**MULTIPLICATION, DIVISION, ETC.**

**STUDY GUIDE**

<https://www.drooker.ca/number.html>

**WATCH THE FOLLOWING VIDEO**

<https://www.youtube.com/watch?v=tr2u97LLYg8>

**PRACTICE YOUR TIMES TABLE TRICKS IN THE SPACE BELOW**

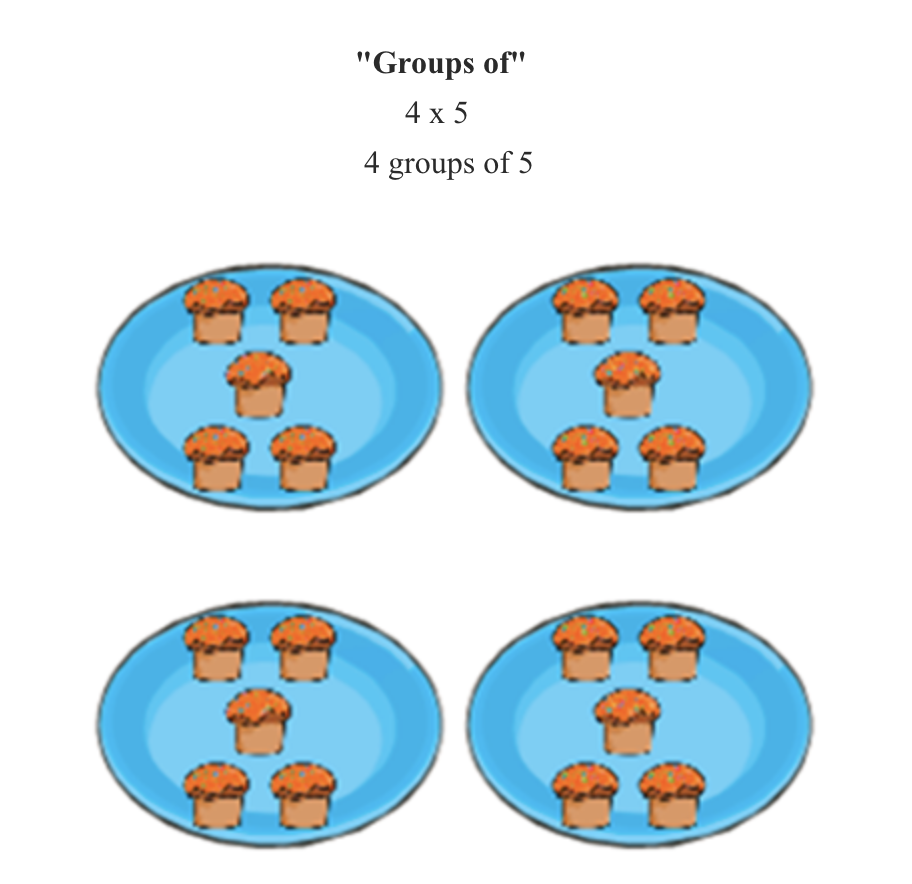
|  |  |
| --- | --- |
| 3 | 4 |
| 6 | 7 |
| 8 | 9 |
| 11 | 12 |

**MULTIPLICATION**

**Multiplication is repeated addition (of the same number)**  
3 + 3 + 3 = 9

VS

3 x 3 = 9



**DIVISION**

**DIVISION IS RELATED TO REPEATED SUBTRACTION**

<https://www.youtube.com/watch?v=xBlingXK188>   
45 / 5 =9  
  
45 -5=40  
40-5=35  
35-5=30  
30-5=25  
25-5=20  
20-5=15  
15-5=10  
10-5=5  
5-5=0  
(9 STEPS OF SUBTRACTION!)

**CHECK OUT THE FOLLOWING VIDEO THAT RELATES ARRAYS AND MULTIPLICATION TO DIVISION**

<https://www.youtube.com/watch?v=mwig70aQuHI>

**DIVISION SOLUTION STRATEGIES**

1)Use multiplication to help solve a question  
45 / 5 = ?  What is the ? x 5 which would equal 45  
2) Use manipulatives and divide them into rows  
3) Repeatedly subtract and count how many steps until you reach 0

**LONG AND SHORT DIVISION**

<https://www.youtube.com/watch?v=BCqqn2sWUzY>

<https://www.youtube.com/watch?v=SLze82Zcc4Y>

**FRACTIONS**

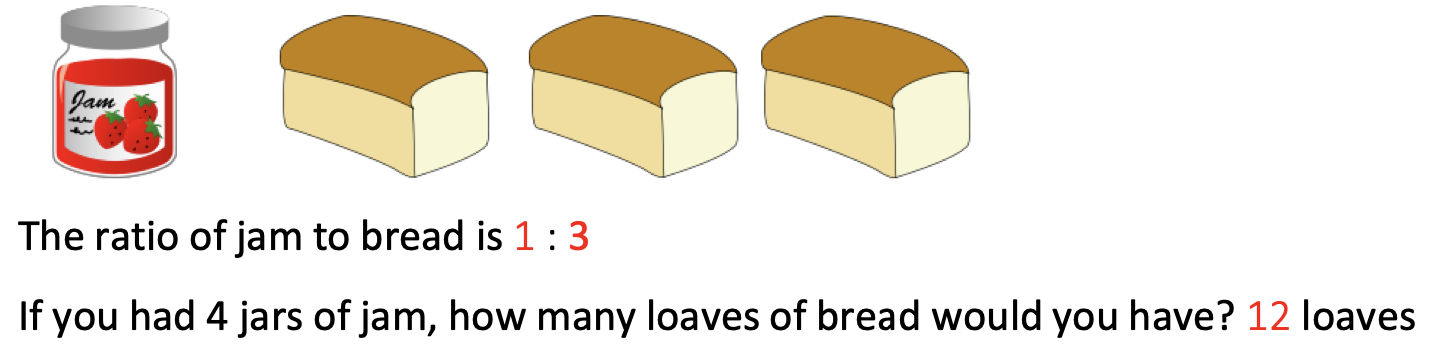
**Fraction Song**

<https://player.vimeo.com/video/215758087?app_id=122963>

**Fraction Manipulatives**  
[toytheater.com/fraction-bars/](http://toytheater.com/fraction-bars/)  
[toytheater.com/fraction-strips/](http://toytheater.com/fraction-strips/)

**RATIOS/RATES**

**Take note as to how multiplication and division factor into the balance within growing and shrinking ratios!**

****

