson 7: Identify and represent shaded and non-shaded parts of one whole as fractions.

2. What fraction of the applesauce did Robert's sister eat?

Read

Draw

Write

40

Identify and represent shaded and non-shaded parts of one whole as fractions.



A STORY OF UNITS	Lesson 7 Problem Set 3•
Name	Date
Whisper the fraction of the shape that is shaded. Then, match 1.	n the shape to the amount that is <u>not</u> shaded.
2.	 2 thirds
	 6 sevenths
3.	 4 fifths
4.	 8 ninths
5.	 1 half
6.	 5 sixths
7.	 7 eighths
8.	 3 fourths



Lesson 7:

9. a. How many eighths are in 1 whole?

b. How many ninths are in 1 whole?

c. How many twelfths are in 1 whole?

10. Each strip represents 1 whole. Write a fraction to label the shaded and unshaded parts.



11. Avanti read 1 sixth of her book. What fraction of the book has she not read yet?



For breakfast, Mr. Schwartz spent 1 sixth of his money on a coffee and 1 sixth of his money on a bagel. What fraction of his money did Mr. Schwartz spend on breakfast?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 8:	Represent pa	irts of one whole as fractio	ns with number bonds.	45
MATH	© 2018 Great Mir	nds® eureka-math.org			

Name _____

Date

Show a number bond representing what is shaded and unshaded in each of the figures. Draw a different visual model that would be represented by the same number bond.

Sample:





1.







4.





5. Draw a number bond with 2 parts showing the shaded and unshaded fractions of each figure. Decompose both parts of the number bond into unit fractions.



6. The chef put $\frac{1}{4}$ of the ground beef on the grill to make one hamburger and put the rest in the refrigerator. Draw a 2-part number bond showing the fraction of the ground beef on the grill and the fraction in the refrigerator. Draw a visual model of all the ground beef. Shade what is in the refrigerator.

- a. What fraction of the ground beef was in the refrigerator?
- b. How many more hamburgers can the chef make if he makes them all the same size as the first one?
- c. Show the refrigerated ground beef broken into unit fractions on your number bond above.



Julianne's friendship bracelet had 8 beads. When it broke, the beads fell off. She could only find 1 bead. To fix her bracelet, what fraction of the beads does she need to buy?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 9:	Build and wri	te fractions greater than o	ne whole using unit fractions.	51
MATH	© 2018 Great Mir	nds®. eureka-math.org			

Name _____

Date _____

1. Each figure represents 1 whole. Fill in the chart.

	Unit Fraction	Total Number of Units Shaded	Fraction Shaded
a. Sample:	$\frac{1}{2}$	5	5 2
b.			
C.			
d.			
e.			
f.			



2. Estimate to draw and shade units on the fraction strips. Solve. Sample:



- 3. Mrs. Jawlik baked 2 pans of brownies. Draw the pans and estimate to partition each pan into 8 equal pieces.
 - a. Mrs. Jawlik's children gobbled up 10 pieces. Shade the amount that was eaten.
 - b. Write a fraction to show how many pans of brownies her children ate.

Sarah makes soup. She divides each batch equally into thirds to give away. Each family that she makes soup for gets 1 third of a batch. Sarah needs to make enough soup for 5 families. How much soup does Sarah give away? Write your answer in terms of batches.

Extension: What fraction will be left over for Sarah?



Draw

Write



Lesson 10: Compare unit fractions by reasoning about their size using fraction strips.

Α	STO)RY	OF	UN	ITS

Name	Date	

1. Each fraction strip is 1 whole. All the fraction strips are equal in length. Color 1 fractional unit in each strip. Then, answer the questions below.



2. Circle less than or greater than. Whisper the complete sentence.





3. Lily needs $\frac{1}{3}$ cup of oil and $\frac{1}{4}$ cup of water to make muffins. Will Lily use more oil or more water? Explain your answer using pictures, numbers, and words.

4. Use >, <, or = to compare.



5. Your friend Eric says that $\frac{1}{6}$ is greater than $\frac{1}{5}$ because 6 is greater than 5. Is Eric correct? Use words and pictures to explain what happens to the size of a unit fraction when the number of parts gets larger.



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Rachel, Silvia, and Lola each received the same homework assignment and only completed part of it. Rachel completed $\frac{1}{6}$ of her homework, Silvia completed $\frac{1}{2}$ of her homework, and Lola completed $\frac{1}{4}$ of her homework. Write the amount of homework each girl completed from least to greatest. Draw a picture to prove your answer.

	Re	ead	Draw	Write	
EUREKA MATH	Lesson 11:	Compare uni whole.	t fractions with different-s	ized models representing the	63
	© 2018 Great Mine	ds®. eureka-math.org			

Name _____

Date _____

Label the unit fraction. In each blank, draw and label the same whole with a shaded unit fraction that makes the sentence true. There is more than 1 correct way to make the sentence true.

Sample: $\frac{1}{4}$	is less than	$\frac{1}{2}$
1.	is greater than	
2.	is less than	
3.	is greater than	
4.	is less than	





8. Fill in the blank with a fraction to make the statement true, and draw a matching model.



9. Robert ate $\frac{1}{2}$ of a small pizza. Elizabeth ate $\frac{1}{4}$ of a large pizza. Elizabeth says, "My piece was larger than yours, so that means $\frac{1}{4} > \frac{1}{2}$." Is Elizabeth correct? Explain your answer.



10. Manny and Daniel each ate $\frac{1}{2}$ of his candy, as shown below. Manny said he ate more candy than Daniel because his half is longer. Is he right? Explain your answer.

Manny's Candy Bar



Daniel's Candy Bar





Jennifer hid half of her birthday money in the dresser drawer. The other half she put in her jewelry box. If she hid \$8 in the drawer, how much money did she get for her birthday?

	R	ead	Draw	Write	
EUREKA	Lesson 12:	Specify the c	orresponding whole when	presented with one equal part.	71
MATH	© 2018 Great Min	ds®. eureka-math.org			

Name _____ Date _____

For each of the following:

- Draw a picture of the designated unit fraction copied to make at least two different wholes.
- Label the unit fractions.
- Label the whole as 1.
- Draw at least one number bond that matches a drawing.





1. Yellow strip

2. Brown strip



3. Orange square

4. Yarn

5. Water

6. Clay



Davis wants to make a picture using 9 square tiles. What fraction of the picture does 1 tile represent? Draw 3 different ways Davis could make his picture.

	Re	ead	Draw	Write	
EUREKA MATH	Lesson 13: © 2018 Great Mind		aded fractional part in diffe of the whole.	erent ways depending on the	77

Name ______

Date _____





Lesson 13: Identify a shaded fractional part in different ways depending on the designation of the whole.

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6. Use the diagram below to complete the following statements.

Rope A	<u></u>
Rope B	
Rope C	

- a. Rope _____ is $\frac{1}{2}$ the length of Rope B.
- b. Rope _____ is $\frac{1}{2}$ the length of Rope A.
- c. Rope C is $\frac{1}{4}$ the length of Rope _____.
- d. If Rope B measures 1 m long, then Rope A is _____ m long, and Rope C is _____ m long.
- e. If Rope A measures 1 m long, Rope B is _____ m long, and Rope C is _____ m long.
- 7. Ms. Fan drew the figure below on the board. She asked the class to name the shaded fraction. Charlie answered $\frac{3}{4}$. Janice answered $\frac{3}{2}$. Jenna thinks they're both right. With whom do you agree? Explain your thinking.





Mr. Ray is knitting a scarf. He says that he has completed 1 fifth of the total length of the scarf. Draw a picture of the final scarf. Label what he has finished and what he still has to make. Draw a number bond with 2 parts to show the fraction he has made and the fraction he has not made.

	R	ead	Draw	Write	
EUREKA MATH	Lesson 14:	Place fractior	ns on a number line with e	ndpoints 0 and 1.	83
MATH®	© 2018 Great Min	ds®. eureka-math.org			

Name

Date _____

1. Draw a number bond for each fractional unit. Partition the fraction strip to show the unit fractions of the number bond. Use the fraction strip to help you label the fractions on the number line. Be sure to label the fractions at 0 and 1.

←

0

a. Halves



b. Thirds





c. Fourths





d. Fifths







Lesson 14: Place fractions on a number line with endpoints 0 and 1.

≻

1

2. Trevor needs to let his puppy outside every quarter (1 fourth) hour to potty train him. Draw and label a number line from 0 hours to 1 hour to show every 1 fourth hour. Include 0 fourths and 4 fourths hour. Label 0 hours and 1 hour, too.

3. A ribbon is 1 meter long. Mrs. Lee wants to sew a bead every $\frac{1}{5}$ meter. The first bead is at $\frac{1}{5}$ meter. The last bead is at 1 meter. Draw and label a number line from 0 meters to 1 meter to show where Mrs. Lee will sew beads. Label all the fractions, including 0 fifths and 5 fifths. Label 0 meters and 1 meter, too.


In baseball, it is about 30 yards from home plate to first base. The batter got tagged out about halfway to first base. About how many yards from home plate was he when he got tagged out? Draw a number line to show the point where he was when he got tagged out.

	R	ead	Draw	Write	
EUREKA MATH	Lesson 15:	Place any frac	ction on a number line wit	h endpoints 0 and 1.	89
MATH	© 2018 Great Mind	ds®. eureka-math.org			

Name	Date	

1. Estimate to label the given fractions on the number line. Be sure to label the fractions at 0 and 1. Write the fractions above the number line. Draw a number bond to match your number line.





2. Draw a number line. Use a fraction strip to locate 0 and 1. Fold the strip to make 8 equal parts. Use the strip to measure and label your number line with eighths.

Count up from 0 eighths to 8 eighths on your number line. Touch each number with your finger as you count.

3. For his boat, James stretched out a rope with 5 equally spaced knots as shown.

• • • • • •

- a. Starting at the first knot and ending at the last knot, how many equal parts are formed by the 5 knots? Label each fraction at the knot.
- b. What fraction of the rope is labeled at the third knot?
- c. What if the rope had 6 equally spaced knots along the same length? What fraction of the rope would be measured by the first 2 knots?



Hannah bought 1 yard of ribbon to wrap 4 small presents. She wants to cut the ribbon into equal parts. Draw and label a number line from 0 yards to 1 yard to show where Hannah will cut the ribbon. Label all the fractions, including 0 fourths and 4 fourths. Also, label 0 yards and 1 yard.

Read

Draw

Write



Lesson 16: Place whole number fractions and fractions between whole numbers on the number line.

Δ	ST	ORY	OF	UP	JITS	
	· · ·	U	<u> </u>	<u> </u>		

Name _	Date	

1. Estimate to equally partition and label the fractions on the number line. Label the wholes as fractions, and box them. The first one is done for you.



on the number line.

2. Partition each whole into fifths. Label each fraction. Count up as you go. Box the fractions that are located at the same points as whole numbers.



3. Partition each whole into thirds. Label each fraction. Count up as you go. Box the fractions that are located at the same points as whole numbers.

<u>_</u> '	1	I	· 、
1	2	3	4

4. Draw a number line with endpoints 0 and 3. Label the wholes. Partition each whole into fourths. Label all the fractions from 0 to 3. Box the fractions that are located at the same points as whole numbers. Use a separate paper if you need more space.



Sammy sees a black line at the bottom of the pool stretching from one end to the other. She wonders how long it is. The black line is the same length as 9 concrete slabs that make the sidewalk at the edge of the pool. One concrete slab is 5 meters long. What is the length of the black line at the bottom of the pool?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 17:	Practice placi	ng various fractions on the	e number line.	101
MATH	© 2018 Great Min	ds®. eureka-math.org			





4. For a measurement project in math class, students measured the lengths of their pinky fingers. Alex's measured 2 inches long. Jerimiah's pinky finger was $\frac{7}{4}$ inches long. Whose finger is longer? Draw a number line to help prove your answer.

5. Marcy ran 4 kilometers after school. She stopped to tie her shoelace at $\frac{7}{5}$ kilometers. Then, she stopped to switch songs on her iPod at $\frac{12}{5}$ kilometers. Draw a number line showing Marcy's run. Include her starting and finishing points and the 2 places where she stopped.



Third-grade students are growing peppers. The student with the longest pepper wins the Green Thumb award. Jackson's pepper measured 3 inches long. Drew's measured $\frac{10}{4}$ inches long. Who won the award? Draw a number line to help prove your answer.

	R	ead	Draw	Write	
EUREKA MATH	Lesson 18:		ctions and whole numbers out their distance from 0.	on the number line by	107
MAIH	© 2018 Great Min	reat Minds®. eureka-math.org			

Name _____ Date _____

Place the two fractions on the number line. Circle the fraction with the distance closest to 0. Then, compare using >, <, or =. The first problem is done for you.





Lesson 18: Compare fractions and whole numbers on the number line by reasoning about their distance from 0.

109

6. JoAnn and Lupe live straight down the street from their school. JoAnn walks $\frac{5}{6}$ miles and Lupe walks $\frac{7}{8}$ miles home from school every day. Draw a number line to model how far each girl walks. Who walks the least? Explain how you know using pictures, numbers, and words.

7. Cheryl cuts 2 pieces of thread. The blue thread is $\frac{5}{4}$ meters long. The red thread is $\frac{4}{5}$ meters long. Draw a number line to model the length of each piece of thread. Which piece of thread is shorter? Explain how you know using pictures, numbers, and words.

8. Brandon makes homemade spaghetti. He measures 3 noodles. One measures $\frac{7}{8}$ feet, the second is $\frac{7}{4}$ feet, and the third is $\frac{4}{2}$ feet long. Draw a number line to model the length of each piece of spaghetti. Write a number sentence using <, >, or = to compare the pieces. Explain using pictures, numbers, and words.

110



Thomas has 2 sheets of paper. He wants to punch 4 equally spaced holes along the edge of each sheet. Draw Thomas's 2 sheets of paper next to each other so the ends meet. Label a number line from 0 at the start of his first paper to 2 at the end of his second paper. Show Thomas where to hole-punch his papers and label the fractions. What fraction is labeled at the eighth hole?

	Re	ead	Draw	Write	
EUREKA MATH	Lesson 19:	comparing fr	actions. (Optional)	e number line as strategies for	113
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A STORY OF UNITS

Name

Date _____

1. Divide each number line into the given fractional unit. Then, place the fractions. Write each whole as a fraction.



2. Use the number lines above to compare the following fractions using >, <, or =.





Lesson 19: Understand distance and position on the number line as strategies for comparing fractions. (Optional)

3. Choose a *greater than* comparison you made in Problem 2. Use pictures, numbers, and words to explain how you made that comparison.

4. Choose a *less than* comparison you made in Problem 2. Use pictures, numbers, and words to explain a different way of thinking about the comparison than what you wrote in Problem 3.

5. Choose an *equal to* comparison you made in Problem 2. Use pictures, numbers, and words to explain two ways that you can prove your comparison is true.



Max ate $\frac{2}{3}$ of his pizza for lunch. He wanted to eat a small snack in the afternoon, so he cut the leftover pizza in half and ate 1 slice. How much of the pizza was left? Draw a picture to help you think about the pizza.

	R	ead	Draw	Write	
EUREKA MATH	Lesson 20:	0	nd show that equivalent frances are shape to the same same shape to the same same same same same same same sam	ictions have the same size,	119
MATH	© 2018 Great Min	ds®. eureka-math.org			

Name	Date

1. Label what fraction of each shape is shaded. Then, circle the fractions that are equal.



2. Label the shaded fraction. Draw 2 different representations of the same fractional amount.



though not necessarily the same shape.

3. Ann has 6 small square pieces of paper. 2 squares are grey. Ann cuts the 2 grey squares in half with a diagonal line from one corner to the other.

- a. What shapes does she have now?
- b. How many of each shape does she have?
- c. Use all the shapes with no overlaps. Draw at least 2 different ways Ann's set of shapes might look. What fraction of the figure is grey?

4. Laura has 2 different beakers that hold exactly 1 liter. She pours $\frac{1}{2}$ liter of blue liquid into Beaker A. She pours $\frac{1}{2}$ liter of orange liquid into Beaker B. Susan says the amounts are not equal. Cristina says they are. Explain who you think is correct and why.



Lesson 20:

Recognize and show that equivalent fractions have the same size, though not necessarily the same shape.



Dorothea is training to run a 2-mile race. She marks off her starting point and the finish line. To track her progress, she places a mark at 1 mile. She then places a mark halfway between her starting position and 1 mile, and another mark halfway between 1 mile and the finish line.

a. Draw and label a number line to show the points Dorothea marks along her run.

b. What fractional unit does Dorothea make as she marks the points on her run?



Draw

Write



Lesson 21: Recognize and show that equivalent fractions refer to the same point on the number line.

A STORY OF UNITS

Name	Date

1. Use the fractional units on the left to count up on the number line. Label the missing fractions on the blanks.



- 2. Use the number lines above to:
 - Color fractions equal to 1 half blue.
 - Color fractions equal to 1 yellow.
 - Color fractions equal to 3 halves green.
 - Color fractions equal to 2 red.
- 3. Use the number lines above to make the number sentences true.





Lesson 21: Recognize and show that equivalent fractions refer to the same point on the number line.

4. Jack and Jill use rain gauges the same size and shape to measure rain on the top of a hill. Jack uses a rain gauge marked in fourths of an inch. Jill's gauge measures rain in eighths of an inch. On Thursday, Jack's gauge measured $\frac{2}{4}$ inches of rain. They both had the same amount of water, so what was the reading on Jill's gauge Thursday? Draw a number line to help explain your thinking.

5. Jack and Jill's baby brother Rosco also had a gauge the same size and shape on the same hill. He told Jack and Jill that there had been $\frac{1}{2}$ inch of rain on Thursday. Is he right? Why or why not? Use words and a number line to explain your answer.

128



Mr. Ramos wants to put a wire on the wall. He puts 9 nails equally spaced along the wire. Draw a number line representing the wire. Label it from 0 at the start of the wire to 1 at the end. Mark each fraction where Mr. Ramos puts each nail.

a. Build a number bond with unit fractions to 1 whole.

b. Write the fraction of the nail that is equivalent to $\frac{1}{2}$ of the wire.



Draw

Write



Lesson 22: Generate simple equivalent fractions by using visual fraction models and the number line.

Name _____

Date _____

1. Write the shaded fraction of each figure on the blank. Then, draw a line to match the equivalent fractions.





Lesson 22: Generate simple equivalent fractions by using visual fraction models and the number line.

2. Write the missing parts of the fractions.



3. Why does it take 2 copies of $\frac{1}{8}$ to show the same amount as 1 copy of $\frac{1}{4}$? Explain your answer in words and pictures.

4. How many sixths does it take to make the same amount as $\frac{1}{3}$? Explain your answer in words and pictures.

5. Why does it take 10 copies of 1 sixth to make the same amount as 5 copies of 1 third? Explain your answer in words and pictures.

134



Shannon stood at the end of a 100-meter long soccer field and kicked the ball to her teammate. She kicked it 20 meters. The commentator said she kicked it a quarter of the way down the field. Is that true? If not, what fraction should the commentator have said? Prove your answer by using a number line.

	R	ead	Draw	Write	
EUREKA MATH	Lesson 23:	Generate simple equivalent fractions by using visual fraction models and the number line.			137
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Date	
+ +	
-	Date 2 3

- 1. On the number line above, use a red colored pencil to divide each whole into fourths, and label each fraction above the line. Use a fraction strip to help you estimate, if necessary.
- 2. On the number line above, use a blue colored pencil to divide each whole into eighths, and label each fraction below the line. Refold your fraction strip from Problem 1 to help you estimate.
- 3. List the fractions that name the same place on the number line.

4. Using your number line to help, what red fraction and what blue fraction would be equal to $\frac{7}{2}$? Draw the part of the number line below that would include these fractions, and label it.



5. Write two different fractions for the dot on the number line. You may use halves, thirds, fourths, fifths, sixths, or eighths. Use fraction strips to help you, if necessary.



6. Cameron and Terrance plan to run in the city race on Saturday. Cameron has decided that he will divide his race into 3 equal parts and will stop to rest after running 2 of them. Terrance divides his race into 6 equal parts and will stop and rest after running 2 of them. Will the boys rest at the same spot in the race? Why or why not? Draw a number line to explain your answer.



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The zipper on Robert's jacket is 1 foot long. It breaks on the first day of winter. He can only zip it $\frac{8}{12}$ of the way before it gets stuck. Draw and label a number line to show how far Robert can zip

his jacket.

a. Divide and label the number line in thirds. What fraction of the way can he zip his jacket in thirds?

b. What fraction of Robert's jacket is not zipped? Write your answer in twelfths and thirds.



Draw

Write



Lesson 24: Express whole numbers as fractions and recognize equivalence with different units.

	А	STO	RY	OF	UNITS	
--	---	-----	----	----	-------	--

Name	Date	

1. Complete the number bond as indicated by the fractional unit. Partition the number line into the given fractional unit, and label the fractions. Rename 0 and 1 as fractions of the given unit. The first one is done for you.





2. Circle all the fractions in Problem 1 that are equal to 1. Write them in a number sentence below.

<u>2</u> = _____ = ____ = _____

3. What pattern do you notice in the fractions that are equivalent to 1?

4. Taylor took his little brother to get pizza. Each boy ordered a small pizza. Taylor's pizza was cut in fourths, and his brother's was cut in thirds. After they had both eaten all of their pizza, Taylor's little brother said, "Hey that was no fair! You got more than me! You got 4 pieces, and I only got 3."

Should Taylor's little brother be mad? What could you say to explain the situation to him? Use words, pictures, or a number line.

146



Lincoln drinks 1 eighth gallon of milk every morning.

a. How many days will it take Lincoln to drink 1 gallon of milk? Use a number line and words to explain your answer.

b. How many days will it take Lincoln to drink 2 gallons? Extend your number line to show2 gallons, and use words to explain your answer.



Draw

Write



Lesson 25: Express whole number fractions on the number line when the unit interval is 1.

Name _____

Date _____

1. Label the following models as a fraction inside the dotted box. The first one has been done for you.





Lesson 25: Express whole number fractions on the number line when the unit interval is 1.

2. Fill in the missing whole numbers in the boxes below the number line. Rename the whole numbers as fractions in the boxes above the number line.



3. Explain the difference between these two fractions with words and pictures.

$$\frac{2}{1}$$
 $\frac{2}{2}$



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3 wholes





6 wholes



Antonio works on his project for 4 thirds hours. His mom tells him that he must spend another 2 thirds of an hour on it. Draw a number bond and number line with copies of thirds to show how long Antonio needs to work altogether. Write the amount of time Antonio needs to work altogether as a whole number.

	R	ead	Draw	Write	
EUREKA MATH	Lesson 26:	Decompose whole number fractions greater than 1 using whole number equivalence with various models.			159
MAIH	© 2018 Great Minds [®] . eureka-math.org				
A STORY OF UNITS

Name _____ Date _____

1. Partition the number line to show the fractional units. Then, draw number bonds using copies of 1 whole for the circled whole numbers.





Lesson 26: Decompose whole number fractions greater than 1 using whole number equivalence with various models.

- 2. Write the fractions that name the whole numbers for each fractional unit. The first one has been done.

- 3. Sammy uses $\frac{1}{4}$ meter of wire each day to make things.
 - a. Draw a number line to represent 1 meter of wire. Partition the number line to represent how much Sammy uses each day. How many days does the wire last?
 - b. How many days will 3 meters of wire last?
- 4. Cindy feeds her dog $\frac{1}{3}$ pound of food each day.
 - a. Draw a number line to represent 1 pound of food. Partition the number line to represent how much food she uses each day.
 - b. Draw another number line to represent 4 pounds of food. After 3 days, how many pounds of food has she given her dog?
 - c. After 6 days, how many pounds of food has she given her dog?



The branch of a tree is 2 meters long. Monica chops the branch for firewood. She cuts pieces that are $\frac{1}{6}$ meter long. Draw a number line to show the total length of the branch. Partition and label each of Monica's cuts.

a. How many pieces does Monica have altogether?

b. Write 2 equivalent fractions to describe the total length of Monica's branch.





Draw

Write



Lesson 27: Explain equivalence by manipulating units and reasoning about their size.

A STORY OF UNITS	Lesson 27 Problem Set 3			
Name	Date			
1. Use the pictures to model equivalent fractions. Fill				
$4 \text{ sixths is equal to} \\ \frac{4}{6} = \frac{13}{3}$ The whole stays the same.	$1 \text{ half is equal to} \\ \frac{1}{2} = \frac{1}{8}$ The whole stays the same.			
What happened to the size of the equal parts when there were fewer equal parts?	What happened to the size of the equal parts when there were more equal parts?			
What happened to the number of equal parts when the equal parts became larger?	What happened to the number of equal parts when the equal parts became smaller?			

6 friends want to share 3 chocolate bars that are all the same size, which are represented by the 3 rectangles below. When the bars are unwrapped, the friends notice that the first chocolate bar is cut into 2 equal parts, the second is cut into 4 equal parts, and the third is cut into 6 equal parts. How can the 6 friends share the chocolate bars equally without breaking any of the pieces?





3. When the whole is the same, why does it take 6 copies of 1 eighth to equal 3 copies of 1 fourth? Draw a model to support your answer.

4. When the whole is the same, how many sixths does it take to equal 1 third? Draw a model to support your answer.

5. You have a magic wand that doubles the number of equal parts but keeps the whole the same size. Use your magic wand. In the space below, draw to show what happens to a rectangle that is partitioned in fourths after you tap it with your wand. Use words and numbers to explain what happened.



LaTonya has 2 equal-sized hotdogs. She cut the first one into thirds at lunch. Later, she cut the second hotdog to make double the number of pieces. Draw a model of LaTonya's hotdogs.

a. How many pieces is the second hotdog cut into?

b. If she wants to eat $\frac{2}{3}$ of the second hotdog, how many pieces should she eat?



Draw

Write



Name							Da	ate		
Shade the	e models to co	mpare the	fraction	s. Circle	e the large	er fractio	n for eac	h problem	۱.	
1.	2 fifths]
	2 thirds]
2.	2 tenths]
	2 eighths									
3.	3 fourths 3 eighths]
4.	4 eighths]
	4 sixths]
5.	3 thirds]
	3 sixths]



6. After softball, Leslie and Kelly each buy a half-liter bottle of water. Leslie drinks 3 fourths of her water. Kelly drinks 3 fifths of her water. Who drinks the least amount of water? Draw a picture to support your answer.

7. Becky and Malory get matching piggy banks. Becky fills $\frac{2}{3}$ of her piggy bank with pennies. Malory fills $\frac{2}{4}$ of her piggy bank with pennies. Whose piggy bank has more pennies? Draw a picture to support your answer.

8. Heidi lines up her dolls in order from shortest to tallest. Doll A is $\frac{2}{4}$ foot tall, Doll B is $\frac{2}{6}$ foot tall, and Doll C is $\frac{2}{3}$ foot tall. Compare the heights of the dolls to show how Heidi puts them in order. Draw a picture to support your answer.



Catherine and Diana buy matching scrapbooks. Catherine decorates $\frac{5}{9}$ of the pages in her book. Diana decorates $\frac{5}{6}$ of the pages in her book. Who has decorated more pages of her scrapbook? Draw a picture to support your answer.

	Re	ead	Draw	Write	
EUREKA MATH	Lesson 29: © 2018 Great Mind		ason about their size.	erator using <, >, or =, and use a	177



5. Partition each number line into the units labeled on the left. Then, use the number lines to compare the fractions.



Draw your own model to compare the following fractions.

6. $\frac{3}{10}$ \bigcirc $\frac{3}{5}$ 7. $\frac{2}{6}$ \bigcirc	$\frac{2}{8}$
------------------------------------------------------------------------	---------------

8. John ran 2 thirds of a kilometer after school. Nicholas ran 2 fifths of a kilometer after school. Who ran the shorter distance? Use the model below to support your answer. Be sure to label 1 whole as 1 kilometer.

			_

9. Erica ate 2 ninths of a licorice stick. Robbie ate 2 fifths of an identical licorice stick. Who ate more? Use the model below to support your answer.

i		·	 •	 	1	

180



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0	
•	

lined paper

Damien folds a paper strip into 6 equal parts. He shades 5 of the equal parts and then cuts off 2 shaded parts. Explain your thinking about what fraction is unshaded.

	R	ead	Draw	Write	
EUREKA MATH	Lesson 1:	Generate and	d organize data.		187
MATH	© 2018 Great Mir	ds®. eureka-math.org			

Name

Date _____

1. "What is your favorite color?" Survey the class to complete the tally chart below.

	Favorite Colors					
Color	Number of Students					
Green						
Yellow						
Red						
Blue						
Orange						

- 2. Use the tally chart to answer the following questions.
 - a. How many students chose orange as their favorite color?
 - b. How many students chose yellow as their favorite color?
 - c. Which color did students choose the most? How many students chose it?
 - d. Which color did students choose the least? How many students chose it?
 - e. What is the difference between the number of students in parts (c) and (d)? Write a number sentence to show your thinking.
 - f. Write an equation to show the total number of students surveyed on this chart.



- 3. Use the tally chart in Problem 1 to complete the picture graphs below.
 - a.

Favorite Colors					
Green	Yellow	Red	Blue	Orange	
Each V represents 1 student.					

b.

Favorite Colors						
Green	Yellow	Red	Blue	Orange		
Each represents 2 students.						



- 4. Use the picture graph in Problem 3(b) to answer the following questions.
 - a. What does each () represent?

b. Draw a picture and write a number sentence to show how to represent 3 students in your picture graph.

c. How many students does C C C C C C C C C C represent? Write a number sentence to show how you know.

d. How many more did you draw for the color that students chose the most than for the color that students chose the least? Write a number sentence to show the difference between the number of votes for the color that students chose the most and the color that students chose the least.



Reisha played in three basketball games. She scored 12 points in Game 1, 8 points in Game 2, and 16 points in Game 3. Each basket that she made was worth 2 points. She uses tape diagrams with a unit size of 2 to represent the points she scored in each game. How many total units of 2 does it take to represent the points she scored in all three games?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 2:	Rotate tape o	diagrams vertically.		195
MATH	© 2018 Great Min	ds®. eureka-math.org			

Name

Date _____

1. Find the total number of stamps each student has. Draw tape diagrams with a unit size of 4 to show the number of stamps each student has. The first one has been done for you.



Anna:

2. Explain how you can create vertical tape diagrams to show this data.



3. Complete the vertical tape diagrams below using the data from Problem 1.



- c. What is a good title for the vertical tape diagrams?
- d. How many total units of 4 are in the vertical tape diagrams in Problem 3(a)?
- e. How many total units of 8 are in the vertical tape diagrams in Problem 3(b)?
- f. Compare your answers to parts (d) and (e). Why does the number of units change?
- g. Mattaeus looks at the vertical tape diagrams in Problem 3(b) and finds the total number of Anna's and Raquel's stamps by writing the equation $7 \times 8 = 56$. Explain his thinking.

Name ______

Date _____

The chart below shows a survey of the book club's favorite type of book.

Book Club's Favorite Type of Book					
Type of Book	Number of Votes				
Mystery	12				
Biography	16				
Fantasy	20				
Science Fiction	8				

a. Draw tape diagrams with a unit size of 4 to represent the book club's favorite type of book.

b. Use your tape diagrams to draw vertical tape diagrams that represent the data.





The vertical tape diagrams show the number of fish in Sal's Pet Store.

a. Find the total number of fish in Tank C. Show your work.

b. Tank B has a total of 30 fish. Draw the tape diagram for Tank B.



Read

Draw

Write

c. How many more fish are in Tank B than in Tanks A and D combined?

Read

Draw

Write

202

Lesson 3: Create scaled bar graphs.



Name ____

Date _____

1. This table shows the number of students in each class.

Number of Students in Each Class				
Class	Number of Students			
Baking	9			
Sports	16			
Chorus	13			
Drama	18			

Use the table to color the bar graph. The first one has been done for you.



- a. What is the value of each square in the bar graph?
- b. Write a number sentence to find how many total students are enrolled in classes.
- c. How many fewer students are in sports than in chorus and baking combined? Write a number sentence to show your thinking.



2. This bar graph shows Kyle's savings from February to June. Use a straightedge to help you read the graph.



a. How much money did Kyle save in May?

b. In which months did Kyle save less than \$35?

- c. How much more did Kyle save in June than April? Write a number sentence to show your thinking.
- d. The money Kyle saved in ______ was half the money he saved in ______
- 3. Complete the table below to show the same data given in the bar graph in Problem 2.

Months	February		
Amount Saved in Dollars			

This bar graph shows the number of minutes Charlotte read from Monday through Friday.



Charlotte's Reading Minutes

- 4. Use the graph's lines as a ruler to draw in the intervals on the number line shown above. Then plot and label a point for each day on the number line.
- 5. Use the graph or number line to answer the following questions.
 - a. On which days did Charlotte read for the same number of minutes? How many minutes did Charlotte read on these days?
 - b. How many more minutes did Charlotte read on Wednesday than on Friday?





Tank

graph A



	Tank E				
	Tank D				
Tank					
	Tank C				
	Tank B			 	
	Tank A				

Number of Fish at Sal's Pet Store

Number of Fish

graph B

←

210



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The following chart shows the number of times an insect's wings vibrate each second. Use the following clues to complete the unknowns in the chart.

Wing Vibrations of Insects					
Insect	Number of Wing Vibrations Each Second				
Honeybee	350				
Beetle	b				
Fly	550				
Mosquito	т				

a. The beetle's number of wing vibrations is the same as the difference between the fly's and honeybee's.

b. The mosquito's number of wing vibrations is the same as 50 less than the beetle's and fly's combined.

	R	ead	Draw	Write	
КА	Lesson 4:	Solve one- and t	wo-step problems invo	lving graphs.	

Name	Date	

1. The chart below shows the number of magazines sold by each student.

Student	Ben	Rachel	Jeff	Stanley	Debbie
Magazines Sold	300	250	100	450	600

a. Use the chart to draw a bar graph below. Create an appropriate scale for the graph.



Student

- b. Explain why you chose the scale for the graph.
- c. How many fewer magazines did Debbie sell than Ben and Stanley combined?
- d. How many more magazines did Debbie and Jeff sell than Ben and Rachel?



2. The bar graph shows the number of visitors to a carnival from Monday through Friday.



- a. How many fewer visitors were there on the least busy day than on the busiest day?
- b. How many more visitors attended the carnival on Monday and Tuesday combined than on Thursday and Friday combined?



graph

Name

Date _____

1. Use the ruler you made to measure different classmates' straws to the nearest inch, $\frac{1}{2}$ inch, and $\frac{1}{4}$ inch. Record the measurements in the chart below. Draw a star next to measurements that are exact.

Straw Owner	Measured to the nearest inch	Measured to the nearest $\frac{1}{2}$ inch	Measured to the nearest $\frac{1}{4}$ inch
My straw			

a. ______''s straw is the shortest straw I measured. It measures ______ inch(es).

b. ______'s straw is the longest straw I measured. It measures ______ inches.

c. Choose the straw from your chart that was most accurately measured with the $\frac{1}{4}$ -inch intervals on your ruler. How do you know the $\frac{1}{4}$ -inch intervals are the most accurate for measuring this straw?



2. Jenna marks a 5-inch paper strip into equal parts as shown below.

- a. Label the whole and half inches on the paper strip.
- b. Estimate to draw the $\frac{1}{4}$ -inch marks on the paper strip. Then, fill in the blanks below.

1 inch is equal to _____ half inches.

1 inch is equal to _____ quarter inches.

1 half inch is equal to _____ quarter inches.

c. Describe how Jenna could use this paper strip to measure an object that is longer than 5 inches.

3. Sari says her pencil measures 8 half inches. Bart disagrees and says it measures 4 inches. Explain to Bart why the two measurements are the same in the space below. Use words, pictures, or numbers.





lined paper



Katelynn measures the height of her bean plant on Monday and again on Friday. She says that her bean plant grew 10 quarter inches. Her partner records $2\frac{1}{2}$ inches on his growth chart for the week. Is her partner right? Why or why not?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 6:	Interpret mea	surement data from vario	us line plots.	225
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Lesson 6 Problem Set

1. Coach Harris measures the heights of the children on his third-grade basketball team in inches. The heights are shown on the line plot below.

Heights of Children on Third-Grade Basketball Team



- a. How many children are on the team? How do you know?
- b. How many children are less than 53 inches tall?
- c. Coach Harris says that the most common height for the children on his team is $53\frac{1}{2}$ inches. Is he right? Explain your answer.
- d. Coach Harris says that the player who does the tip-off in the beginning of the game has to be at least 54 inches tall. How many children could do the tip-off?



A STORY OF UNITS
2. Miss Vernier's class is studying worms. The lengths of the worms in inches are shown in the line plot below.



- a. How many worms did the class measure? How do you know?
- b. Cara says that there are more worms $3\frac{3}{4}$ inches long than worms that are $3\frac{2}{4}$ and $4\frac{1}{4}$ inches long combined. Is she right? Explain your answer.

c. Madeline finds a worm hiding under a leaf. She measures it, and it is $4\frac{3}{4}$ inches long. Plot the length of the worm on the line plot.





Time Spent Outside Over the Weekend

Hours

X = 1 person

time spent outside line plot



Straw Lengths (in Inches)					
3	4	$4\frac{1}{2}$	$2\frac{3}{4}$	$3\frac{3}{4}$	
$3\frac{3}{4}$	$4\frac{1}{2}$	$3\frac{1}{4}$	4	$4\frac{3}{4}$	
$4\frac{1}{4}$	5	3	$3\frac{1}{2}$	$4\frac{1}{2}$	
$4\frac{1}{2}$	4	$3\frac{1}{4}$	5	$4\frac{1}{4}$	

The chart shows the lengths of straws measured in Mr. Han's class.

a. How many straws were measured? Explain how you know.

b. What is the smallest measurement on the chart? The greatest?



Draw

Write

Read

c. Were the straws measured to the nearest inch? How do you know?

Read

Draw

Write

Lesson 7:

7: Represent measurement data with line plots.



Name _____

Date ____

Mrs. Weisse's class grows beans for a science experiment. The students measure the heights of their bean plants to the nearest $\frac{1}{4}$ inch and record the measurements as shown below.

Heights of Bean Plants (in Inches)					
$2\frac{1}{4}$	$2\frac{3}{4}$	$3\frac{1}{4}$	$1\frac{3}{4}$	$1\frac{3}{4}$	
$1\frac{3}{4}$	3	$2\frac{1}{2}$	$3\frac{1}{4}$	$2\frac{1}{2}$	
2	$2\frac{1}{4}$	3	$2\frac{1}{4}$	3	
2 ¹ / ₂	$3\frac{1}{4}$	$1\frac{3}{4}$	$2\frac{3}{4}$	2	

Title: _____

a. Use the data to complete the line plot below.



- b. How many bean plants are at least $2\frac{1}{4}$ inches tall?
- c. How many bean plants are taller than $2\frac{3}{4}$ inches?
- d. What is the most frequent measurement? How many bean plants were plotted for this measurement?

e. George says that most of the bean plants are at least 3 inches tall. Is he right? Explain your answer.

f. Savannah was absent the day the class measured the heights of their bean plants. When she returns, her plant measures $2\frac{2}{4}$ inches tall. Can Savannah plot the height of her bean plant on the class line plot? Why or why not?



Straw Lengths (in Inches)						
3	4	$4\frac{1}{2}$	$2\frac{3}{4}$	$3\frac{3}{4}$		
$3\frac{3}{4}$	$4\frac{1}{2}$	$3\frac{1}{4}$	4	$4\frac{3}{4}$		
$4\frac{1}{4}$	5	3	$3\frac{1}{2}$	$4\frac{1}{2}$		
$4\frac{3}{4}$	4	$3\frac{1}{4}$	5	$4\frac{1}{4}$		

straw lengths

←

 \rightarrow

Mrs. Byrne's class is studying worms. They measure the lengths of the worms to the nearest quarter inch. The length of the shortest worm is $3\frac{3}{4}$ inches. The length of the longest worm is $5\frac{2}{4}$ inches. Kathleen says they need 8 quarter-inch intervals to plot the lengths of the worms on a line plot. Is she right? Why or why not?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 8:	Represent m	easurement data with line	plots.	241
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Name _____

Date _____

Delilah stops under a silver maple tree and collects leaves. At home, she measures the widths of the leaves to the nearest $\frac{1}{4}$ inch and records the measurements as shown below.

Widths of Silver Maple Tree Leaves (in Inches)						
$5\frac{3}{4}$	6	$6\frac{1}{4}$	6	$5\frac{3}{4}$		
$6\frac{1}{2}$	$6\frac{1}{4}$	$5\frac{1}{2}$	$5\frac{3}{4}$	6		
$6\frac{1}{4}$	6	6	$6\frac{1}{2}$	$6\frac{1}{4}$		
$6\frac{1}{2}$	$5\frac{3}{4}$	$6\frac{1}{4}$	6	6 <mark>3</mark> 4		
6	$6\frac{1}{4}$	6	$5\frac{3}{4}$	$6\frac{1}{2}$		

a. Use the data to create a line plot below.

b. Explain the steps you took to create the line plot.

c. How many more leaves were 6 inches wide than $6\frac{1}{2}$ inches wide?

d. Find the three most frequent measurements on the line plot. What does this tell you about the typical width of a silver maple tree leaf?



244

Mrs. Schaut measures the heights of the sunflower plants in her garden. The measurements are shown in the chart below.

Heights of Sunflower Plants (in Inches)					
61	63	62	61	$62\frac{1}{2}$	
$61\frac{1}{2}$	$61\frac{1}{2}$	$61\frac{1}{2}$	62	60	
64	62	$60\frac{1}{2}$	$63\frac{1}{2}$	61	
63	$62\frac{1}{2}$	$62\frac{1}{2}$	64	$62\frac{1}{2}$	
$62\frac{1}{2}$	$63\frac{1}{2}$	63	$62\frac{1}{2}$	$63\frac{1}{2}$	
62	$62\frac{1}{2}$	62	63	$60\frac{1}{2}$	

heights of sunflower plants chart



Maria creates a line plot with a half-inch scale from 33 to 37 inches. How many tick marks should be on her line plot?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 9:	Analyze data	to problem solve.		249
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Name	Date	

1. Four children went apple picking. The chart shows the number of apples the children picked.

Name	Number of Apples Picked
Stewart	16
Roxanne	
Trisha	12
Philip	20
	Total: 72

- a. Find the number of apples Roxanne picked to complete the chart.
- b. Create a picture graph below using the data in the table.







- 2. Use the chart or graph to answer the following questions.
 - a. How many more apples did Stewart and Roxanne pick than Philip and Trisha?

b. Trisha and Stewart combine their apples to make apples pies. Each pie takes 7 apples. How many pies can they make?

3. Ms. Pacho's science class measured the lengths of blades of grass from their school field to the nearest $\frac{1}{4}$ inch. The lengths are shown below.

Lengths of Blades of Grass (in Inches)						
$2\frac{1}{4}$	$2\frac{3}{4}$	$3\frac{1}{4}$	3	$2\frac{1}{2}$	$2\frac{3}{4}$	
$2\frac{3}{4}$	$3\frac{3}{4}$	2	$2\frac{3}{4}$	$3\frac{3}{4}$	$3\frac{1}{4}$	
3	$2\frac{1}{2}$	$3\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{3}{4}$	3	
$3\frac{1}{4}$	$2\frac{1}{4}$	$3\frac{3}{4}$	3	$3\frac{1}{4}$	$2\frac{3}{4}$	



a. Make a line plot of the grass data. Explain your choice of scale.

- b. How many blades of grass were measured? Explain how you know.
- c. What was the length measured most frequently on the line plot? How many blades of grass had this length?

d. How many more blades of grass measured $2\frac{3}{4}$ inches than both $3\frac{3}{4}$ inches and 2 inches combined?





Crayfish Lengths from Mr. Nye's Class



bar graph and line plot



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G3-M7-L-05.2018

Name _____

Date ____

Lena's family visits Little Tree Apple Orchard. Use the RDW process to solve the problems about Lena's visit to the orchard. Use a letter to represent the unknown in each problem.

1. The sign below shows information about hayrides at the orchard.

	Hayrides
Adult ticket .	\$7
Child ticket	\$4
Leaves every	15 minutes starting at 11:00

a. Lena's family buys 2 adult tickets and 2 child tickets for the hayride. How much does it cost Lena's family to go on the hayride?

b. Lena's mom pays for the tickets with \$5 bills. She receives \$3 in change. How many \$5 bills does Lena's mom use to pay for the hayride?

c. Lena's family wants to go on the fourth hayride of the day. It's 11:38 now. How many minutes do they have to wait for the fourth hayride?



2. Lena picked 17 apples, and her brother picked 19. Lena's mom has a pie recipe that requires 9 apples. How many pies can Mom make with the apples that Lena and her brother picked?

3. Lena's dad gives the cashier \$30 to pay for 6 liters of apple cider. The cashier gives him \$6 in change. How much does each liter of apple cider cost?

4. The apple orchard has 152 apple trees. There are 88 trees with red apples. The rest of the trees have green apples. How many more trees have red apples than green apples?



Name _____ Date _____

Use the RDW process to solve. Use a letter to represent the unknown in each problem.

1. Leanne needs 120 tiles for an art project. She has 56 tiles. If tiles are sold in boxes of 8, how many more boxes of tiles does Leanne need to buy?

2. Gwen pours 236 milliliters of water into Ravi's beaker. Henry pours 189 milliliters of water into Ravi's beaker. Ravi's beaker now contains 800 milliliters of water. How much water was in Ravi's beaker to begin with?

3. Maude hung 3 pictures on her wall. Each picture measures 8 inches by 10 inches. What is the total area of the wall covered by the pictures?



4. Kami scored a total of 21 points during her basketball game. She made 6 two-point shots, and the rest were three-point shots. How many three-point shots did Kami make?

5. An orange weighs 198 grams. A kiwi weighs 85 grams less than the orange. What is the total weight of the fruit?

6. The total amount of rain that fell in New York City in two years was 282 centimeters. In the first year, 185 centimeters of rain fell. How many more centimeters of rain fell in the first year than in the second year?



Name

Date _____

Use the RDW process to solve the problems below. Use a letter to represent the unknown in each problem. When you are finished, share your solutions with a partner. Discuss and compare your strategies with your partner's strategies.

1. Monica measures 91 milliliters of water into 9 tiny beakers. She measures an equal amount of water into the first 8 beakers. She pours the remaining water into the ninth beaker. It measures 19 milliliters. How many milliliters of water are in each of the first 8 beakers?

2. Matthew and his dad put up 8 six-foot lengths of fence on Monday and 9 six-foot lengths on Tuesday. What is the total length of the fence?

3. The total weight of Laura's new pencils is 112 grams. One pencil rolls off the scale. Now the scale reads 105 grams. What is the total weight of 7 new pencils?



4. Mrs. Ford's math class starts at 8:15. They do 3 fluency activities that each last 4 minutes. Just when they finish all of the fluency activities, the fire alarm goes off. When they return to the room after the drill, it is 8:46. How many minutes did the fire drill last?

5. On Saturday, the baker bought a total of 150 pounds of flour in five-pound bags. By Tuesday, he had 115 pounds of flour left. How many five-pound bags of flour did the baker use?

6. Fred cut an 84-centimeter rope into 2 parts and gave his sister 1 part. Fred's part is 56 centimeters long. His sister cut her rope into 4 equal pieces. How long is 1 of his sister's pieces of rope?



10



Student B



student work samples





student work samples

14



The third graders raised \$437 in a fundraiser. The fourth graders raised \$68 less than the third graders. How much money did the two grade levels raise altogether?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 4:	Compare and	d classify quadrilaterals.		15
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Name_____

Date _____

1. Cut out all the polygons (A–L) in the Template. Then, use the polygons to complete the following chart.

Attribute	Write the letters of the polygons in this group.	Sketch 1 polygon from the group.
Example: 3 Sides	Polygons: Y, Z	
4 Sides	Polygons:	
At Least 1 Set of Parallel Sides	Polygons:	
2 Sets of Parallel Sides	Polygons:	
4 Right Angles	Polygons:	
4 Right Angles and 4 Equal Sides	Polygons:	



2. Write the letters of the polygons that are quadrilaterals. Explain how you know these polygons are quadrilaterals.

3. Sketch a polygon below from the group that has 2 sets of parallel sides. Trace 1 pair of parallel sides red. Trace the other pair of parallel sides blue. What makes parallel sides different from sides that are not parallel?

4. Draw a diagonal line from one corner to the opposite corner of each polygon you drew in the chart using a straightedge. What new polygon(s) did you make by drawing the diagonal lines?



18

Name _____

Date _____

1. Cut out all the polygons (M–X) in the Template. Then, use the polygons to complete the following chart.

Attribute	List polygons' letters for each group.	Sketch 1 polygon from the group.
Example: 3 Sides	Polygons: Y, Z	
All Sides Are Equal	Polygons:	
All Sides Are Not Equal	Polygons:	
At Least 1 Right Angle	Polygons:	
At Least 1 Set of Parallel Sides	Polygons:	



2. Compare Polygon M and Polygon X. What is the same? What is different?

3. Jenny says, "Polygon N, Polygon R, and Polygon S are all regular quadrilaterals!" Is she correct? Why or why not?

- 4. "I have six equal sides and six equal angles. I have three sets of parallel lines. I have no right angles."
 - a. Write the letter and the name of the polygon described above.

b. Estimate to draw the same type of polygon as in part (a), but with no equal sides.



Frankie says that all squares are rectangles, but not all rectangles are squares. Do you agree with this statement? Why or why not? Draw diagrams to support your statement.

	R	ead	Draw	Write	
EUREKA MATH	Lesson 6:	Draw polygor	ns with specified attributes	s to solve problems.	25
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Name	Date

Use a ruler and a right angle tool to help you draw the figures with the attributes given below.

1. Draw a triangle with 1 right angle.

2. Draw a quadrilateral with 4 right angles and sides that are all 2 inches long.

3. Draw a quadrilateral with at least 1 set of parallel sides. Trace the parallel sides green.



4. Draw a pentagon with at least 2 equal sides. Label the 2 equal side lengths of your shape.

5. Draw a hexagon with at least 2 equal sides. Label the 2 equal side lengths of your shape.

6. Sam says that he drew a polygon with 2 sides and 2 angles. Can Sam be correct? Use pictures to help you explain your answer.



Name _____

Date _____

1. Use tetrominoes to create at least two different rectangles. Then, color the grid below to show how you created your rectangles. You may use the same tetromino more than once.

2. Use tetrominoes to create at least two squares, each with an area of 36 square units. Then, color the grid below to show how you created your squares. You may use the same tetromino more than once.

- a. Write an equation to show the area of a square above as the sum of the areas of the tetrominoes you used to make the square.
- b. Write an equation to show the area of a square above as the product of its side lengths.



3. a. Use tetrominoes to create at least two different rectangles, each with an area of 12 square units. Then, color the grid below to show how you created the rectangles. You may use the same tetromino more than once.

b. Explain how you know the area of each rectangle is 12 square units.

4. Marco created a rectangle with tetrominoes and traced its outline in the space below. Use tetrominoes to re-create it. Estimate to draw lines inside the rectangle below to show how you re-created Marco's rectangle.



Name	Date	

1. Fold and cut the square on the diagonal. Draw and label your 2 new shapes below.

2. Fold and cut one of the triangles in half. Draw and label your 2 new shapes below.

3. Fold twice, and cut your large triangle. Draw and label your 2 new shapes below.

4. Fold and cut your trapezoid in half. Draw and label your 2 new shapes below.


5. Fold and cut one of your trapezoids. Draw and label your 2 new shapes below.

6. Fold and cut your second trapezoid. Draw and label your 2 new shapes below.

- 7. Reconstruct the original square using the seven shapes.
 - a. Draw lines inside the square below to show how the shapes go together to form the square. The first one has been done for you.



b. Describe the process of forming the square. What was easy, and what was challenging?



Name at least two attributes that a trapezoid, a square, and a parallelogram all have in common. Draw a diagram to support your ideas.

	R	ead	Draw	Write	
EUREKA MATH	Lesson 9:	Reason abou	t composing and decompo	osing polygons using tangrams.	39
	© 2018 Great Mir	nds®. eureka-math.org			

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~	U I	U 1		<u> </u>	-			<u> </u>

Name_____

Date _____

- 1. Use at least two tangram pieces to make and draw two of each of the following shapes. Draw lines to show where the tangram pieces meet.
 - a. A rectangle that does not have all equal sides.

b. A triangle.

c. A parallelogram.

d. A trapezoid.



2. Use your two smallest triangles to create a square, a parallelogram, and a triangle. Show how you created them below.

3. Create your own shape on a separate sheet of paper using all seven pieces. Describe its attributes below.

4. Trade your outline with a partner to see if you can re-create her shape using your tangram pieces. Reflect on your experience below. What was easy? What was challenging?



Trista uses all seven of her tangram pieces to make a square as shown. One side of the large square is 4 inches long. What is the total area of the two large triangles? Explain your answer.



	R	ead	Draw	Write	
EUREKA MATH	Lesson 10:	Decompose of a shape.	quadrilaterals to understan	d perimeter as the boundary	45
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• •			
N	а	m	ρ

Date _____

- 1. Use a 2-inch square to answer the questions below.
 - a. Trace the square in the space below with a red crayon.

b. Trace the new shape you made with the square in the space below with a red crayon.

c. Which shape has a greater perimeter? How do you know?

d. Color the inside of the shapes in Problem 1 (a) and (b) with a blue crayon.



e. Which color represents the perimeters of the shapes? How do you know?

f. What does the other color represent? How do you know?

g. Which shape has a greater area? How do you know?

2. a. Outline the perimeter of the shapes below with a red crayon.



b. Explain how you know you outlined the perimeters of the shapes above.

3. Outline the perimeter of this piece of paper with a highlighter.



Name _____

Date _____

- 1. Follow the directions below using the shape you created yesterday.
 - a. Tessellate your shape on a blank piece of paper.
 - b. Color your tessellation to create a pattern.
 - c. Outline the perimeter of your tessellation with a highlighter.
 - d. Use a string to measure the perimeter of your tessellation.
- 2. Compare the perimeter of your tessellation to a partner's. Whose tessellation has a greater perimeter? How do you know?

3. How could you increase the perimeter of your tessellation?

4. How would overlapping your shape when you tessellated change the perimeter of your tessellation?



Angela measures the sides of a Square napkin with her ruler. Each side measures 6 inches. What is the perimeter of the napkin?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 12:	Measure sid perimeter of	e lengths in whole number polygons.	units to determine the	55
MATH	© 2018 Great Min	ds®. eureka-math.org			

Name

Date _____

1. Measure and label the side lengths of the shapes below in centimeters. Then, find the perimeter of each shape.



perimeter of polygons.

2. Carson draws two triangles to create the new shape shown below. Use a ruler to find the side lengths of Carson's shape in centimeters. Then, find the perimeter.



3. Hugh and Daisy draw the shapes shown below. Measure and label the side lengths in centimeters. Whose shape has a greater perimeter? How do you know?



4. Andrea measures one side length of the square below and says she can find the perimeter with that measurement. Explain Andrea's thinking. Then, find the perimeter in centimeters.











shapes



Lesson 12: Measure side lengths in whole number units to determine the perimeter of polygons.

Use an index card to answer the questions.

a. What is the perimeter of your index card in inches?

b. Place the short end of your index card next to the short end of your partner's index card.Make a prediction: What do you think the perimeter is of the new shape you made?



Draw

Write



Lesson 13: Explore perimeter as an attribute of plane figures and solve problems.

c. Find the perimeter of the new shape. Was your prediction right? Why or why not?

Read

Draw

Write

Lesson 13:

13: Explore perimeter as an attribute of plane figures and solve problems.



Name _____

Date _____







Lesson 13: Explore perimeter as an attribute of plane figures and solve problems.

2. Alan's rectangular swimming pool is 10 meters long and 16 meters wide. What is the perimeter?



3. Lila measures each side of the shape below.



a. What is the perimeter of the shape?

b. Lila says the shape is a pentagon. Is she correct? Explain why or why not.



A rectangular sheep pen measures 5 meters long and 9 meters wide. The perimeter of the cow pen is double the perimeter of the sheep pen. What is the perimeter of the cow pen?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 14:		ne perimeter of regular pol er measurements are unkr	ygons and rectangles when own.	69

A STORY OF UNITS

Name	Date	

- b. a. 7 ft 8 in Perimeter = _____ ft Perimeter = _____ in d. c. 9 m 6 in Perimeter = _____ m Perimeter = _____ in
- 1. Label the unknown side lengths of the regular shapes below. Then, find the perimeter of each shape.

2. Label the unknown side lengths of the rectangle below. Then, find the perimeter of the rectangle.



Perimeter = _____ cm

7 cm



Lesson 14: Determine the perimeter of regular polygons and rectangles when whole number measurements are unknown.

3. David draws a regular octagon and labels a side length as shown below. Find the perimeter of David's octagon.



4. Paige paints an 8-inch by 9-inch picture for her mom's birthday. What is the total length of wood that Paige needs to make a frame for the picture?

5. Mr. Spooner draws a regular hexagon on the board. One of the sides measures 4 centimeters. Giles and Xander find the perimeter. Their work is shown below. Whose work is correct? Explain your answer.

Giles's Work

Perimeter = 4 cm + 4 cm

Perimeter = 24 cm

Xander's Work

Perimeter = 6×4 cm

Perimeter = 24 cm



Clara and Pedro each use four 3-inch by 5-inch cards to make the rectangles below. Whose rectangle has a greater perimeter?





	R	ead	Draw	Write	
EUREKA MATH	Lesson 15:	Solve word p	roblems to determine pe	rimeter with given side lengths.	75
	© 2018 Great Min	ds®. eureka-math.org			

A ST	ORY	OF	UNITS	

Name	Date	_
-		

1. Mrs. Kozlow put a border around a 5-foot by 6-foot rectangular bulletin board. How many feet of border did Mrs. Kozlow use?

 Jason built a model of the Pentagon for a social studies project. He made each outside wall 33 centimeters long. What is the perimeter of Jason's model pentagon?

3. The Holmes family plants a rectangular 8-yard by 9-yard vegetable garden. How many yards of fencing do they need to put a fence around the garden?



4. Marion paints a 5-pointed star on her bedroom wall. Each side of the star is 18 inches long. What is the perimeter of the star?



5. The soccer team jogs around the outside of the soccer field twice to warm up. The rectangular field measures 60 yards by 100 yards. What is the total number of yards the team jogs?

6. Troop 516 makes 3 triangular flags to carry at a parade. They sew ribbon around the outside edges of the flags. The flags' side lengths each measure 24 inches. How many inches of ribbon does the troop use?



Na	me
ING	IIIC.

Date _____

1. Find the perimeter of 10 circular objects to the nearest quarter inch using string. Record the name and perimeter of each object in the chart below.

Object	Perimeter (to the nearest quarter inch)

a. Explain the steps you used to find the perimeter of the circular objects in the chart above.

b. Could the same process be used to find the perimeter of the shape below? Why or why not?





2. Can you find the perimeter of the shape below using just your ruler? Explain your answer.



3. Molly says the perimeter of the shape below is $6\frac{1}{4}$ inches. Use your string to check her work. Do you agree with her? Why or why not?



4. Is the process you used to find the perimeter of a circular object an efficient method to find the perimeter of a rectangle? Why or why not?



Gil places two regular hexagons side by side as shown to make a new shape. Each side measures 6 centimeters. Find the perimeter of his new shape.



	R	ead	Draw	Write	
EUREKA MATH	© 2018 Great Min		operations to solve probler easurements.	ns involving perimeter and	85



equation to find the perimeter of each shape.



P =



1. The shapes below are made up of rectangles. Label the unknown side lengths. Then, write and solve an





P =

A STORY OF UNITS

Date _____

2. Nathan draws and labels the square and rectangle below. Find the perimeter of the new shape.



3. Label the unknown side lengths. Then, find the perimeter of the shaded rectangle.





Rita says that since 15 is larger than 12, she can draw more arrays to show 15 than she can to show 12. Is she correct? Model to solve.

	R	ead	Draw	Write	
EUREKA MATH	Lesson 18:		ctangles from a given numb ne perimeters.	per of unit squares and	91
MATH	© 2018 Great Mine	ds®. eureka-math.org			

Name

Date _____

- 1. Use unit squares to build as many rectangles as you can with an area of 24 square units. Shade in squares on your grid paper to represent each rectangle that you made with an area of 24 square units.
 - a. Estimate to draw and label the side lengths of each rectangle you built in Problem 1. Then, find the perimeter of each rectangle. One rectangle is done for you.

24 units

1 unit

P = 24 units + 1 unit + 24 units + 1 unit = <u>50 units</u>

b. The areas of the rectangles in part (a) above are all the same. What do you notice about the perimeters?



2. Use unit square tiles to build as many rectangles as you can with an area of 16 square units. Estimate to draw each rectangle below. Label the side lengths.

- a. Find the perimeters of the rectangles you built.
- b. What is the perimeter of the square? Explain how you found your answer.

3. Doug uses square unit tiles to build rectangles with an area of 15 square units. He draws the rectangles as shown below but forgets to label the side lengths. Doug says that Rectangle A has a greater perimeter than Rectangle B. Do you agree? Why or why not?

Rectangle A				
Rectangle B				



grid paper



Marci says, "If a rectangle has a greater area than another rectangle, it must have a larger perimeter." Do you agree or disagree? Show an example to prove your thinking.

	R	ead	Draw	Write	
EUREKA MATH	Lesson 19: © 2018 Great Min		er of unit squares.	rectangles constructed from a	99

Na	ame

1. Use unit square tiles to make rectangles for each given number of unit squares. Complete the charts to show how many rectangles you can make for each given number of unit squares. The first one is done for you. You might not use all the spaces in each chart.

Date _____

Number of unit squares = 12

Number of rectangles I made: 3

Width	Length
1	12
2	6
3	4

Number of unit squares = 13 Number of rectangles I made:							
Width	Length						

Number of unit squares = 14							
Number of rectangles I made:							
Width Length							

Number of unit squares = 15 Number of rectangles I made:					
Width	Length				

Number of unit squares = 16						
Number of rectangles I made:						
Width	Length					

Number of unit squares = 17							
Number of rectangles I made:							
Width	Length						

Number of unit squares = 18	
Number of rectangles I made:	
Width	Length



Γ

Lesson 19: Use a line plot to record the number of rectangles constructed from a given number of unit squares.

2. Create a line plot with the data you collected in Problem 1.

Number of Rectangles Made with Unit Squares



3. Which numbers of unit squares produce three rectangles?

4. Why do some numbers of unit squares, such as 13, only produce one rectangle?



Molly builds a rectangular playpen for her pet rabbit. The playpen has an area of 15 square yards.

a. Estimate to draw and label as many possibilities as you can for the playpen.

b. Find the perimeters of the rectangles in part (a).



Draw

Write



Lesson 20: Construct rectangles with a given perimeter using unit squares and determine their areas.

c. What other information do you need in order to re-create Molly's playpen?

Read

Draw

Write

106

Construct rectangles with a given perimeter using unit squares and determine their areas.
Name	Date	

- 1. Use your square unit tiles to build as many rectangles as you can with a perimeter of 12 units.
 - a. Estimate to draw your rectangles below. Label the side lengths of each rectangle.

b. Explain your strategy for finding rectangles with a perimeter of 12 units.

c. Find the areas of all the rectangles in part (a) above.

d. The perimeters of all the rectangles are the same. What do you notice about their areas?



- 2. Use your square unit tiles to build as many rectangles as you can with a perimeter of 14 units.
 - a. Estimate to draw your rectangles below. Label the side lengths of each rectangle.

b. Find the areas of all the rectangles in part (a) above.

c. Given a rectangle's perimeter, what other information do you need to know about the rectangle to find its area?

108

Name

Date ____

Use the data you gathered from Problem Sets 20 and 21 to complete the charts to show how many rectangles you can create with a given perimeter. You might not use all the spaces in the charts.

Perimeter = 10 units										
Number of rectangles you made:										
Width Length Area										
1 unit	4 units	4 square units								

Perimeter = 12 units	Perimeter =	12	units
------------------------	-------------	----	-------

Number of rectangles you made: _____

Width	Length	Area

Perimeter = 14 units										
Number of rectangles you made:										
Width Length Area										

Perimeter = 16 units										
Number of rectangles you made:										
Width Length Area										
~ ~										

Perimeter = 18 units											
Number of rectangles you made:											
Width Length Area											

Perimeter = 20 units										
Number of rectangles you made:										
Width Length Area										



Lesson 20: Construct rectangles with a given perimeter using unit squares and determine their areas.

Mrs. Zeck will use 14 feet of tape to mark a rectangle on the gym wall. Draw several rectangles that Mrs. Zeck could make with her tape. Label the width and length of each rectangle.



Draw

Write



Lesson 21: Construct rectangles with a given perimeter using unit squares and determine their areas.

Δ	ST	OR	Y	OF	U	N	IT	S
~	U I	U 1		<u> </u>	-			<u> </u>

Name_____

Date _____

- 1. On your centimeter grid paper, shade and label as many rectangles as you can with a perimeter of 16 centimeters.
 - a. Sketch the rectangles below, and label the side lengths.

- b. Find the area of each rectangle you drew above.
- 2. On your centimeter grid paper, shade and label as many rectangles as you can with a perimeter of 18 centimeters.
 - a. Sketch the rectangles below, and label the side lengths.

b. Find the area of each rectangle you drew above.



- 3. Use centimeter grid paper to shade in as many rectangles as you can with the given perimeters.
 - a. Use the charts below to show how many rectangles you shaded for each given perimeter. You might not use all the spaces in the charts.

Perimeter = 10 cm										
Number of rectangles I made:										
Width Length Area										
1 cm	4 cm	4 square cm								

Perimeter = 20 cm											
Number of rectangles I made:											
Width Length Area											
1 cm	9 cm	9 square cm									

b. Did you make a square with either of the given perimeters? How do you know?

4. Macy and Gavin both draw rectangles with perimeters of 16 centimeters. Use words and pictures to explain how it is possible for Macy's and Gavin's rectangles to have the same perimeters but different areas.

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centimeter grid paper



Lesson 21: Construct rectangles with a given perimeter using unit squares and determine their areas.

٦

Name

Date _____

Use the data you gathered from Problem Sets 20 and 21 to complete the charts to show how many rectangles you can create with a given perimeter. You might not use all the spaces in the charts.

Γ

Perimeter = 10 units							
Number of rectangles you made:							
Width	Length	Area					
1 unit 4 units 4 square units							

Perimeter = 14 units							
Number of rectangles you made:							
Width Length Area							

Perimeter = 18 units							
Number o	of rectangles y	ou made:					
Width	Length	Area					

	Perimeter = 12 units						
Number o	Number of rectangles you made:						
Width	Width Length Area						

Perimeter = 16 units						
Number of rectangles you made:						
Width Length Area						

Perimeter = 20 units							
Number o	of rectangles y	ou made:					
Width	Length	Area					

120

Construct rectangles with a given perimeter using unit squares and determine their areas.

А	STC	DRY	OF	UNIT	S

←

Name	Date

1. Use the data you gathered from your Problem Sets to create a line plot for the number of rectangles you created with each given perimeter.

Number of Rectangles Made with a Given Perimeter

Perimeter Measurements in Units

X = 1 Rectangle

2. Why are all of the perimeter measurements even? Do all rectangles have an even perimeter?



≻

3. Compare the two line plots we created. Is there any reason to think that knowing only the area of a rectangle would help you to figure out its perimeter or knowing only the perimeter of a rectangle would help you figure out its area?

4. Sumi uses unit square tiles to build 3 rectangles that have an area of 32 square units. Does knowing this help her find the number of rectangles she can build for a perimeter of 32 units? Why or why not?

5. George draws 3 rectangles that have a perimeter of 14 centimeters. Alicia tells George that there are more than 3 rectangles that have a perimeter of 14 centimeters. Explain why Alicia is correct.

122



Name	Date	

1. Gale makes a miniature stop sign, a regular octagon, with a perimeter of 48 centimeters for the town he built with blocks. What is the length of each side of the stop sign?

2. Travis bends wire to make rectangles. Each rectangle measures 34 inches by 12 inches. What is the total length of the wire needed for two rectangles?

3. The perimeter of a rectangular bathroom is 32 feet. The width of the room is 8 feet. What is the length of the room?



A STORY OF UNITS

4. Raj uses 6-inch square tiles to make a rectangle, as shown below. What is the perimeter of the rectangle in inches?



5. Mischa makes a 4-foot by 6-foot rectangular banner. She puts ribbon around the outside edges. The ribbon costs \$2 per foot. What is the total cost of the ribbon?

6. Colton buys a roll of wire fencing that is 120 yards long. He uses it to fence in his 18-yard by 24-yard rectangular garden. Will Colton have enough wire fencing left over to fence in a 6-yard by 8-yard rectangular play space for his pet rabbit?



Name _____

Date _____

Use the given perimeters in the chart below to choose the widths and lengths of your robot's rectangular body parts. Write the widths and lengths in the chart below. Use the blank rows if you want to add extra rectangular body parts to your robot.

Letter	Body Part	Perimeter	Width and Length		
А	arm	14 cm	cm bycm		
В	arm	14 cm	cm by cm		
с	leg	18 cm	cm by cm		
D	leg	18 cm	cm bycm		
E	body	Double the perimeter of one arm = cm	cm bycm		
F	head	16 cm	cm bycm		
G	neck	Half the perimeter of the head = cm	cm bycm		
н			cm bycm		
I			cm bycm		
	My robot has 7 to 9 rectangular body parts. Number of body parts:				



Use the information in the chart below to plan an environment for your robot. Write the width and length for each rectangular item. Use the blank rows if you want to add extra circular or rectangular items to your robot's environment.

Letter	Item	Shape	Perimeter	Width and Length		
J	sun	circle	about 25 cm			
к	house	rectangle	82 cm	cm by cm		
L	tree top	circle	about 30 cm			
м	tree trunk	rectangle	30 cm	cm by cm		
N	tree top	circle	about 20 cm			
0	tree trunk	rectangle	20 cm	cm by cm		
Р						
Q						
	My robot's environment has 6 to 8 items. Number of items:					

Name _____

Date _____

Draw a picture of your robot in its environment in the space below. Label the widths, lengths, and perimeters of all rectangles. Label the perimeters of all circular shapes.



Drew makes rectangular shoes for his robot. Each shoe has whole number side lengths and an area of 7 square centimeters. What is the total perimeter of both shoes? Is there more than one answer? Why or why not?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 26: © 2018 Great Min		les to draw a robot with spe nts, and reason about the d	•	137

Name
Name

Date _____

1. Collect the area measurements of your classmates' **robot bodies.** Make a line plot using everyone's area measurements.

Areas of Robot Bodies

Area Measurements of the Robot's Body in Square Centimeters

X = 1 Robot Body

≻

a. How many different measurements are on the line plot? Why are the measurements different?

b. What does this tell you about the relationship between area and perimeter?



 \leftarrow

2. Measure and calculate the perimeter of your construction paper in inches. Show your work below.

3. Sketch and label two shapes with the same perimeter from the robot's environment. What do you notice about the way they look?

4. Write two or three sentences describing your robot and the environment in which it lives.



Name_____

Date _____

Part A: I reviewed ______ 's robot.

1. Use the chart below to evaluate your friend's robot. Measure the width and length of each rectangle. Then, calculate the perimeter. Record that information in the chart below. If your measurements differ from those listed on the project, put a star by the letter of the rectangle.

Rectangle	Width and Length	Student's Perimeter	Required Perimeter
А	cm bycm		14 cm
В	cm by cm		14 cm
с	cm bycm		18 cm
D	cm by cm		18 cm
E	cm by cm		28 cm
F	cm bycm		16 cm
G	cm by cm		8 cm
н	cm by cm		
I	cm bycm		



2. Is the perimeter of the robot's body double that of the arm? Show calculations below.

3. Is the perimeter of the robot's neck half the perimeter of the head? Show calculations below.

Part B: I reviewed 's robot environment.

4. Use the chart below to evaluate your friend's robot environment. Measure the width and length of each rectangle. Then, calculate the perimeter. Use your string to measure the perimeters of nonrectangular items. Record that information in the chart below. If your measurements differ from those listed on the project, put a star by the letter of the shape.

ltem	Width and Length	Student's Perimeter	Required Perimeter
J			About 25 cm
к	cm bycm		82 cm
L			About 30 cm
м	cm by cm		30 cm
N			About 20 cm
ο	cm bycm		20 cm
Р			
Q			



calculate the p	below to evaluate your friend's robot. M perimeter. Record that information in the project, put a star by the letter of the recta	table below. If your measurements diff	
Rectangle	Width and Length	Student's Perimeter	Required Perimeter
A	cm by cm	2cm+2cm+5cm+5cm=14cm	14 cm
В	2_cm by 5_cm		14 cm
с	cm by cm		18 cm
D	cm by cm		18 cm
E	cm by cm		28 cm
F	<u> </u>		16 cm
G	2_cm by 2_cm		8 cm
н	cm bycm		
L	cm bycm		
		I	

sample Problem Set



Name	Date	

- 1. Gia measures her rectangular garden and finds the width is 9 yards and the length is 7 yards.
 - a. Estimate to draw Gia's garden, and label the side lengths.

- b. What is the area of Gia's garden?
- c. What is the perimeter of Gia's garden?
- 2. Elijah draws a square that has side lengths of 8 centimeters.
 - a. Estimate to draw Elijah's square, and label the side lengths.

- b. What is the area of Elijah's square?
- c. What is the perimeter of Elijah's square?



d. Elijah connects three of these squares to make one long rectangle. What is the perimeter of this rectangle?

- 3. The area of Mason's rectangular painting is 72 square inches. The width of the painting is 8 inches.
 - a. Estimate to draw Mason's painting, and label the side lengths.

b. What is the length of the painting?

- c. What is the perimeter of Mason's painting?
- d. Mason's mom hangs the painting on a wall that already has two of Mason's other paintings. The areas of the other paintings are 64 square inches and 81 square inches. What is the total area of the wall that is covered with Mason's paintings?

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- 4. The perimeter of Jillian's rectangular bedroom is 34 feet. The length of her bedroom is 9 feet.
 - a. Estimate to draw Jillian's bedroom, and label the side lengths.

b. What is the width of Jillian's bedroom?

c. What is the area of Jillian's bedroom?

d. Jillian has a 4-foot by 6-foot rug in her room. What is the area of the floor that is not covered by the rug?



lame	Date	

1. Kyle puts two rectangles together to make the L-shaped figure below. He measures some of the side lengths and records them as shown.



- a. Find the perimeter of Kyle's shape.
- b. Find the area of Kyle's shape.
- c. Kyle makes two copies of the L-shaped figure to create the rectangle shown below. Find the perimeter of the rectangle.





2. Jeremiah and Hayley use a piece of rope to mark a square space for their booth at the science fair. The area of their space is 49 square feet. What is the length of the rope that Jeremiah and Hayley use if they leave a 3-foot opening so they can get in and out of the space?

3. Vivienne draws four identical rectangles as shown below to make a new, larger rectangle. The perimeter of one of the small rectangles is 18 centimeters, and the width is 6 centimeters. What is the perimeter of the new, larger rectangle?

4. A jogging path around the outside edges of a rectangular playground measures 48 yards by 52 yards. Maya runs $3\frac{1}{2}$ laps on the jogging path. What is the total number of yards Maya runs?

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Name ______

Date _____

Use this form to critique your classmate's problem-solving work.

Classmate:	Problem Number:	
Strategies My Classmate Used:		
Things My Classmate Did Well:		
Suggestions for Improvement:		
Strategies I Would Like to Try Based on My Classmate's Work:		



Student A

$$7ft = 7ft = 7ft + 7ft + 7ft + 7ft = 7ft + 7ft + 7ft = 7ft + 7ft + 7ft = 1000 \text{ mm}^{28ft}$$

$$7ft = 7ft = 7ft + 7ft + 7ft = 1000 \text{ mm}^{28ft}$$

$$P = 7ft + 7ft + 7ft + 7ft = 1000 \text{ mm}^{28ft}$$

$$P = 4 \times 7ft = 7ft + 7ft + 7ft + 7ft = 1000 \text{ mm}^{28ft}$$

$$P = 4 \times 7ft = 7ft + 7ft + 7ft + 7ft = 1000 \text{ mm}^{28ft}$$

$$P = 7ft + 7ft + 7ft + 7ft + 7ft = 1000 \text{ mm}^{28ft}$$

$$r = 1000 \text{ mm}^{28ft}$$

$$r = 1000 \text{ mm}^{28ft}$$

$$r = 28ft = 1000 \text{ mm}^{28ft}$$

$$r = 28ft = 1000 \text{ mm}^{28ft}$$

$$r = 28-3 \text{ mm}^{28ft}$$

Student **B**



Student C



student work sample images



Lesson 30: Share and critique peer strategies for problem solving.

Mara draws a 6-inch by 8-inch rectangle. She shades one-half of the rectangle. What is the area of the shaded part of Mara's rectangle?

	R	ead	Draw	Write	
EUREKA MATH	Lesson 31:	Explore and c	reate unconventional repr	resentations of one-half.	167
MATH [®]	© 2018 Great Mind	ds®. eureka-math.org			

Name _____

Date _____

Use this form to analyze your classmate's representations of one-half shaded.

Square (letter)	Does this square show one-half shaded?	Explain why or why not.	Describe changes to make so the square shows one-half shaded.







squares



Hannah traces square-inch tiles to draw 3 larger squares. She draws the 3 large squares side by side to make a rectangle. She shades one-half of each larger square, as shown.

a. Do you agree that all 3 squares are one-half shaded? Explain your answer.

b. What is the area of the rectangle?



Lesson 32: Explore and create unconventional representations of one-half.

Draw

Write

Read

c. What is the total area of the shaded space?

Read

Draw

Write

Lesson 32:

32: Explore and create unconventional representations of one-half.



Name	Date	

1. Look at the circles you shaded today. Glue a circle that is about one-half shaded in the space below.

a. Explain the strategy you used to shade in one-half of your circle.

b. Is your circle exactly one-half shaded? Explain your answer.

2. Julian shades 4 circles as shown below.



a. Write the letters of the circles that are about one-half shaded.



- b. Choose one circle from your answer to Part (a), and explain how you know it's about one-half shaded.
 Circle ______
- c. Choose one circle that you did not list in Part (a), and explain how it could be changed so that it is about one-half shaded.

Circle _____

3. Read the clues to help you shade the circle below.



- a. Divide the circle into 4 equal parts.
- b. Shade in 2 parts.
- c. Erase a small circle from each shaded part.
- d. Estimate to draw and shade 2 circles in the unshaded parts that are the same size as the circles you erased in Part (c).
- 4. Did you shade in one-half of the circle in Problem 3? How do you know?

Name _____

Date _____

List some games we played today in the chart below. Place a check mark in the box that shows how you felt about your level of fluency as you played each activity. Check off the last column if you would like to practice this activity over the summer.

Activity	I still need some practice with my facts.	l am fluent.	I would like to put this in my summer activity book.
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			



There are 9 bicycles and some tricycles at the repair shop. There are 42 total wheels on all the bicycles and tricycles. How many tricycles are in the shop?

	R	ead	Draw	Write		
EUREKA MATH	Lesson 34:	Lesson 34: Create resource booklets to support fluency with Grade 3 skills.				
MAIN	© 2018 Great Min	ds®. eureka-math.org				