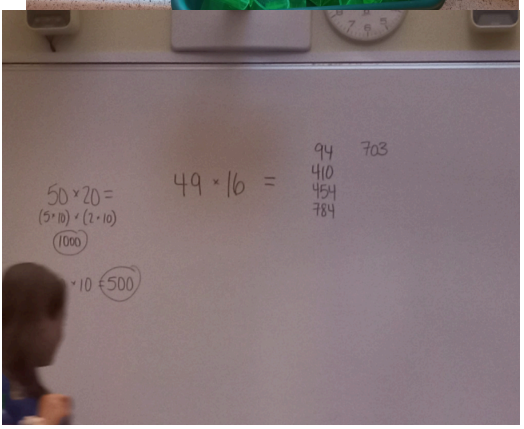
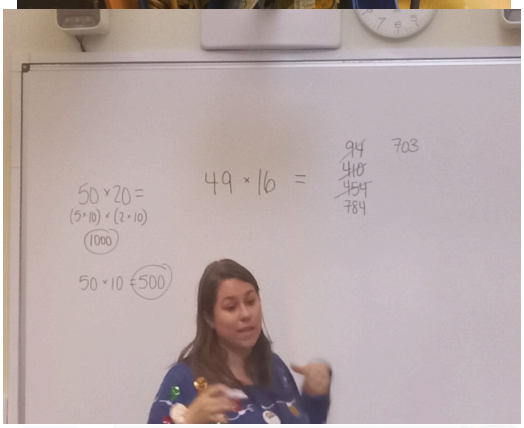
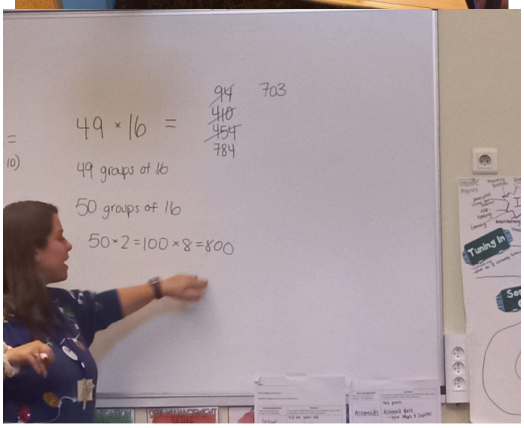
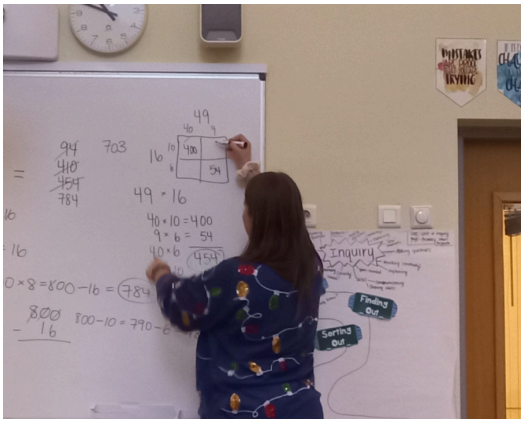
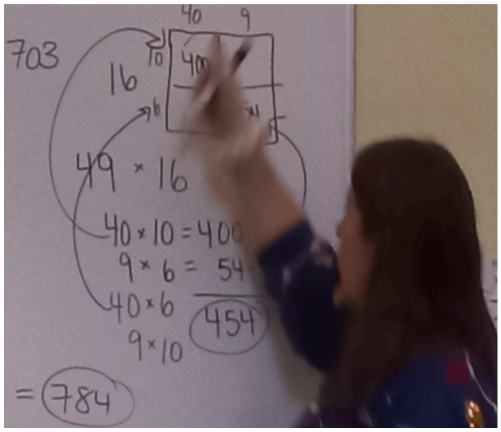
LITERACY: MATHEMATICS / SCIENCE

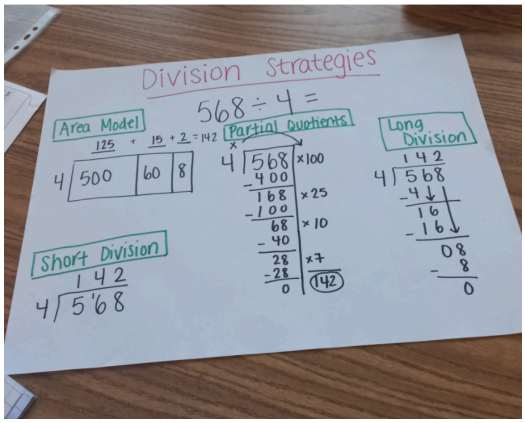


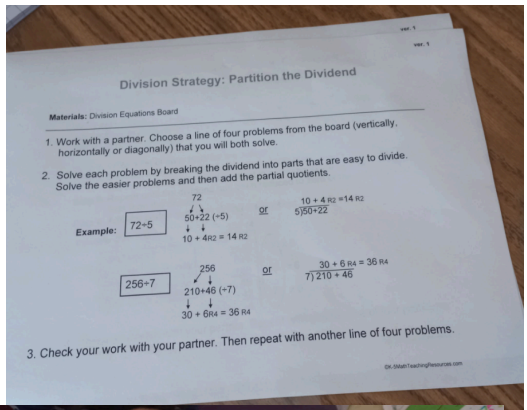


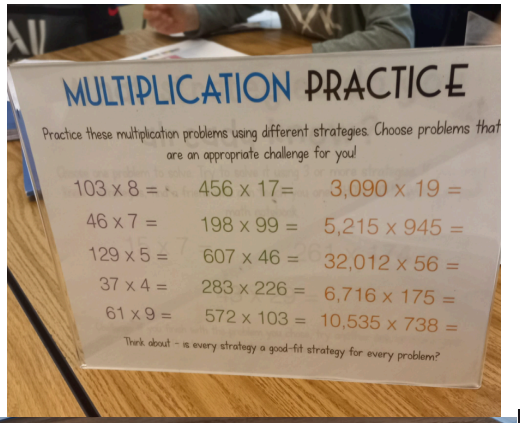


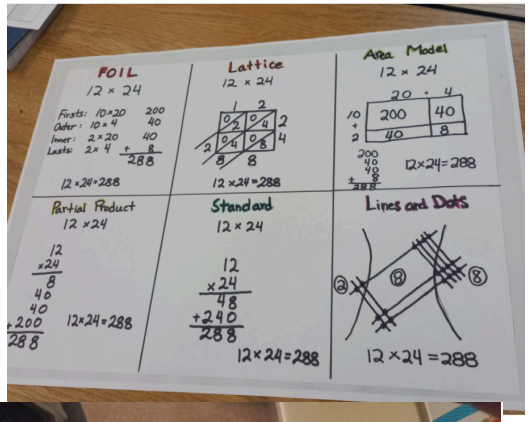


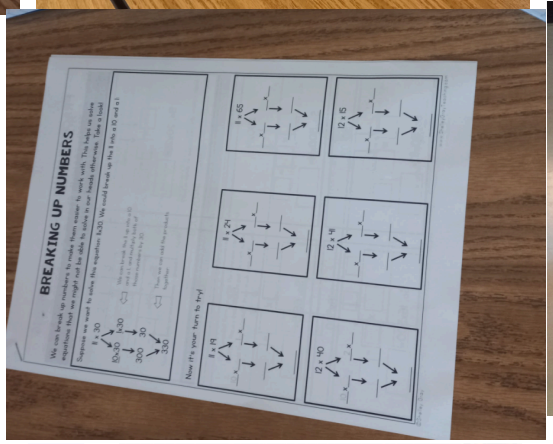


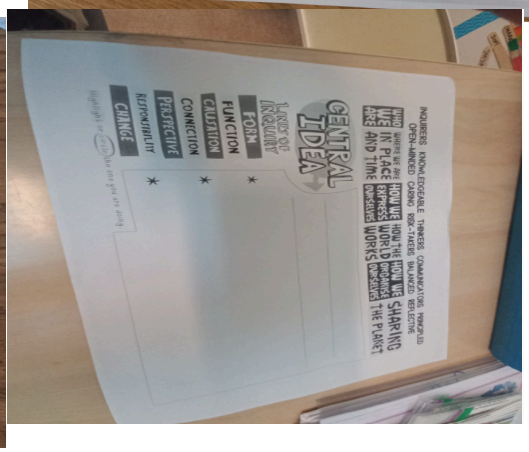


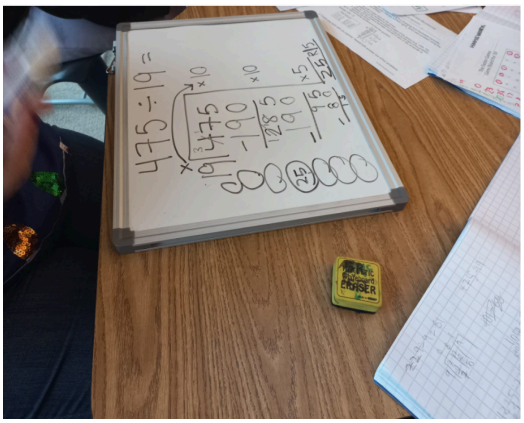

Division Strategy: Partition the Dividend
Materials: Division Equations Board
1. Work with a partner. Choose a line of four problems from the board (vertically, horizontally or diagonally) that you will both solve.
2. Solve each problem by breaking the dividend into parts that are easy to divide. Solve the easier problems and then add the partial quotients.
Example: 72÷5
72
50+22 (÷5)
10 + 4R2 = 14 R2
or
10 + 4 R2 =14 R2
5)50+22
256÷7
256
210+46 (÷7)
30 + 6R4 = 36 R4
or
30 + 6 R4 = 36 R4
7) 210 + 46
3. Check your work with your partner. Then repeat with another line of four problems.

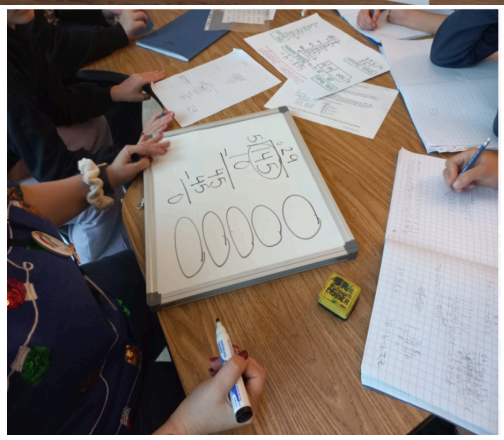

MULTIPLICATION PRACTICE
Practice these multiplication problems using different strategies. Choose problems that are an appropriate challenge for you!
103 x 8 =
46 x 7 =
129 x 5 =
37 x 4 =
61 x 9 =
456 x 17=
198 x 99 =
607 x 46 =
283 x 226 =
572 x 103 =
3,090 x 19 =
5,215 x 945 =
32,012 x 56 =
6,716 x 175 =
10,535 x 738 =
Think about - is every strategy a good-fit strategy for every problem?

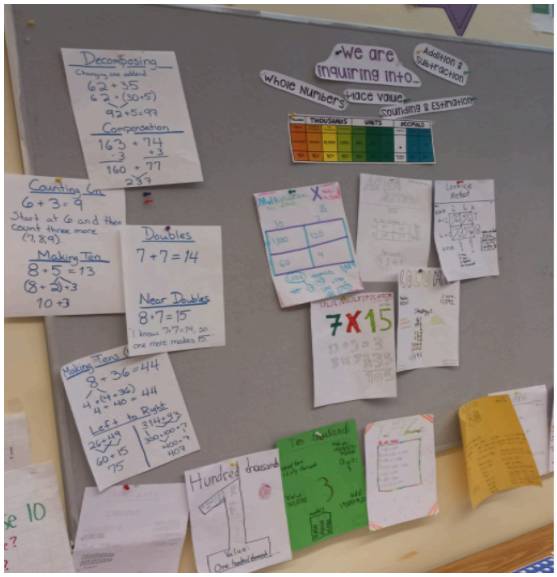

FOIL
12 × 24
Firsts: 10×20 200
Outer: 10×4 40
Inner: 2×20 40
Lasts: 2×4 + 8
288
12×24=288
Lattice
12 × 24
12×24=288
Area Model
12 × 24
200 40
40 8
12×24=288
Partial Product
12 ×24
12×24=288
Standard
12 × 24
12
×24
48
+240
288
12×24=288
Lines and Dots
12 ×24 =288


BREAKING UP NUMBERS
We can break up numbers to make them easier to work with. This helps us solve equations that we might not be able to solve in our heads otherwise. Take a look.
Suppose we want to solve this equation: 8x30. We could break up the 8 into a 10 and a 2.
8 x 30
10x3 2x3
300 60
360
Now it's your turn to try!
8 x 18
8 x 65
12 x 40
9 x 24
12 x 16
9 x 6


CENTRAL IDEA
INQUIRERS KNOWLEDGEABLE THINKERS COMMUNICATORS PRINCIPLED OPEN-MINDED CARING RISK-TAKERS BALANCED REFLECTIVE
WHO WE ARE
WHERE WE ARE IN PLACE AND TIME
HOW WE EXPRESS OURSELVES
HOW THE WORLD WORKS
HOW WE ORGANIZE OURSELVES
SHARING THE PLANET
LINES OF INQUIRY
FORM
FUNCTION
CAUSATION
CONNECTION
PERSPECTIVE
RESPONSIBILITY
CHANGE






We are inquiring into...
Addition & Subtraction
Whole Numbers
Place Value
Counting & Estimation
Decomposing
Compensation
Counting On
Doubles
Near Doubles
Making Ten
Left to Right
7X15
Hundred thousand
Ten thousand