MATH JOURNAL LESSON 11 EXPLORE THE 9s TIMES TABLE

WATCH ME FIRST!

We can solve the 9s facts using the 10s facts:

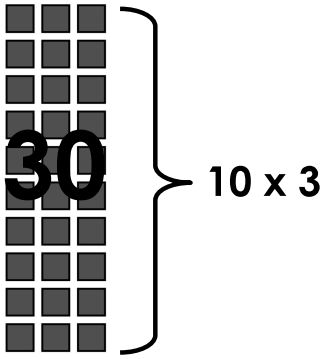
1st – Find the related 10s fact.

2nd – Subtract one group to solve the 9s fact.

EXAMPLE: Find the product of 9 x 3.

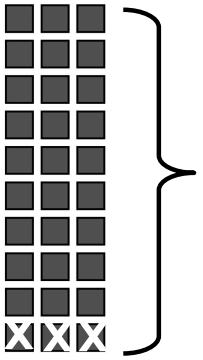
STEP 1

9 x 3 is related to **10 x 3**



STEP 2

Subtract one group from the 10's fact



9 x 3 = (10 x 3) − (1 x 3)

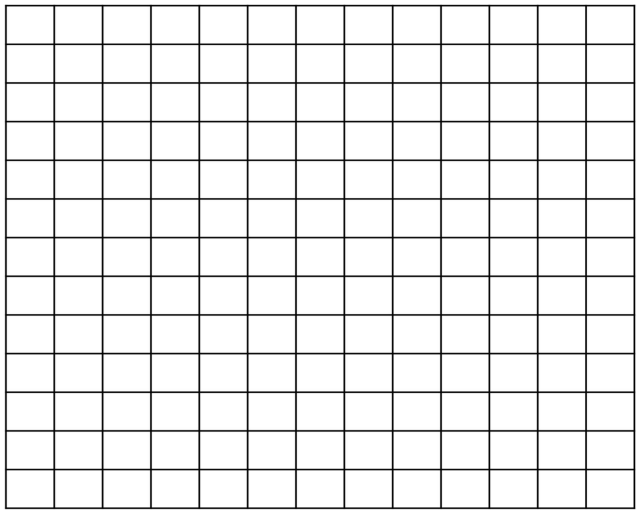
30 − 3

9 x 3 = 27

LET'S WORK TOGETHER!

1) Draw a model and complete the steps to solve **9 × 4**.

DRAW



RECORD & SOLVE

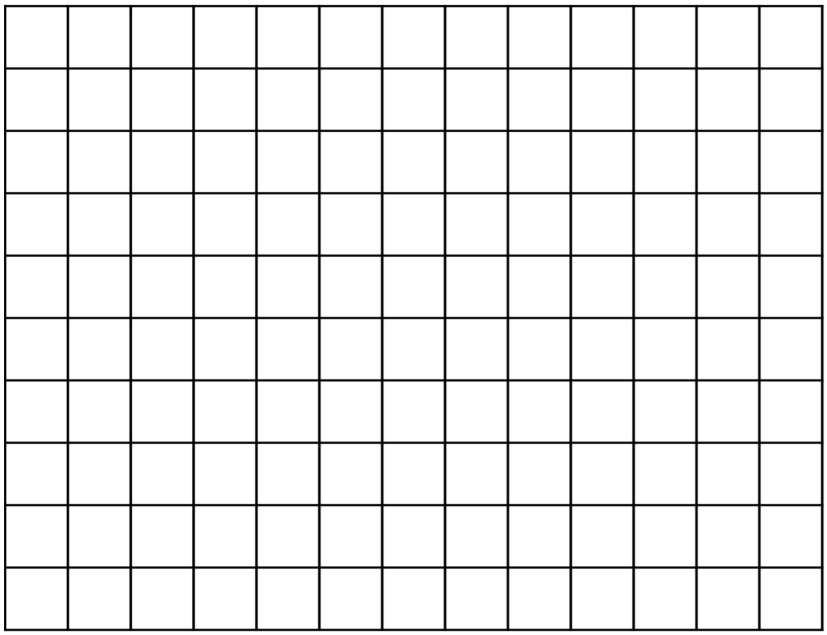
MATH JOURNAL LESSON 11 EXPLORE THE 9s TIMES TABLE

LET'S WORK TOGETHER! (continued)

2) Draw a model and complete the steps to solve **9 × 5**.

DRAW

RECORD & SOLVE



Directions: Fill in the multiplication chart below using information from Problems 1 and 2.

	9s Facts	10s Facts
x1	9 x 1 = 9	10 x 1 = 10
x2	9 x 2 = 18	10 x 2 = 20
x3	9 x 3 = 27	10 x 3 = 30
x4		
x5		

What patterns do you notice when multiplying between the 9s and 10s facts?

MATH JOURNAL LESSON 11 EXPLORE THE 9s TIMES TABLE

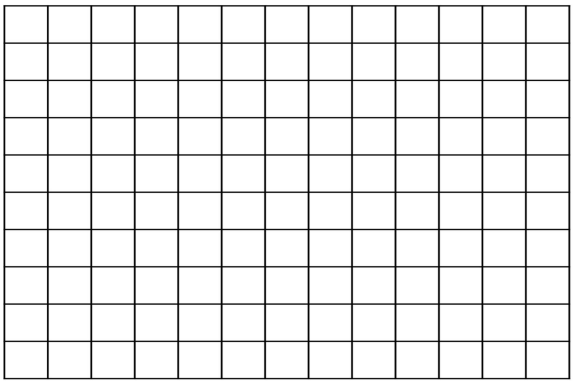
YOUR TURN!

Directions: For problems 1 – 7 find the products by drawing models and showing your work. Fill in the chart below.

9s Facts	10s Facts
9 x 1 =	10 x 1 =
9 x 2 =	10 x 2 =
9 x 3 =	10 x 3 =
9 x 4 =	10 x 4 =
9 x 5 =	10 x 5 =
9 x 6 =	10 x 6 =
9 x 7 =	10 x 7 =
9 x 8 =	10 x 8 =
9 x 9 =	10 x 9 =
9 x 10 =	10 x 10 =
9 x 11 =	10 x 11 =
9 x 12 =	10 x 12 =

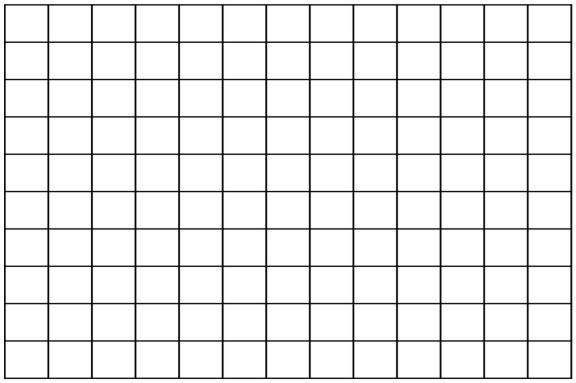
1) Use the strategy we just learned to find the product of **9 × 6**.

DRAW **RECORD & SOLVE**



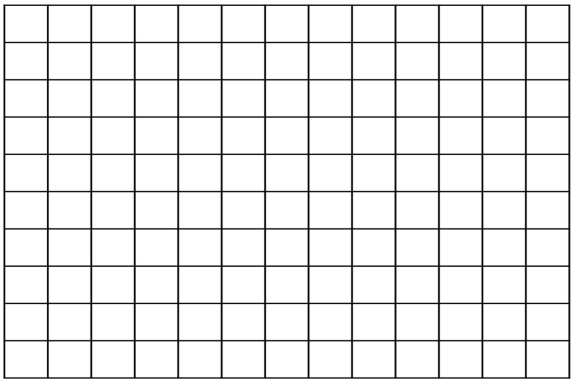
2) Use the strategy we just learned to find the product of **9 × 7**.

DRAW **RECORD & SOLVE**



3) Use the strategy we just learned to find the product of **9 × 8**.

DRAW **RECORD & SOLVE**

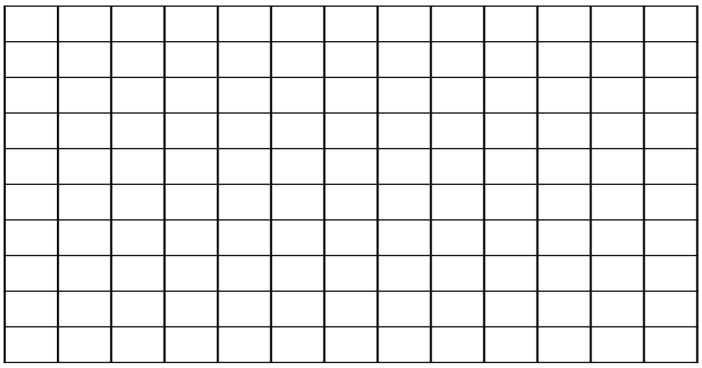


MATH JOURNAL LESSON 11 EXPLORE THE 9s TIMES TABLE

YOUR TURN! (continued)

4) Use the strategy we just learned to find the product of **9 × 9**.

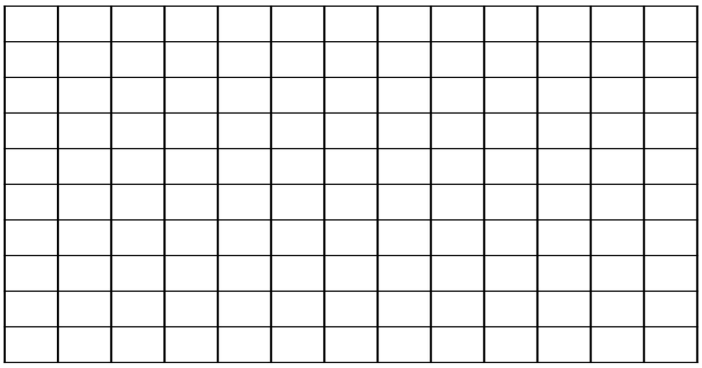
DRAW



RECORD & SOLVE

5) Use the strategy we just learned to find the product of **9 × 10**.

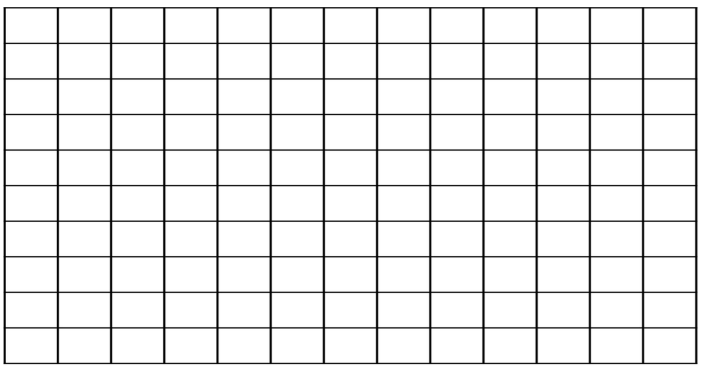
DRAW



RECORD & SOLVE

6) Use the strategy we just learned to find the product of **9 × 11**.

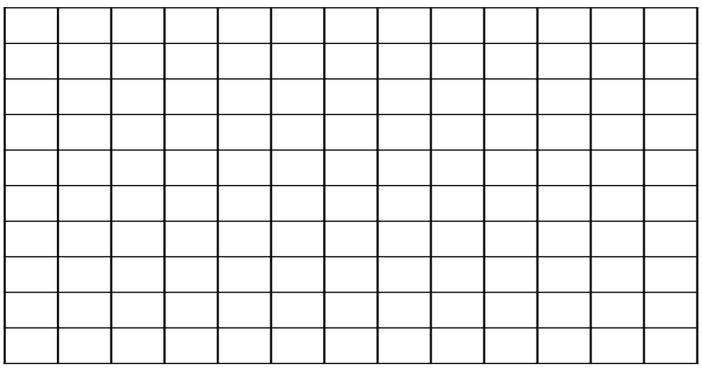
DRAW



RECORD & SOLVE

7) Use the strategy we just learned to find the product of **9 × 12**.

DRAW



RECORD & SOLVE

EXPLORE THE 9 TIMES TABLES

YOUR TURN! (continued)

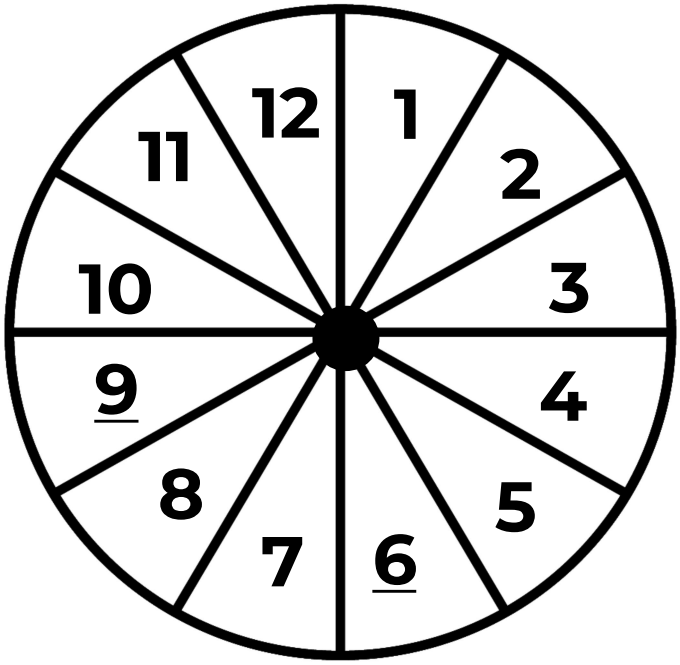
8) Explain the strategy we used to find the product of a 9s times table fact.

EXTRA PRACTICE
LESSON 11

MULTIPLICATION
9s TIMES TABLE WORKSHEET

Name: _____ Date: _____

DIRECTIONS: *Use a paper clip, pencil and number wheel to spin a number. Fill in the multiplication equation using the number as a factor. Solve. Move to the next problem and repeat.*

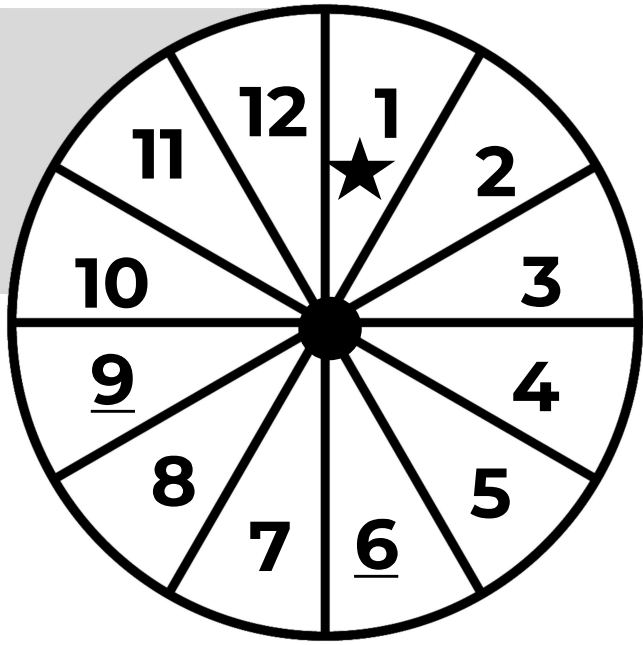


1. 9 x _____ = _____
2. 9 x _____ = _____
3. 9 x _____ = _____
4. 9 x _____ = _____
5. 9 x _____ = _____
6. 9 x _____ = _____
7. 9 x _____ = _____
8. 9 x _____ = _____
9. 9 x _____ = _____
10. 9 x _____ = _____
11. _____ x 9 = _____
12. _____ x 9 = _____
13. _____ x 9 = _____
14. _____ x 9 = _____
15. _____ x 9 = _____
16. _____ x 9 = _____
17. _____ x 9 = _____
18. _____ x 9 = _____
19. _____ x 9 = _____
20. _____ x 9 = _____

PLAYER 1

9s TIMES TABLE

EXTRA PRACTICE GAME



GAMEBOARD

54	99	18	36	108	63
36					18
81					45
45	MY NUMBER x 9 = ?				90
27					72
108					9
9					27
90	54	72	81	99	63

DIRECTIONS:

Object of Game:

The first player to fill in an entire row or column wins.

1) Player #1:

- Spins a number (NOTE: Number 1 has a star because it is a free choice. It can either be a 1 or any number the player selects).
- Multiply the number by 2 to find the product
- Place an "X" on the product on the gameboard. (i.e. Spin a 3. The product of 3 and 2 is 6. Place "X" on the 6)

2) If no match is found, Player #1 loses a turn.

3) Player #2 repeats the steps above.

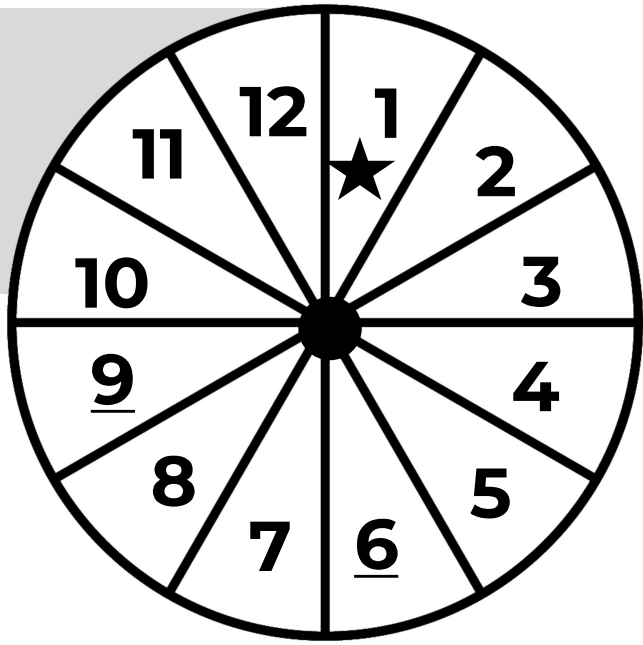
Materials:

- ✓ *Player 1 and Player 2 Gameboards*
- ✓ *Pencils and Paper Clips*

PLAYER 2

9s TIMES TABLE

EXTRA PRACTICE GAME



GAMEBOARD

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36					18
81					45
45	MY NUMBER x 9 = ?				90
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90	54	72	81	99	63

DIRECTIONS:

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2) If no match is found, Player #1 loses a turn.

3) Player #2 repeats the steps above.

Materials:

- ✓ *Player 1 and Player 2 Gameboards*
- ✓ *Pencils and Paper Clips*

Times Tables Game Answers

2 Times Tables	3 Times Tables	4 Times Tables	5 Times Tables	6 Times Tables	7 Times Tables
1 x 2 = 2	1 x 3 = 3	1 x 4 = 4	1 x 5 = 5	1 x 6 = 6	1 x 7 = 7
2 x 2 = 4	2 x 3 = 6	2 x 4 = 8	2 x 5 = 10	2 x 6 = 12	2 x 7 = 14
3 x 2 = 6	3 x 3 = 9	3 x 4 = 12	3 x 5 = 15	3 x 6 = 18	3 x 7 = 21
4 x 2 = 8	4 x 3 = 12	4 x 4 = 16	4 x 5 = 20	4 x 6 = 24	4 x 7 = 28
5 x 2 = 10	5 x 3 = 15	5 x 4 = 20	5 x 5 = 25	5 x 6 = 30	5 x 7 = 35
6 x 2 = 12	6 x 3 = 18	6 x 4 = 24	6 x 5 = 30	6 x 6 = 36	6 x 7 = 42
7 x 2 = 14	7 x 3 = 21	7 x 4 = 28	7 x 5 = 35	7 x 6 = 42	7 x 7 = 49
8 x 2 = 16	8 x 3 = 24	8 x 4 = 32	8 x 5 = 40	8 x 6 = 48	8 x 7 = 56
9 x 2 = 18	9 x 3 = 27	9 x 4 = 36	9 x 5 = 45	9 x 6 = 54	9 x 7 = 63
10 x 2 = 20	10 x 3 = 30	10 x 4 = 40	10 x 5 = 50	10 x 6 = 60	10 x 7 = 70
11 x 2 = 22	11 x 3 = 33	11 x 4 = 44	11 x 5 = 55	11 x 6 = 66	11 x 7 = 77
12 x 2 = 24	12 x 3 = 36	12 x 4 = 48	12 x 5 = 60	12 x 6 = 72	12 x 7 = 84

8 Times Tables	9 Times Tables	10 Times Tables	11 Times Tables	12 Times Tables	Square Facts
1 x 8 = 8	1 x 9 = 9	1 x 10 = 10	1 x 11 = 11	1 x 12 = 12	1 x 1 = 1
2 x 8 = 16	2 x 9 = 18	2 x 10 = 20	2 x 11 = 22	2 x 12 = 24	2 x 2 = 2
3 x 8 = 24	3 x 9 = 27	3 x 10 = 30	3 x 11 = 33	3 x 12 = 36	3 x 3 = 9
4 x 8 = 32	4 x 9 = 36	4 x 10 = 40	4 x 11 = 44	4 x 12 = 48	4 x 4 = 16
5 x 8 = 40	5 x 9 = 45	5 x 10 = 50	5 x 11 = 55	5 x 12 = 60	5 x 5 = 25
6 x 8 = 48	6 x 9 = 54	6 x 10 = 60	6 x 11 = 66	6 x 12 = 72	6 x 6 = 36
7 x 8 = 56	7 x 9 = 63	7 x 10 = 70	7 x 11 = 77	7 x 12 = 84	7 x 7 = 49
8 x 8 = 64	8 x 9 = 72	8 x 10 = 80	8 x 11 = 88	8 x 12 = 96	8 x 8 = 64
9 x 8 = 72	9 x 9 = 81	9 x 10 = 90	9 x 11 = 99	9 x 12 = 108	9 x 9 = 81
10 x 8 = 80	10 x 9 = 90	10 x 10 = 100	10 x 11 = 110	10 x 12 = 120	10 x 10 = 100
11 x 8 = 88	11 x 9 = 99	11 x 10 = 110	11 x 11 = 121	11 x 12 = 132	11 x 11 = 121
12 x 8 = 96	12 x 9 = 108	12 x 10 = 120	12 x 11 = 132	12 x 12 = 144	12 x 12 = 144