**TEACHER RESOURCE LIBRARY**

Grade 6 ~ ***Number Systems: Division of Fractions (6.NS.1)***

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| **Apply and extend previous understandings of multiplication and division to divide fractions by fractions.** |
| **Resources** | 1. **Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.** *For* *example, create a story context for (2/3) °“ (3/4) and use a visual fraction* *model to show the quotient; use the relationship between multiplication* *and division to explain that (2/3) °“ (3/4) = 8/9 because 3/4 of 8/9 is 2/3.* *(In general, (a/b) °“ (c/d) = ad/bc.) How much chocolate will each person* *get if 3 people share 1/2 lb of chocolate equally? How many 3/4-cup* *servings are in 2/3 of a cup of yogurt? How wide is a rectangular strip of* *land with length 3/4 mi and area 1/2 square mi?*
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| **My Stuff**  |   |
| **Resource Books** | * **Elementary & Middle School Mathematics (VanDeWalle, 7th Ed.)**
	+ TEACHER CONTENT
		- Meaning of Fractions in Division: p. 287
		- Relationship between Multiplication and Division of Fractions: p. 311-312
		- Division Types, Models, and Algorithms for Division of Fractions: p. 321-326
		- Mixed Numerals and Improper Fractions: p. 296-297
	+ STUDENT ACTIVITIES
		- Partitive Interpretation of Division: p. 321-323, Figure 16.12 & problems in dark print
		- Measurement Interpretation of Division: p. 323, Figure 16.15 & problems in dark print
		- Developing the Algorithm: p. 324-326, Figure 16.17 & problems in dark print
* **Elementary & Middle School Mathematics (VanDeWalle, 6th Ed.)**
	+ TEACHER CONTENT
		- Partition Concept of Division: p. 326-328
		- Measurement Concept of Division: p. 328-329
		- Developing the algorithm: p. 329-330
	+ STUDENT ACTIVITIES
		- Partition Concept of Division: p. 327-328, Figure 17.2 & problems in dark print
		- Measurement Concept of Division: p. 328-329, problems in dark print
		- Developing the Algorithm: p. 329-330, Figures 17.14, 17.15, and 17.16, and problems in dark print
* **Elementary Mathematics for Teachers (Parker, Baldridge, 2004) ISBN 0-9748140-0-8**
	+ TEACHER CONTENT
		- Partitive and Measurement Division: p. 146-149
		- Division of Fractions TEACHING SEQUENCE: p. 150-154
		- Division Word Problems: p. 155-158
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| **Web**  | **Models and Algorithms**TEACHER CONTENT* **Math Forum - Teacher Tutorial** - <http://mathforum.org/dr.math/faq/faq.divide.fractions.html>
* **Dividing Fractions - Teacher Tutorial** - <http://www.tpub.com/math1/5g.htm>

STUDENT ACTIVITIES/LESSONS* **NLVM - Fraction Number Line Bars- Interactive Applet** -

 <http://nlvm.usu.edu/en/nav/frames_asid_265_g_3_t_1.html?open>=activities&from=category\_g\_3\_t\_1.html* **Visual Fractions - “Divide Fractions” - Interactive Applets and Game -** <http://www.visualfractions.com/divide.htm>
* **UEN - “Modeling Multiplication and Division of Fractions” Lesson** - <http://www.uen.org/Lessonplan/preview.cgi?LPid=23394>

**Mixed Numbers and Improper Fractions**STUDENT ACTIVITIES/LESSONS* **LearnAlberta - “Improper Fractions and Mixed Numbers” Video Lesson** -

 <http://www.learnalberta.ca/content/mesg/html/math6web/index.html?page=lessons&lesson=m6lessonshell02.swf>**Lessons**STUDENT ACTIVITIES/LESSONS* **Illuminations “Feeding Frenzy” - Unit Rates; Multiply/Divide Fractions** - <http://illuminations.nctm.org/LessonDetail.aspx?id=L781>
* **UEN - “Sticky Note Math” Lesson** - <http://www.uen.org/Lessonplan/preview?LPid=15443>
* **UEN - “Dividing Fractions” Lesson** - <http://www.uen.org/Lessonplan/preview?LPid=530>1
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| **Literature Connections** | The Doorbell Rang by Pat HutchinsFull House: An Invitation to Fractions by Dayle Ann Dodds. |