**ROCHESTER CITY SCHOOL DISTRICT**

**In order to get ready for the New Common Core Mathematics tests below are suggested activities and resources that can be utilized during the extra period Mathematics block. Students who do not have a double period scheduled may utilize this in intervention classrooms or after school tutorial in order to prepare for the tests.**

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| --- | --- | --- |
| **Components** | **Instructional Methods**  |  |
| Fluency (10 minutes) | * Interventions at all grade levels should devote time in each session to build fluent retrieval of basic arithmetic facts.
* This can be done with flash cards, timed tests, fames, or any other routine
 |  |
| Tasks and Practice (35 minutes) | * Instruction during the intervention block should be explicit and systematic. This includes providing models of proficient problem solving, verbalization of thought processes, guided practice, corrective feedback, and frequent cumulative review.
* Intervention should include instruction on solving word problems that is based on common underlying structures.
* Students should have opportunities to work with visual representations of mathematical ideas and interventionists should be proficient in the use of visual representations of mathematical ideas.
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**Grade 6**

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| --- | --- | --- | --- |
| **Weeks** | **Standards** | **Fluencies** | **Tasks and Resources** |
| 2/11-3/1 | * 6.NS.2
* 6.NS.6
* 6.NS.8
* 6.G.3
 | * Multiplication and Division
 | * RCSD Common Core Units
* [Got Your Number](http://insidemathematics.org/problems-of-the-month/pom-gotyournumber.pdf)
* [Basketball Players](http://insidemathematics.org/common-core-math-tasks/6th-grade/6-2003%20Baseball%20Players.pdf)
* [Once Upon a Time](http://insidemathematics.org/problems-of-the-month/pom-onceuponatime.pdf)
 |
|  | * 6.NS.3
* 6.G.1
 | * Operations with Decimals
 | * RCSD Common Core Units
* [Sewing](http://insidemathematics.org/common-core-math-tasks/6th-grade/6-2009%20Sewing.pdf)
 |
| 3/4-3/22 | * 6.NS.1
* 6.RP
 | * Operations with fractions
 | Understand Ratio concepts and use ratio reasoning to solve problems* <http://illustrativemathematics.org/illustrations/496>
* <http://illustrativemathematics.org/illustrations/61>
* <http://illustrativemathematics.org/illustrations/62>
* <http://illustrativemathematics.org/illustrations/63>
* <http://illustrativemathematics.org/illustrations/64>
* [Grade 6 Performance Task: Taking a Field Trip](http://www.smarterbalanced.org/wordpress/wp-content/uploads/2012/09/performance-tasks/fieldtrip.pdf)
* [Grade 6 Math: Ratios and Proportional Relationships (NYC)](http://schools.nyc.gov/NR/rdonlyres/A9F735CB-47E4-40F8-884F-EA54D0AB5705/0/NYCDOEG6MathRatios_Final.pdf)
* [Grade 6 Math: Ratio Reasoning (NYC)](http://schools.nyc.gov/NR/rdonlyres/DA04B2E8-94CE-4DE4-B902-CEE331D651FB/0/NYCDOEG6MathRatioReasoning_Final.pdf)
* [Candies](http://insidemathematics.org/common-core-math-tasks/6th-grade/6-2007%20Candies.pdf)
* [Truffles](http://insidemathematics.org/common-core-math-tasks/6th-grade/6-2009%20Truffles.pdf)
* [First Rate](http://insidemathematics.org/problems-of-the-month/pom-firstrate.pdf)
* [Movin n Grovin](http://insidemathematics.org/problems-of-the-month/pom-movinngroovin.pdf)
* Apply and extend previous understandings of multiplication and division to divide fractions by fractions
* <http://illustrativemathematics.org/illustrations/463>
* <http://illustrativemathematics.org/illustrations/330>
* <http://illustrativemathematics.org/illustrations/409>
* [Rabbit Costumes](http://insidemathematics.org/common-core-math-tasks/6th-grade/6-2003%20Rabbit%20Costumes.pdf)
 |

[Educator Guide to the 2013 Grade 6 Common Core Mathematics Test](http://engageny.org/sites/default/files/resource/attachments/grade-6-math-guide.pdf) [Additional Tasks from Rochester’s Curriculum](http://intranet/sites/Rochester%20Curriculum/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fsites%2fRochester%20Curriculum%2fShared%20Documents%2fMath%206%2fUnit%205%20%2d%20Synthesis%20and%20Application&FolderCTID=&View=%7b2CA63BA1%2d74AB%2d4655%2d9B75%2d91E9D9A151D1%7d)

<http://illustrativemathematics.org/>

[Mathematics Assessment Project](http://map.mathshell.org/materials/index.php)

[Middle School Balanced Assessment Tasks](http://balancedassessment.concord.org/packetms.html)

[Inside Mathematics – Grade 6](http://insidemathematics.org/index.php/6th-grade)

[www.learnzillion.com](http://www.learnzillion.com)

[Mathematics Grade 6 Common Core Sample Questions](http://www.p12.nysed.gov/assessment/common-core-sample-questions/math-grade-6.pdf)

**Grade 7**

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| --- | --- | --- | --- |
| **Weeks** | **Standards** | **Fluencies** | **Tasks and Resources** |
| 2/8-3/1 | * 7.NS.1-2
* 7.RP
 | * Addition and Subtraction with rational numbers
 | * <http://illustrativemathematics.org/illustrations/98>
* <http://illustrativemathematics.org/illustrations/99>
* <http://illustrativemathematics.org/illustrations/82>
* [Buses](http://map.mathshell.org/materials/tasks.php?taskid=365#task365)
* [Sale!](http://map.mathshell.org/materials/tasks.php?taskid=269#task269)
* [T-Shirt Sale](http://map.mathshell.org/materials/tasks.php?taskid=271#task271)
* [A Golden Crown?](http://map.mathshell.org/materials/tasks.php?taskid=282#task282)
* [Counting Trees](http://map.mathshell.org/materials/tasks.php?taskid=386#task386)
* [Ice Cream](http://map.mathshell.org/materials/tasks.php?taskid=389#task389)

Lessons:* [Increasing and decreasing a number by a percent](http://map.mathshell.org/materials/lessons.php?taskid=210#task210) (lesson and ppt)
* [Estimating: Counting Trees](http://map.mathshell.org/materials/lessons.php?taskid=422#task422) (lesson and ppt)
 |
| 3/4-3/22 | * 7.NS.1-2
* 7.NS
 | * Multiplication and division with rational numbers
 | * <http://illustrativemathematics.org/illustrations/314>
* <http://illustrativemathematics.org/illustrations/310>
* <http://illustrativemathematics.org/illustrations/46>
* <http://illustrativemathematics.org/illustrations/604>
* <http://illustrativemathematics.org/illustrations/298>
* [Division](http://map.mathshell.org/materials/tasks.php?taskid=368#task368)
* [A Day Out](http://map.mathshell.org/materials/tasks.php?taskid=387#task387)
* [Taxi Cabs](http://map.mathshell.org/materials/tasks.php?taskid=395#task395)
* [Using positive and negative numbers in context](http://map.mathshell.org/materials/lessons.php?taskid=453#task453) (lesson and resources)
 |
| 3/25-4/19 | * 7. EE.4
* 7.EE
 | * px + q = r
* p(x + q) = r
 | Use properties of equations to generate equivalent expressions* <http://illustrativemathematics.org/illustrations/543>
* <http://illustrativemathematics.org/illustrations/433>
* <http://illustrativemathematics.org/illustrations/541>

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.* <http://illustrativemathematics.org/illustrations/712>
* <http://illustrativemathematics.org/illustrations/478>
* <http://illustrativemathematics.org/illustrations/108>
* <http://illustrativemathematics.org/illustrations/643>
* <http://illustrativemathematics.org/illustrations/986>

[Steps to solving equations](http://map.mathshell.org/materials/lessons.php?taskid=431#task431) (Lesson and ppt)[Fencing](http://map.mathshell.org/materials/tasks.php?taskid=369#task369) |

[Educators Guide to the 2013 Grade 7 Common Core Mathematics Test](http://engageny.org/sites/default/files/resource/attachments/grade-7-math-guide.pdf)

[Mathematics Assessment Project](http://map.mathshell.org/materials/index.php)

<http://illustrativemathematics.org/>

[Middle School Balanced Assessment Tasks](http://balancedassessment.concord.org/packetms.html)

[Inside Mathematics – Grade 7](http://insidemathematics.org/index.php/7th-grade)

[www.learnzillion.com](http://www.learnzillion.com)

[Mathematics Grade 7 Common Core Sample Questions](http://www.p12.nysed.gov/assessment/common-core-sample-questions/math-grade-7.pdf)

[Grade 7 Math: Proportional Reasoning (NYC)](http://schools.nyc.gov/NR/rdonlyres/41C0F04C-0BD6-491F-9BF0-16485EC080BE/0/NYCDOEG7MathProportionalReasoning_Final.pdf)

**Grade 8**

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| --- | --- | --- | --- |
| **Weeks** | **Standards** | **Fluencies** | **Tasks and Resources** |
| 2/8-3/1 | * 8.EE.8
 | * Solve simple 2x2 systems by inspection
 | * <http://www.illustrativemathematics.org/illustrations/469>
* <http://www.illustrativemathematics.org/illustrations/472>
* <http://www.illustrativemathematics.org/illustrations/554>
* <http://www.illustrativemathematics.org/illustrations/73>
* [Buying Chips and Candy](http://map.mathshell.org/materials/tasks.php?taskid=366&subpage=apprentice)
* [Hot Under the Collar](http://map.mathshell.org/materials/tasks.php?taskid=388#task388)

Lessons:* [Building and Solving Equations 1](http://map.mathshell.org/materials/lessons.php?gradeid=23) (lesson and ppt)
* [Classifying Solutions to Systems of Equations](http://map.mathshell.org/materials/lessons.php?taskid=411&subpage=concept) (lesson and ppt)
 |
| 3/4-3/22 | * 8.F.1
* 8.F.2
* 8.F.3
* 8.F.4
 | * Define and Evaluate Functions
* Real-life Models
 | Define, Evaluate, and Compare* <http://www.illustrativemathematics.org/illustrations/713>
* <http://www.illustrativemathematics.org/standards/k8>
* <http://www.illustrativemathematics.org/illustrations/1165>
* <http://www.illustrativemathematics.org/illustrations/641>
* <http://www.illustrativemathematics.org/illustrations/813>

Use Functions to model Relationships: Real-life* <http://www.illustrativemathematics.org/illustrations/417>
* <http://www.illustrativemathematics.org/illustrations/552>
* <http://www.illustrativemathematics.org/illustrations/477>
* <http://www.illustrativemathematics.org/illustrations/1206>
* <http://www.illustrativemathematics.org/illustrations/247>
* [Baseball Jerseys](http://map.mathshell.org/materials/tasks.php?taskid=362&subpage=apprentice)
* [Short tasks using Functions](http://map.mathshell.org/materials/tasks.php?taskid=400&subpage=novice)

Lessons:* [Interpreting Distance-Time Graphs](http://map.mathshell.org/materials/lessons.php?taskid=208&subpage=concept) (lesson and ppt)
* [Modeling Situations with Linear Equations](http://map.mathshell.org/materials/lessons.php?taskid=211&subpage=concept) (lesson and ppt)
 |
| 3/22-4/19 | * 8.EE.4
* 8.EE.3
 | * **Scientific Notation**
* Estimating with Scientific Notation
* Perform operations with scientific notation
 | Solve real-life and mathematical problems using scientific notation* <http://www.illustrativemathematics.org/illustrations/476>
* <http://www.illustrativemathematics.org/standards/k8>
* <http://www.illustrativemathematics.org/illustrations/113>
* [100 People](http://map.mathshell.org/materials/download.php?fileid=1046)
* [A Million Dollars](http://map.mathshell.org/materials/tasks.php?taskid=360&subpage=apprentice)

 Lessons: * [Estimating Length Using Scientific Notation](http://map.mathshell.org/materials/lessons.php?taskid=414&subpage=concept)
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[Mathematics Grade 8 Common Core Sample Questions](http://engageny.org/sites/default/files/resource/attachments/math-grade-8.pdf)

[Educators Guide to the 2013 Grade 8 Common Core Mathematics Test](http://engageny.org/sites/default/files/resource/attachments/grade-8-math-guide.pdf)

[Mathematics Assessment Project](http://map.mathshell.org/materials/index.php)

<http://illustrativemathematics.org/>

[Middle School Balanced Assessment Tasks](http://balancedassessment.concord.org/packetms.html)

[www.learnzillion.com](http://www.learnzillion.com)

<http://insidemathematics.org>