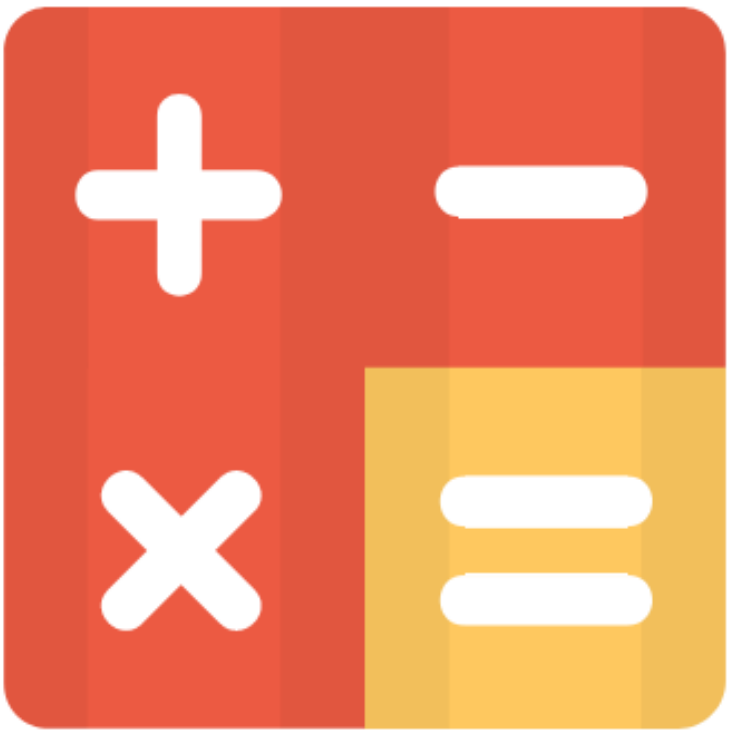
equal groups

CONCEPTUAL LENS



multiplication, division, and fractions

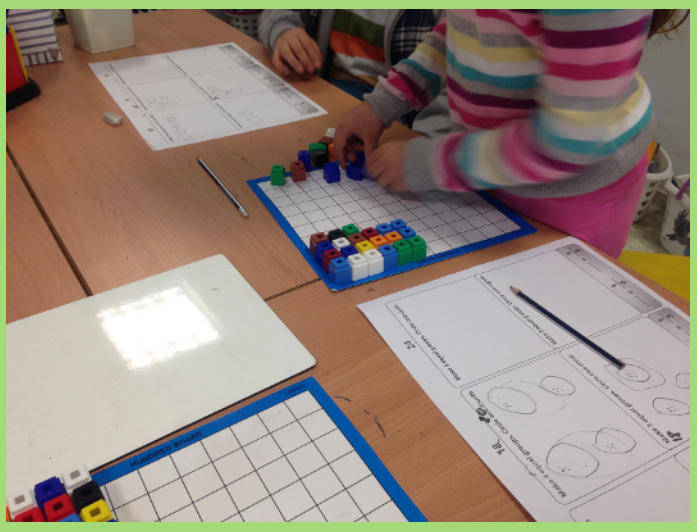
GRADES 1-3

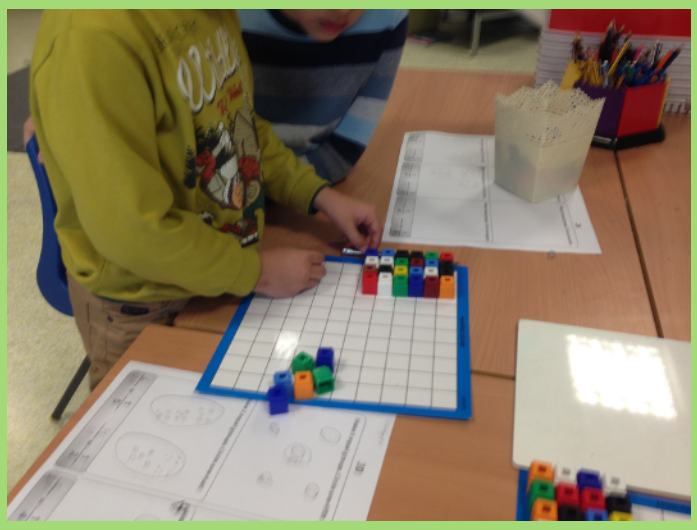
THINK CONCEPTUALLY

www.thinkconceptually.com

Equal Groups

These learning engagements are intended to be used with math manipulatives and in a guided math group working with partners and a teacher. I recommend that the teacher use questioning to both guide and deepen understandings as students cooperatively explore the concept of equal groups. The multiple ways to help students work with and visualize equal groups can be done with cubes, blocks, arrays, and fraction materials even clocks. There are multiple strategies to access and build upon while building understandings.





Equal Groups for Multiplication I

Name: _____

Problem	Drawing	Repeated Addition	Answer
2 groups of 4			
4 groups of 4			
3 groups of 5			
5 groups of 5			
8 groups of 3			
6 groups of 2			

Equal Groups for Division I

Name: _____

Problem	Drawing	Division Sentence	Answer
John has a bag of 30 M&Ms. He wants to share with his 4 friends. How many M&M's does each kid get?			
Maria, Jean and Naz want to share a pizza. How many pizzas will each kid get if there are 9 slices?			
There are 30 stickers and 6 kids. How many stickers does each kid get? Draw it to find out.			

Equal Groups for Multiplication II

Name: _____

Problem	Drawing	Array	Repeated Addition	Multiplication Sentence	Answer
3 groups of 8					
4 groups of 6					
2 groups of 7					
5 groups of 5					
8 groups of 4					
6 groups of 3					

Equal Groups for Division II

Name: _____

Problem	Drawing	Division Sentence	Answer
Chris has 28 cactus plants. He keeps his cactus plants in even rows of 7. How many cactus plants are in each row?			
Ameer's pet store has 24 tropical fish. They keep 3 fish in each tank. How many fish tanks are there?			
There are 50 toes in the swimming pool. Each person has 10 toes. How many people are in the swimming pool?			
Ivan scooped 16 scoops of ice-cream evenly onto 8 cones. How many scoops are ice-cream are on each cone?			

Name: _____

Equal Groups for Multiplication III

Problem	Draw equal groups	Array - neatly drawn	Repeated Addition, Multiplication Sentence & Answer
4 groups of 6			
3 groups of 9			
5 groups of 8			
6 groups of 7			
8 groups of 5			
7 groups of 4			

Equal Groups for Division III

Name: _____

Problem	Show equal groups by drawing or on an open number line	Draw a division story	Division Sentence & Answer
Chris has 28 cactus plants. He keeps his cactus plants in even rows of 7. How many rows are there?			
Ameer's pet store has 24 tropical fish. They keep 3 fish in each tank. How many fish tanks are there?			
There are 50 toes in the swimming pool. Each person has 10 toes. How many people are in the swimming pool?			
Ivan scooped 16 scoops of ice-cream evenly onto 8 cones. How many scoops of ice-cream are on each cone?			

Equal Groups for Multiplication IV

Name: _____

Problem	Show equal groups	Array - neatly drawn	Repeated Addition, Multiplication Sentence & Answer
3 groups of 8			
4 groups of 6			
2 groups of 7			
5 groups of 5			
8 groups of 4			
6 groups of 3			

Equal Groups for Division IV

Name: _____

Problem	Drawing Equal Groups	Division Story	Division Sentence & Answer
24 divided by 3			
45 divided by 9			
12 divided by 6			
56 divided by 8			
32 divided by 4			
18 divided by 3			

Equal Groups for Multiplication V

Name: _____

Problem	Draw Equal Groups	Array - neatly drawn with straight lines	Open Number Line	Repeated Addition, Multiplication Sentence & Answer
4 groups of 8				
6 groups of 7				
8 groups of 9				
9 groups of 8				
11 groups of 3				
5 groups of 7				

Equal Groups for Division V

Name: _____

Problem	Show equal groups	Division Story with Pictures	Division Sentence & Answer
35 divided by 7			
24 divided by 6			
15 divided by 3			
42 divided by 7			
72 divided by 9			
40 divided by 5			

Equal Groups for Multiplication VI

Name: _____

Word Problem	Show equal groups on number line or as a drawing	Array - neatly drawn with straight lines	Repeated Addition, Multiplication Sentence & Answer
Malik has 7 grapes. Jenna has 7 times as many grapes as Malik. How many grapes does Jenna have?			
Mamma Lucia usually sells 20 spaghetti dinners per night. Each spaghetti dinner has 5 meatballs. How many meatballs should they make each night for dinner?			
The third grade at IICS has 21 students in each class. There are 3 classrooms. One at Hisar and 2 at Marmara. How many 3rd grade students are there altogether?			
Ally painted 8 pictures a day for one week. How many pictures did Ally paint altogether?			

Equal Groups for Division VI

Name: _____

Problem	Show Equal Groups	Division Story	Division Sentence & Answer
30 divided by 5			
36 divided by 6			
21 divided by 3			
35 divided by 7			
81 divided by 9			
45 divided by 5			

Equal Groups for Multiplication VII

Name: _____

Word Problem	Show equal groups on an open number line or as a drawing	Array - neatly drawn with straight lines	Repeated Addition, Multiplication Sentence & Answer
There are six classes outside for recess. If there are 12 students in each class, how many students are outside at recess in total?			
Paola has a collection of pencils. He sorted his pencils into 4 equal groups with 6 pencils in each group. How many pencils does Paolo have in all?			
Autumn Orchards has 8 baskets of apples. If there are 9 apples in each basket, how many apples are there in all?			
Migros has 8 packages of fish sticks. Each package has 12 pieces. How many fish sticks are there in all?			

Equal Groups for Division VII

Name: _____

Problem	Show Equal Groups	Division Story Drawing	Division Sentence & Answer
Ms. Smith brought 4 evenly divided boxes of muffins to class. There are 36 muffins altogether. How many muffins are in each box?			
John divided his 48 spools of thread evenly into 6 boxes. How many spools of thread did he put in each box?			
Christine has 42 herb plants. She keeps her herb plants in rows. There are 7 shelves. How many cactus plants are in each row?			
Faruz scooped 36 scoops of ice-cream evenly onto 12 cones. How many scoops are ice-cream are on each cone?			

Consolidating multiplication strategies

Solve using PV Chip Diagrams

56 X 3 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 3 = 56

43 x 6 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 6 = 43

57 x 7 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 7 = 57

36 x 5 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 5 = 36

159 x 2 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 2 = 159

69 x 4 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 4 = 69

Consolidating multiplication strategies

Solve using Chip Diagrams

233 x 4 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 4 = 233

181 x 3 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 3 = 181

238 x 7 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 7 = 238

255 x 5 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 5 = 255

442 x 2 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 2 = 442

323 x 3 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 3 = 323

Consolidating multiplication strategies

Solve using Expanded Form

26 x 4 = _____

_____ ÷ 4 = 26

18 x 3 = _____

_____ ÷ 3 = 18

39 x 4 = _____

_____ ÷ 4 = 39

15 x 5 = _____

_____ ÷ 5 = 15

32 x 2 = _____

_____ ÷ 2 = 32

123 x 3 = _____

_____ ÷ 3 = 123

Consolidating multiplication strategies

Solve using Expanded Form

12 x 4 = _____

_____ ÷ 4 = 12

19 x 3 = _____

_____ ÷ 3 =19

145 x 7 = _____

_____ ÷ 7 = 145

165 x 5 = _____

_____ ÷ 5 = 165

582 x 2 = _____

_____ ÷ 2 = 582

343 x 3 = _____

_____ ÷ 3 = 343

Moving forward with division strategies

Decompose with Number Bonds

Example! 24 ÷ 4= _____

24 ÷ 4

1. Decompose the number into 2 numbers that can be divided by 4.

20 and 4

24÷4

2. I know 4+4+4+4+4 = 20 so, 20÷4= 5

4÷4 = 1

3. I know 8 goes into 8 only 1 time .

4. Add the partial quotients.

5+1 = 6

5. So 24 books divided by 4 students equals 6 books for each student.

_____ x 4 = 24

30 ÷ 5 = _____

_____ x 5=30

36 ÷ 6 = _____

_____ x 6 = 36

27÷ 3= _____

_____ x 3 = 27

32 ÷ 4 = _____

_____ x 4 = 32

48÷ 2 = _____

_____ x 2 =48

Moving forward with division strategies

Decompose with Number Bonds

42÷ 6= _____

_____ x 6 = 42

40÷ 5 = _____

_____ x 5=40

112÷ 2 = _____

_____ x 2 = 112

54÷ 6 = _____

_____ x 6 =54

42 ÷ 3 = _____

_____ x 3 = 42

48÷ 4 = _____

_____ x 4 = 48

Number of the Day

Equal Groups

Name: _____

Identify the number bond for your number of the day.

Make an array out of the beans, counters or cubes using the number of the day. Use that information to solve the problems.

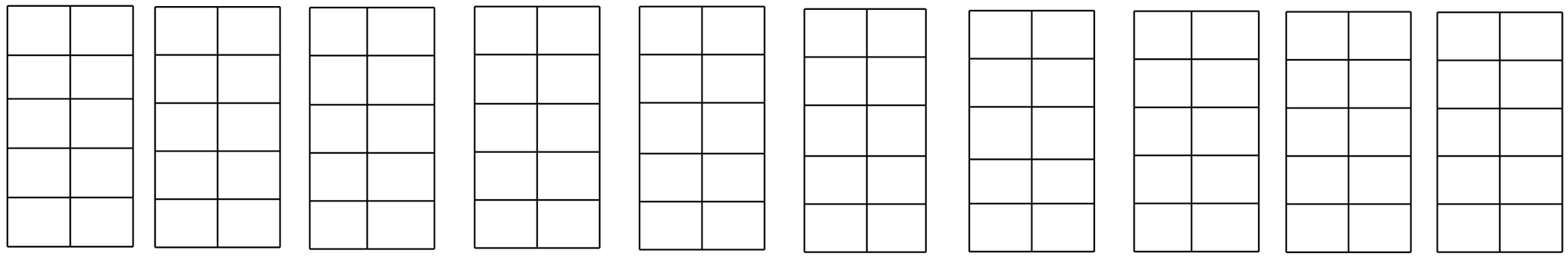
I have _____ groups of _____

Multiplication Sentence

_____ x _____ = _____

Division Sentence

_____ ÷ _____ = _____



Add or subtract to make equal groups if the number of the day cannot be divided equally. Write the new number in the corner.

Show one-half by drawing.

$\frac{1}{2}$

Draw an array. Circle one-half.

_____ = $\frac{1}{2}$

Show one-fourth by drawing.

$\frac{1}{4}$

Draw an array. Circle one-fourth.

_____ = $\frac{1}{4}$

Show one-third by drawing.

$\frac{1}{3}$

Draw an array. Circle one-third.

_____ = $\frac{1}{3}$

Equal Groups

Name: _____

Show one-half by drawing.

$\frac{1}{2}$

$\_\_\_\_ = \frac{1}{2}$

Draw an array. Circle one-half.

Show one-fourth by drawing.

$\frac{1}{4}$

$\_\_\_\_ = \frac{1}{4}$

Draw an array. Circle one-fourth.

Show one-third by drawing.

$\frac{1}{3}$

$\_\_\_\_ = \frac{1}{3}$

Draw an array. Circle one-third.

Break-it-Down to find what is inside by facto family or by place value

Make an array out of the beans, counters or cubes using the number of the day. Use that information to solve the problems.

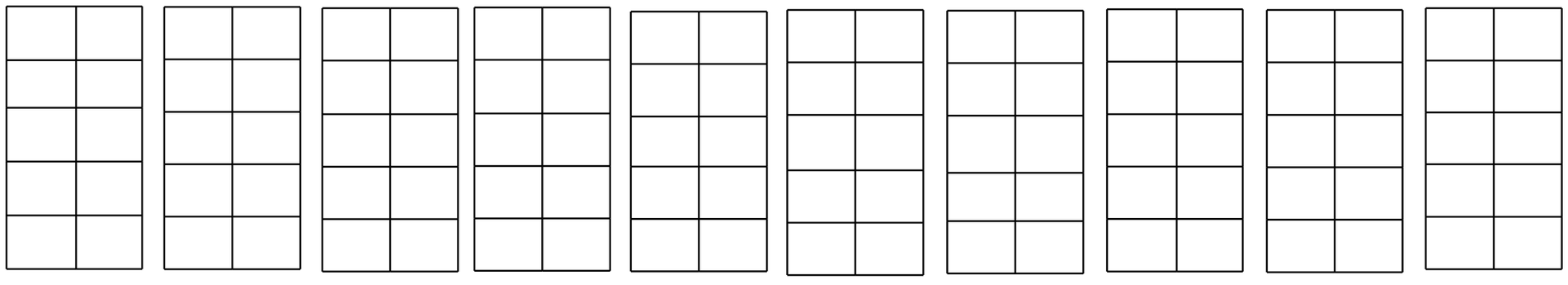
I have _____ groups of _____

x = _____

Multiplication Sentence

÷ = _____

Division Sentence



Task: Use beans, counters or cubes to make an array to finish the multiplication sentence. Then draw equal groups to circle the fraction. You can draw equal groups with pictures, tape diagrams or repeated addition, a number line or with an array.

5 x _____= 30

Make 5 equal groups. Circle one-fifth.

30 ÷ 5 = _____

3 x _____ = 18

Make 3 equal groups. Circle one-third.

18 ÷ 3 = _____

4 x _____ = 24

Make 4 equal groups. Circle one-fourth.

24 ÷ 4 = _____

Now rearrange your array to match the multiplication sentence and complete the sentence.

2 x _____= 30

Make 2 equal groups. Circle one-half.

30 ÷ 2 = _____

6 x _____= 18

Make 6 equal groups. Circle one-sixth.

18 ÷ 6 = _____

8 x _____= 24

Make 8 equal groups. Circle one-eighth.

24 ÷ 8 = _____

$\_\_\_ = \frac{1}{5}$	$\_\_\_ = \frac{1}{2}$	
$\_\_\_ = \frac{1}{3}$	$\_\_\_ = \frac{1}{6}$	
$\_\_\_ = \frac{1}{4}$	$\_\_\_ = \frac{1}{8}$	

Task: Use beans, counters or cubes to make an array to finish the multiplication sentence. Then draw equal groups to circle the fraction. You can draw equal groups with pictures, tape diagrams or repeated addition, a number line or with an array.

7 x _____= 42

Make 7 equal groups. Circle one-seventh.

42 ÷ 7 = _____

3 x _____ = 12

Make 3 equal groups. Circle one-third.

12 ÷ 3 = _____

4 x _____ = 28

Make 4 equal groups. Circle one-fourth.

28 ÷ 4 = _____

Now rearrange your array to match the multiplication sentence and complete the sentence.

2 x _____= 42

Make 2 equal groups. Circle one-half.

42 ÷ 2 = _____

6 x _____= 36

Make 6 equal groups. Circle one-sixth.

36 ÷ 6 = _____

8 x _____= 24

Make 8 equal groups. Circle one-eighth.

24 ÷ 8 = _____

____ = $\frac{1}{7}$	____ = $\frac{1}{2}$	
____ = $\frac{1}{3}$	____ = $\frac{1}{6}$	
____ = $\frac{1}{4}$	____ = $\frac{1}{8}$	

Task: Use beans, counters or cubes to make an array to finish the multiplication sentence. Then draw equal groups to circle the fraction. You can draw equal groups with pictures, tape diagrams or repeated addition, a number line or with an array.

6 x _____ = 42

Make 6 equal groups. Circle one-sixth.

42 ÷ 6 = _____

4 x _____ = 12

Make 4 equal groups. Circle one-fourth.

12 ÷ 4 = _____

7 x _____ = 28

Make 7 equal groups. Circle one-seventh.

28 ÷ 7 = _____

Now rearrange your array to match the multiplication sentence and complete the sentence.

2 x _____ = 84

Make 2 equal groups. Circle one-half.

84 ÷ 2 = _____

6 x _____ = 54

Make 6 equal groups. Circle one-sixth.

54 ÷ 6 = _____

8 x _____ = 32

Make 8 equal groups. Circle one-eighth.

32 ÷ 8 = _____

____ = $\frac{1}{7}$	____ = $\frac{1}{2}$

____ = $\frac{1}{3}$	____ = $\frac{1}{6}$

____ = $\frac{1}{4}$	____ = $\frac{1}{8}$

Task: Use beans, counters or cubes to make an array to finish the multiplication sentence. Then draw equal groups to circle the fraction. You can draw equal groups with pictures, tape diagrams or repeated addition, a number line or with an array.

5 x _____ = 125

Make 4 equal groups. Circle one-fourth.

125 ÷ 5 = _____

2 x _____ = 50

Make 2 equal groups. Circle one-half.

50 ÷ 2 = _____

3 x _____ = 75

Make 3 equal groups. Circle one-third.

75 ÷ 3 = _____

Now rearrange your array to match the multiplication sentence and complete the sentence.

2 x _____ = 40

Make 2 equal groups. Circle one-half.

40 ÷ 2 = _____

6 x _____ = 60

Make 6 equal groups. Circle one-sixth.

60 ÷ 6 = _____

8 x _____ = 80

Make 8 equal groups. Circle one-eighth.

80 ÷ 8 = _____

$\_\_ = \frac{1}{5}$ | $\_\_ = \frac{1}{2}$

$\_\_ = \frac{1}{3}$ | $\_\_ = \frac{1}{2}$

$\_\_ = \frac{1}{6}$ | $\_\_ = \frac{1}{8}$

Task: Use beans, counters or cubes to make an array to finish the multiplication sentence. Then draw equal groups to circle the fraction. You can draw equal groups with pictures, tape diagrams or repeated addition, a number line or with an array.

5 x _____= 20

Make 5 equal groups. Circle two-fifths.

20 ÷ 5 = _____

6 x _____ = 48

Make 6 equal groups. Circle five-sixths.

48 ÷ 6 = _____

8 x _____ = 48

Make 8 equal groups. Circle three-eighths.

48 ÷ 8 = _____

Now rearrange your array to match the multiplication sentence and complete the sentence.

4 x _____= 44

Make 4 equal groups. Circle three-fourths.

44 ÷ 4 = _____

9 x _____= 54

Make 9 equal groups. Circle two-ninths.

54 ÷ 9 = _____

8 x _____= 72

Make 8 equal groups. Circle five-eighths.

72 ÷ 8 = _____

____ = $\frac{2}{5}$	____ = $\frac{3}{4}$	
____ = $\frac{5}{6}$	____ = $\frac{2}{9}$	
____ = $\frac{3}{8}$	____ = $\frac{5}{8}$	

Task: Use beans, counters or cubes to make an array to finish the multiplication sentence. Then draw equal groups to circle the fraction. You can draw equal groups with pictures, tape diagrams or repeated addition, a number line or with an array.

3 x _____= 36

Make 3 equal groups. Circle two-thirds.

36 ÷ 3 = _____

4 x _____ = 36

Make 4 equal groups. Circle one-half.

36 ÷ 4 = _____

5 x _____ = 50

Make 5 equal groups. Circle three-fifths.

50 ÷ 5 = _____

Now rearrange your array to match the multiplication sentence and complete the sentence.

3 x _____= 33

Make 3 equal groups. Circle two-thirds.

33 ÷ 3 = _____

7 x _____= 56

Make 7 equal groups. Circle four-sevenths.

56 ÷ 7 = _____

8 x _____= 56

Make 8 equal groups. Circle five-eighths.

56 ÷ 8 = _____

$\_\_\_ = \frac{2}{3}$ | $\_\_\_ = \frac{2}{3}$

$\_\_\_ = \frac{1}{2}$ | $\_\_\_ = \frac{4}{7}$

$\_\_\_ = \frac{3}{5}$ | $\_\_\_ = \frac{5}{8}$

5 x _____= 125

Make 5 equal groups. Circle two-fifths.

125 ÷ 5 = _____

6 x _____ = 246

Make 6 equal groups. Circle five-sixths.

246 ÷ 6 = _____

8 x _____ = 152

Make 8 equal groups. Circle three-eighths.

152 ÷ 8 = _____

Use an array or a chip diagram to show equal groups.

4 x _____= 144

Make 4 equal groups. Circle three-fourths.

144 ÷ 4 = _____

9 x _____= 99

Make 9 equal groups. Circle two-ninths.

99 ÷ 9 = _____

8 x _____= 96

Make 8 equal groups. Circle five-eighths.

96 ÷ 8 = _____

$\frac{\quad}{\quad} = \frac{2}{5}$ | $\frac{\quad}{\quad} = \frac{3}{4}$

$\frac{\quad}{\quad} = \frac{5}{6}$ | $\frac{\quad}{\quad} = \frac{2}{9}$

$\frac{\quad}{\quad} = \frac{3}{8}$ | $\frac{\quad}{\quad} = \frac{5}{8}$

Task: Use beans, counters or cubes to make an array to finish the multiplication sentence. Then draw equal groups to circle the fraction. You can draw equal groups with pictures, tape diagrams or repeated addition, a number line or with an array.

3 x _____= 36

Make 3 equal groups. Circle two-thirds.

36 ÷ 3 = _____

4 x _____ = 36

Make 4 equal groups. Circle one-half.

36 ÷ 4 = _____

5 x _____ = 50

Make 5 equal groups. Circle three-fifths.

50 ÷ 5 = _____

Now rearrange your array to match the multiplication sentence and complete the sentence.

3 x _____= 33

Make 3 equal groups. Circle two-thirds.

33 ÷ 3 = _____

7 x _____= 56

Make 7 equal groups. Circle four-sevenths.

56 ÷ 7 = _____

8 x _____= 56

Make 8 equal groups. Circle five-eighths.

56 ÷ 8 = _____

$\_\_\_ = \frac{2}{3}$ | $\_\_\_ = \frac{2}{3}$

$\_\_\_ = \frac{1}{2}$ | $\_\_\_ = \frac{4}{7}$

$\_\_\_ = \frac{3}{5}$ | $\_\_\_ = \frac{5}{8}$

Moving forward with multiplication strategies

Solve using Chip Diagrams

152 x 3 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 3 = 152

431 x 6 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 6 = 431

537 x 2 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 2 = 537

367 x 5 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 5 = 367

1,246 x 2 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 2 = 1,246

689 x 3 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 3 = 689

Moving forward with multiplication strategies

Solve using Chip Diagrams

2533 x 4 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 4 = 2533

681 x 3 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 3 = 681

238 x 7 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 7 = 238

455 x 5 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 5 = 455

842 x 2 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 2 = 842

1423 x 3 = _____

Thousands	Hundreds	Tens	Ones

_____ ÷ 3 = 1423

Moving forward with multiplication strategies

Solve using Expanded Form

56 x 4 = _____

58 x 3 = _____

29 x 7 = _____

_____ ÷ 4 = 56

_____ ÷ 3 = 58

_____ ÷ 7 = 29

65 x 5 = _____

82 x 2 = _____

143 x 3 = _____

_____ ÷ 5 = 65

_____ ÷ 2 = 82

_____ ÷ 3 = 143

Moving forward with multiplication strategies

Solve using Expanded Form

126 x 4 = _____

_____ ÷ 4 = 126

139 x 3 = _____

_____ ÷ 3 =139

345 x 7 = _____

_____ ÷ 7 = 345

165 x 5 = _____

_____ ÷ 5 = 165

282 x 2 = _____

_____ ÷ 2 = 282

2343 x 3 = _____

_____ ÷ 3 = 2343

Decompose using partial products: *decompose one of the factors (numbers) to make it easier by using number bonds*

9 x 7 = _____

_____ ÷ 7 = 9

6 x 9 = _____

_____ ÷ 9 = 6

29 x 7 = _____

_____ ÷ 7 = 29

6 x 5 = _____

_____ ÷ 5 = 6

12 x 12 = _____

_____ ÷ 12 = 12

14 x 6 = _____

_____ ÷ 6 = 14

Decompose using partial products: *decompose one of the factors (numbers) to make it easier by using number bonds*

26 x 14 = _____

_____ ÷ 14 = 26

39 x 9 = _____

_____ ÷ 9 =39

34 x 7 = _____

_____ ÷ 7 = 34

165 x 5 = _____

_____ ÷ 5 = 165

28 x 4 = _____

_____ ÷ 4 = 28

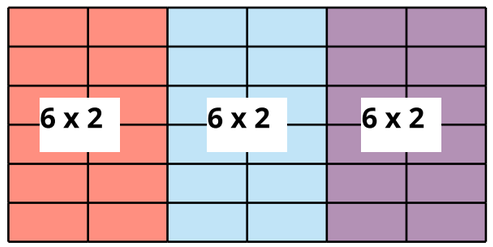
8 x 6= _____

_____ ÷ 6 = 8

Moving forward with multiplication strategies

Decompose with Arrays

Example! 6 x 6 = _____



6 x 2 = 12

6 x 2 = 12

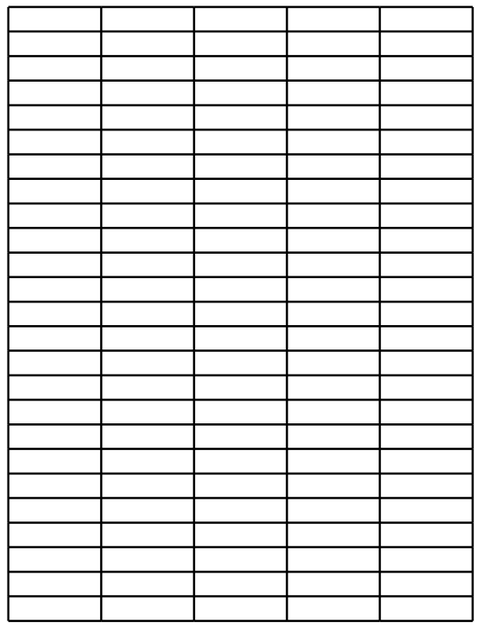
6 x 2 = 12

12+12 = 24

24 + 12 = 36

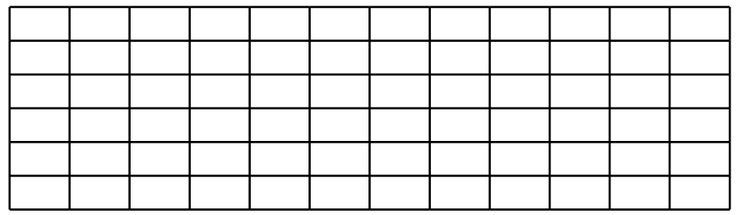
_____ ÷ 6 = _____

25 X 5 = _____



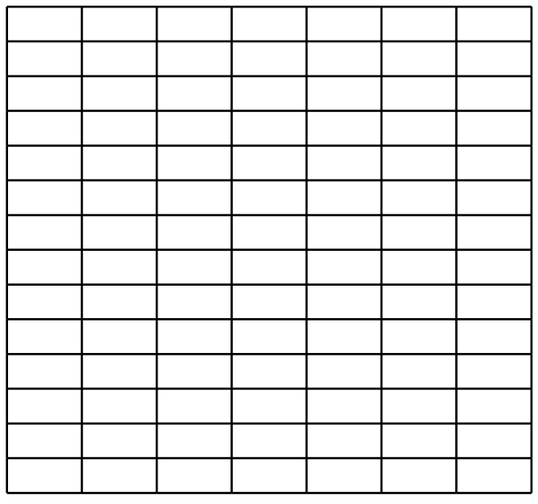
_____ ÷ 5= _____

6 x 12 = _____



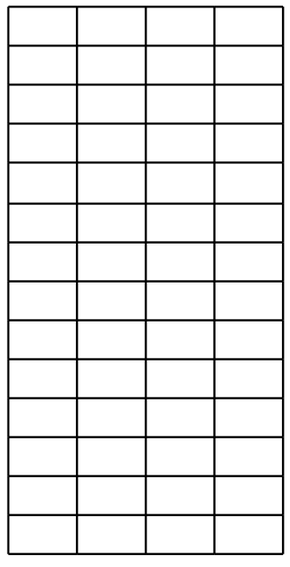
_____ ÷ 6 = _____

14 X 7 = _____



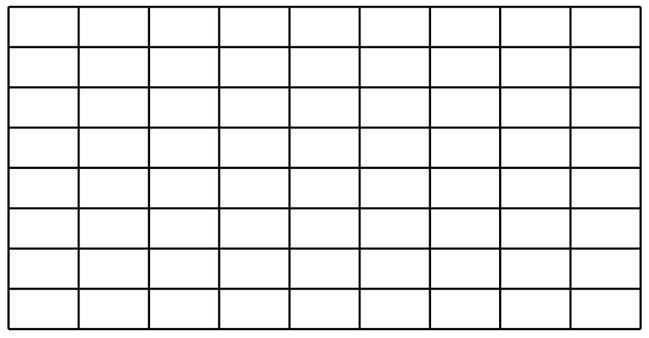
_____ ÷ 7 = _____

14 X 4 = _____



_____ ÷ 4 = _____

8 X 9 = _____



_____ ÷ 9 = _____

Moving forward with multiplication strategies

Doubles & Halves

41 X 8 = _____

_____ ÷ 8 = _____

24 X 16= _____

_____ ÷ 16 =_____

144 X 12 = _____

_____ ÷ 12 = _____

612 X 24 = _____

_____ ÷ 24=_____

128 X 18= _____

_____ ÷ 18 = _____

358 X 14 = _____

_____ ÷ 14 = _____

Moving forward with multiplication strategies

Landmark Numbers

What is 28 x 6?

Make 28 a friendlier number:

28 + 2 = 30

Now multiply:

30 x 6 = 180

Compensate:

2 x 6 = 12

180 - 12 = 168

Thus 28 x 6 = 168

25 X 9 = _____

_____ ÷ 9 =25

149 X 4 = _____

_____÷4 = 149

23 X 8 = _____

_____ ÷ 8 =23

17 X 19= _____

_____ ÷ 19 = 17

38 X 7 = _____

_____÷7 = 38

Moving forward with multiplication strategies

Factor and Factor Again

What is 12 x 24?

Find the factors of 24:

3 x 2 x 4

Now multiply the first factor by 12:

12 x 3 = 36

Multiply the product by the next factor:

36 x 2 = 72

Multiply the product by the next factor:

72 x 4 = 298

Thus 12 x 24 = 298

34 X 4 = _____

_____ ÷ 4 =34

17 X 4 = _____

_____÷4 = 17

21 X 8 = _____

_____ ÷ 8 =21

27 X 9= _____

_____ ÷ 9 = 27

38 X 6 = _____

_____÷6 = 38

Moving forward with division strategies

Decompose with Number Bonds

Example! **248 ÷ 8 = _____**

248 ÷ 8

1. Decompose the number into 2 numbers that can be divided by 8.

240 and 8

240÷8

2. I know 8+8+8 = 24 so, 240÷8= 30

8÷8 = 1

3. I know 8 goes into 8 only 1 time .

4. Add the partial quotients.

30+1 = 31

5. So 248 students divided by 8 rows equals 31 students on each row.

_____ x 8 = 248

125 ÷ 5 = _____

_____ x 5=125

72 ÷ 6 = _____

_____ x 6 = 72

165 ÷ 5 = _____

_____ x 5 = 165

56 ÷ 4 = _____

_____ x 4 = 56

584÷ 2 = _____

_____ x 2 = 584

Moving forward with division strategies

Decompose with Number Bonds

328÷ 8 = _____

_____ x 8 = 328

425 ÷ 5 = _____

_____ x 5=425

366 ÷ 6 = _____

_____ x 6 = 366

305 ÷ 5 = _____

_____ x 5 = 305

368 ÷ 4 = _____

_____ x 4 = 368

1284÷ 2 = _____

_____ x 2 = 1284

Area Modeling with 1-digit divisors

What is 108 ÷ 9?

(90 + 9 + 9)

x	10	+ 1	+ 1	= 12
9	90	9	9	

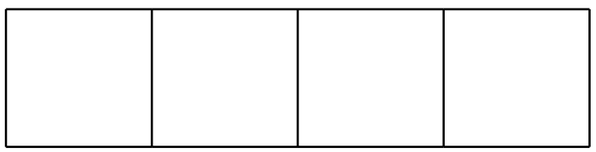
Thus 108 ÷ 9 = 12

_____ x 8 = 248

728 ÷ 7 = _____

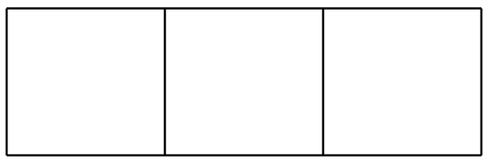
_____ x 7 = 728

528 ÷ 8 = _____



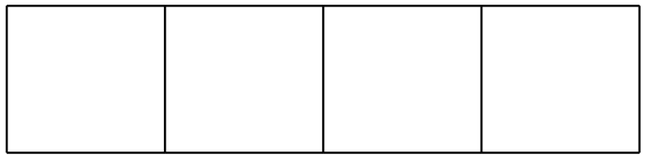
_____ x 8 = 528

303 ÷ 3 = _____



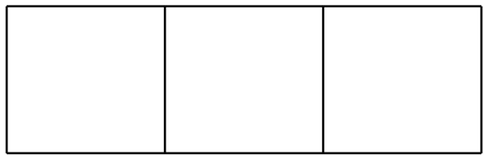
_____ x 3 = 303

96 ÷ 4 = _____



_____ x 4 = 96

800 ÷ 5 = _____



_____ x 5 = 800

Moving forward with division strategies

Area Modeling with 1-digit divisors

99÷ 3 = _____

_____ x 3 = 99

672÷ 7 = _____

_____ x 7 = 672

288÷ 9 = _____

_____ x 9= 288

572÷ 4 = _____

_____ x 4 = 572

368 ÷ 4 = _____

_____ x 4 = 368

1284÷ 2 = _____

_____ x 2 = 1284

www.thinkconceptually.com

Check out my blog for ideas on ways to develop student conceptual understandings. I am a certified Concept-Based Curriculum and Instruction Trainer and currently a PYP Coordinator in an IB school. Contact me if your school is interested in a CBCI workshop.

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