A Story of Units®

Eureka Math[™] Grade 5, Module 1

Student File_B

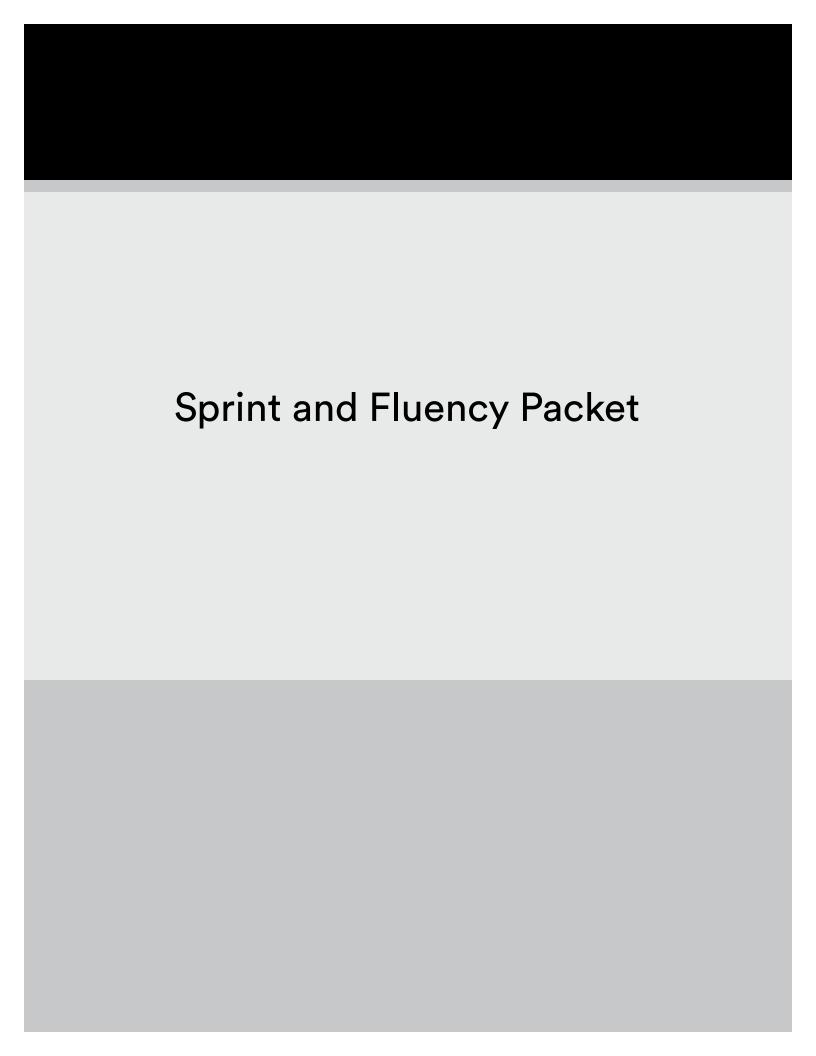
Contains Sprint and Fluency, Exit Ticket, and Assessment Materials

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10 9 8 7 6 5 4 3 2 1



Multiply by 10

1.	12 × 10 =	
2.	14 × 10 =	
3.	15 × 10 =	
4.	17 × 10 =	
5.	81 × 10 =	
6.	10 × 81 =	
7.	21 × 10 =	
8.	22 × 10 =	
9.	23 × 10 =	
10.	29 × 10 =	
11.	92 × 10 =	
12.	10 × 92 =	
13.	18 × 10 =	
14.	19 × 10 =	
15.	20 × 10 =	
16.	30 × 10 =	
17.	40 × 10 =	
18.	80 × 10 =	
19.	10 × 80 =	
20.	10 × 50 =	
21.	10 × 90 =	
22.	10 × 70 =	

Number Correct: _____

24.	
26. 334 × 10 = 27. 834 × 10 = 28. 10 × 834 = 29. 45 × 10 = 30. 145 × 10 = 31. 245 × 10 =	
27. 834 × 10 = 28. 10 × 834 = 29. 45 × 10 = 30. 145 × 10 = 31. 245 × 10 =	
28.	
29.	
30. 145 × 10 = 31. 245 × 10 =	
31. 245 × 10 =	
32. 345 × 10 =	
33. 945 × 10 =	
34. 56 × 10 =	
35. 456 × 10 =	
36. 556 × 10 =	
37. 950 × 10 =	
38. 10 × 950 =	
39. 16 × 10 =	
40. 10 × 60 =	
41. 493 × 10 =	
42. 10 × 84 =	
43. 96 × 10 =	
44. 10 × 580 =	



Lesson 1:

Reason concretely and pictorially using place value understanding to relate adjacent base ten units from millions to thousandths. $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{$

Multiply by 10

1.	13 × 10 =	
2.	14 × 10 =	
3.	15 × 10 =	
4.	19 × 10 =	
5.	91 × 10 =	
6.	10 × 91 =	
7.	31 × 10 =	
8.	32 × 10 =	
9.	33 × 10 =	
10.	38 × 10 =	
11.	83 × 10 =	
12.	10 × 83 =	
13.	28 × 10 =	
14.	29 × 10 =	
15.	30 × 10 =	
16.	40 × 10 =	
17.	50 × 10 =	
18.	90 × 10 =	
19.	10 × 90 =	
20.	10 × 20 =	
21.	10 × 60 =	
22.	10 × 80 =	

Number Correct:	
Improvement:	

23.	43 × 10 =	
24.	143 × 10 =	
25.	243 × 10 =	
26.	343 × 10 =	
27.	743 × 10 =	
28.	10 × 743 =	
29.	54 × 10 =	
30.	154 × 10 =	
31.	254 × 10 =	
32.	354 × 10 =	
33.	854 × 10 =	
34.	65 × 10 =	
35.	465 × 10 =	
36.	565 × 10 =	
37.	960 × 10 =	
38.	10 × 960 =	
39.	17 × 10 =	
40.	10 × 70 =	
41.	582 × 10 =	
42.	10 × 73 =	
43.	98 × 10 =	
44.	10 × 470 =	



Lesson 1:

Reason concretely and pictorially using place value understanding to relate adjacent base ten units from millions to thousandths. $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{$

Number Correct: _____

Multiply by 3

1.	1 × 3 =	
2.	3 × 1 =	
3.	2 × 3 =	
4.	3 × 2 =	
5.	3 × 3 =	
6.	4 × 3 =	
7.	3 × 4 =	
8.	5 × 3 =	
9.	3 × 5 =	
10.	6 × 3 =	
11.	3 × 6 =	
12.	7 × 3 =	
13.	3 × 7 =	
14.	8 × 3 =	
15.	3 × 8 =	
16.	9 × 3 =	
17.	3 × 9 =	
18.	10 × 3 =	
19.	3 × 10 =	
20.	3 × 3 =	
21.	1 × 3 =	
22.	2 × 3 =	

23.	10 × 3 =	
24.	9 × 3 =	
25.	4 × 3 =	
26.	8 × 3 =	
27.	5 × 3 =	
28.	7 × 3 =	
29.	6 × 3 =	
30.	3 × 10 =	
31.	3 × 5 =	
32.	3 × 6 =	
33.	3 × 1 =	
34.	3 × 9 =	
35.	3 × 4 =	
36.	3 × 3 =	
37.	3 × 2 =	
38.	3 × 7 =	
39.	3 × 8 =	
40.	11 × 3 =	
41.	3 × 11 =	

 $12 \times 3 =$

 $3 \times 13 =$

 $13 \times 3 =$



Lesson 3: Use exponents to name place value units, and explain patterns in the placement of the decimal point.

42.

43.

44.

Multiply by 3

1.	3 × 1 =	
2.	1 × 3 =	
3.	3 × 2 =	
4.	2 × 3 =	
5.	3 × 3 =	
6.	3 × 4 =	
7.	4 × 3 =	
8.	3 × 5 =	
9.	5 × 3 =	
10.	3 × 6 =	
11.	6 × 3 =	
12.	3 × 7 =	
13.	7 × 3 =	
14.	3 × 8 =	
15.	8 × 3 =	
16.	3 × 9 =	
17.	9 × 3 =	
18.	3 × 10 =	
19.	10 × 3 =	
20.	1 × 3 =	
21.	10 × 3 =	
22.	2 × 3 =	

Number Correct:	
Improvement:	

23.	9 × 3 =	
24.	3 × 3 =	
25.	8 × 3 =	
26.	4 × 3 =	
27.	7 × 3 =	
28.	5 × 3 =	
29.	6 × 3 =	
30.	3 × 5 =	
31.	3 × 10 =	
32.	3 × 1 =	
33.	3 × 6 =	
34.	3 × 4 =	
35.	3 × 9 =	
36.	3 × 2 =	
37.	3 × 7 =	
38.	3 × 3 =	
39.	3 × 8 =	
40.	11 × 3 =	
41.	3 × 11 =	
42.	13 × 3 =	
43.	3 × 13 =	
44.	12 × 3 =	
	<u></u>	



Lesson 3:

Number Correct: _____



Multiply Decimals by 10, 100, and 1,000

1.	62.3 × 10 =	
2.	62.3 × 100 =	
3.	62.3 × 1,000 =	
4.	73.6 × 10 =	
5.	73.6 × 100 =	
6.	73.6 × 1,000 =	
7.	0.6 × 10 =	
8.	0.06 × 10 =	
9.	0.006 × 10 =	
10.	0.3 × 10 =	
11.	0.3 × 100 =	
12.	0.3 × 1,000 =	
13.	0.02 × 10 =	
14.	0.02 × 100 =	
15.	0.02 × 1,000 =	
16.	0.008 × 10 =	
17.	0.008 × 100 =	
18.	0.008 × 1,000 =	
19.	0.32 × 10 =	
20.	0.67 × 10 =	
21.	0.91 × 100 =	
22.	0.74 × 100 =	

23.	4.1 × 1,000 =	
24.	7.6 × 1,000 =	
25.	0.01 × 1,000 =	
26.	0.07 × 1,000 =	
27.	0.072 × 100 =	
28.	0.802 × 10 =	
29.	0.019 × 1,000 =	
30.	7.412 × 1,000 =	
31.	6.8 × 100 =	
32.	4.901 × 10 =	
33.	16.07 × 100 =	
34.	9.19 × 10 =	
35.	18.2 × 100 =	
36.	14.7 × 1,000 =	
37.	2.021 × 100 =	
38.	172.1 × 10 =	
39.	3.2 × 20 =	
40.	4.1 × 20 =	
41.	3.2 × 30 =	
42.	1.3 × 30 =	
43.	3.12 × 40 =	
44.	14.12 × 40 =	



Lesson 5:

Name decimal fractions in expanded, unit, and word forms by applying place value reasoning.

Multiply Decimals by 10, 100, and 1,000

Number Correct:	
Improvement:	

1.	46.1 × 10 =	
2.	46.1 × 100 =	
3.	46.1 × 1,000 =	
4.	89.2 × 10 =	
5.	89.2 × 100 =	
6.	89.2 × 1,000 =	
7.	0.3 × 10 =	
8.	0.03 × 10 =	
9.	0.003 × 10 =	
10.	0.9 × 10 =	
11.	0.9 × 100 =	
12.	0.9 × 1,000 =	
13.	0.04 × 10 =	
14.	0.04 × 100 =	
15.	0.04 × 1,000 =	
16.	0.007 × 10 =	
17.	0.007 × 100 =	
18.	0.007 × 1,000 =	
19.	0.45 × 10 =	
20.	0.78 × 10 =	
21.	0.28 × 100 =	
22.	0.19 × 100 =	

23.	5.2 × 1,000 =	
24.	8.7 × 1,000 =	
25.	0.01 × 1,000 =	
26.	0.08 × 1,000 =	
27.	0.083 × 10 =	
28.	0.903 × 10 =	
29.	0.017 × 1,000 =	
30.	8.523 × 1,000 =	
31.	7.9 × 100 =	
32.	5.802 × 10 =	
33.	27.08 × 100 =	
34.	8.18 × 10 =	
35.	29.3 × 100 =	
36.	25.8 × 1,000 =	
37.	3.032 × 100 =	
38.	283.1 × 10 =	
39.	2.1 × 20 =	
40.	3.3 × 20 =	
41.	3.1 × 30 =	
42.	1.2 × 30 =	
43.	2.11 × 40 =	
44.	13.11 × 40 =	



Lesson 5:

Name decimal fractions in expanded, unit, and word forms by applying place value reasoning.

Lesson 7 Sprint 5-1

Number Correct: _____



Find the Midpoint

1.	0	10
2.	0	1
3.	0	0.01
4.	10	20
5.	1	2
6.	2	3
7.	3	4
8.	7	8
9.	1	2
10.	0.1	0.2
11.	0.2	0.3
12.	0.3	0.4
13.	0.7	0.8
14.	0.1	0.2
15.	0.01	0.02
16.	0.02	0.03
17.	0.03	0.04
18.	0.07	0.08
19.	6	7
20.	16	17
21.	38	39
22.	0.4	0.5

23.	8.5	8.6
24.	2.8	2.9
25.	0.03	0.04
26.	0.13	0.14
27.	0.37	0.38
28.	80	90
29.	90	100
30.	8	9
31.	9	10
32.	0.8	0.9
33.	0.9	1
34.	0.08	0.09
35.	0.09	0.1
36.	26	27
37.	7.8	7.9
38.	1.26	1.27
39.	29	30
40.	9.9	10
41.	7.9	8
42.	1.59	1.6
43.	1.79	1.8
44.	3.99	4



Lesson 7: Round a given decimal to any place using place value understanding and the vertical number line.

Find the Midpoint

1.	10	20
2.	1	2
3.	0.1	0.2
4.	0.01	0.02
5.	0	10
6.	0	1
7.	1	2
8.	2	3
9.	6	7
10.	1	2
11.	0.1	0.2
12.	0.2	0.3
13.	0.3	0.4
14.	0.6	0.7
15.	0.1	0.2
16.	0.01	0.02
17.	0.02	0.03
18.	0.03	0.04
19.	0.06	0.07
20.	7	8

Number Correct:	
Improvement:	

23.	0.7	0.8
24.	4.7	4.8
25.	2.3	2.4
26.	0.02	0.03
27.	0.12	0.13
28.	0.47	0.48
29.	80	90
30.	90	100
31.	8	9
32.	9	10
33.	0.8	0.9
34.	0.9	1
35.	0.08	0.09
36.	0.09	0.1
37.	36	37
38.	6.8	6.9
39.	1.46	1.47
40.	39	40
41.	9.9	10
42.	6.9	7
43.	1.29	1.3
44.	6.99	7



21.

22.

17

47

Lesson 7: Round a given decimal to any place using place value understanding and the vertical number line.

18

48



Number Correct: _____

Round to the Nearest One

1. $3.1 \approx$ 2. $3.2 \approx$ 3. $3.4 \approx$ 4. $3.4 \approx$ 5. $3.5 \approx$ 6. $3.6 \approx$ 7. $3.9 \approx$ 8. $13.9 \approx$ 9. $13.1 \approx$ 10. $13.5 \approx$ 11. $7.5 \approx$ 12. $8.5 \approx$ 13. $9.5 \approx$ 14. $19.5 \approx$ 15. $29.5 \approx$ 16. $89.5 \approx$ 17. $2.4 \approx$ 19. $2.42 \approx$ 20. $2.45 \approx$ 21. $2.49 \approx$ 22. $2.51 \approx$	4	3.1≈	
3. $3.3 \approx$ 4. $3.4 \approx$ 5. $3.5 \approx$ 6. $3.6 \approx$ 7. $3.9 \approx$ 8. $13.9 \approx$ 9. $13.1 \approx$ 10. $13.5 \approx$ 11. $7.5 \approx$ 12. $8.5 \approx$ 13. $9.5 \approx$ 14. $19.5 \approx$ 15. $29.5 \approx$ 16. $89.5 \approx$ 17. $2.4 \approx$ 18. $2.41 \approx$ 19. $2.42 \approx$ 20. $2.45 \approx$ 21. $2.49 \approx$	1.	3.1 ~	
 4. 3.4 ≈ 5. 3.5 ≈ 6. 3.6 ≈ 7. 3.9 ≈ 8. 13.9 ≈ 9. 13.1 ≈ 10. 13.5 ≈ 11. 7.5 ≈ 12. 8.5 ≈ 13. 9.5 ≈ 14. 19.5 ≈ 15. 29.5 ≈ 16. 89.5 ≈ 17. 2.4 ≈ 18. 2.41 ≈ 19. 2.42 ≈ 20. 2.45 ≈ 21. 2.49 ≈ 	2.	3.2 ≈	
5.	3.	3.3 ≈	
6. $3.6 \approx$ 7. $3.9 \approx$ 8. $13.9 \approx$ 9. $13.1 \approx$ 10. $13.5 \approx$ 11. $7.5 \approx$ 12. $8.5 \approx$ 13. $9.5 \approx$ 14. $19.5 \approx$ 15. $29.5 \approx$ 16. $89.5 \approx$ 17. $2.4 \approx$ 18. $2.41 \approx$ 19. $2.42 \approx$ 20. $2.45 \approx$ 21. $2.49 \approx$	4.	3.4 ≈	
7. $3.9 \approx$ 8. $13.9 \approx$ 9. $13.1 \approx$ 10. $13.5 \approx$ 11. $7.5 \approx$ 12. $8.5 \approx$ 13. $9.5 \approx$ 14. $19.5 \approx$ 15. $29.5 \approx$ 16. $89.5 \approx$ 17. $2.4 \approx$ 18. $2.41 \approx$ 19. $2.42 \approx$ 20. $2.45 \approx$ 21. $2.49 \approx$	5.	3.5 ≈	
 8. 13.9 ≈ 9. 13.1 ≈ 10. 13.5 ≈ 11. 7.5 ≈ 12. 8.5 ≈ 13. 9.5 ≈ 14. 19.5 ≈ 15. 29.5 ≈ 16. 89.5 ≈ 17. 2.4 ≈ 18. 2.41 ≈ 19. 2.42 ≈ 20. 2.45 ≈ 21. 2.49 ≈ 	6.	3.6 ≈	
9.	7.	3.9 ≈	
10.	8.	13.9 ≈	
11. $7.5 \approx$ 12. $8.5 \approx$ 13. $9.5 \approx$ 14. $19.5 \approx$ 15. $29.5 \approx$ 16. $89.5 \approx$ 17. $2.4 \approx$ 18. $2.41 \approx$ 19. $2.42 \approx$ 20. $2.45 \approx$ 21. $2.49 \approx$	9.	13.1 ≈	
12. 8.5 ≈ 13. 9.5 ≈ 14. 19.5 ≈ 15. 29.5 ≈ 16. 89.5 ≈ 17. 2.4 ≈ 18. 2.41 ≈ 19. 2.42 ≈ 20. 2.45 ≈ 21. 2.49 ≈	10.	13.5 ≈	
13. 9.5 ≈ 14. 19.5 ≈ 15. 29.5 ≈ 16. 89.5 ≈ 17. 2.4 ≈ 18. 2.41 ≈ 19. 2.42 ≈ 20. 2.45 ≈ 21. 2.49 ≈	11.	7.5 ≈	
14. 19.5 ≈ 15. 29.5 ≈ 16. 89.5 ≈ 17. 2.4 ≈ 18. 2.41 ≈ 19. 2.42 ≈ 20. 2.45 ≈ 21. 2.49 ≈	12.	8.5 ≈	
15. 29.5 ≈ 16. 89.5 ≈ 17. 2.4 ≈ 18. 2.41 ≈ 19. 2.42 ≈ 20. 2.45 ≈ 21. 2.49 ≈	13.	9.5 ≈	
16. 89.5 ≈ 17. 2.4 ≈ 18. 2.41 ≈ 19. 2.42 ≈ 20. 2.45 ≈ 21. 2.49 ≈	14.	19.5 ≈	
17. 2.4 ≈ 18. 2.41 ≈ 19. 2.42 ≈ 20. 2.45 ≈ 21. 2.49 ≈	15.	29.5 ≈	
18. 2.41 ≈ 19. 2.42 ≈ 20. 2.45 ≈ 21. 2.49 ≈	16.	89.5 ≈	
19. 2.42 ≈ 20. 2.45 ≈ 21. 2.49 ≈	17.	2.4 ≈	
20. 2.45 ≈ 21. 2.49 ≈	18.	2.41 ≈	
21. 2.49 ≈	19.	2.42 ≈	
	20.	2.45 ≈	
22. 2.51 ≈	21.	2.49 ≈	
•	22.	2.51 ≈	

23.	12.51 ≈	
24.	16.61 ≈	
25.	17.41 ≈	
26.	11.51 ≈	
27.	11.49 ≈	
28.	13.49 ≈	
29.	13.51 ≈	
30.	15.51 ≈	
31.	15.49 ≈	
32.	6.3 ≈	
33.	7.6 ≈	
34.	49.5 ≈	
35.	3.45 ≈	
36.	17.46 ≈	
37.	11.76 ≈	
38.	5.2 ≈	
39.	12.8 ≈	
40.	59.5 ≈	
41.	5.45 ≈	
42.	19.47 ≈	
43.	19.87 ≈	
44.	69.51 ≈	



Lesson 9:

 $\label{lem:conditional} \mbox{Add decimals using place value strategies, and relate those strategies}$ to a written method.

B

Number Correct: _____ Improvement: _____

Round to the Nearest One

1.	4.1 ≈	
2.	4.2 ≈	
3.	4.3 ≈	
4.	4.4 ≈	
5.	4.5 ≈	
6.	4.6 ≈	
7.	4.9 ≈	
8.	14.9 ≈	
9.	14.1 ≈	
10.	14.5 ≈	
11.	7.5 ≈	
12.	8.5 ≈	
13.	9.5 ≈	
14.	19.5 ≈	
15.	29.5 ≈	
16.	79.5 ≈	
17.	3.4 ≈	
18.	3.41 ≈	
19.	3.42 ≈	
20.	3.45 ≈	
21.	3.49 ≈	
22.	3.51 ≈	

23.	13.51 ≈	
24.	17.61 ≈	
25.	18.41 ≈	
26.	12.51 ≈	
27.	12.49 ≈	
28.	14.49 ≈	
29.	14.51 ≈	
30.	16.51 ≈	
31.	16.49 ≈	
32.	7.3 ≈	
33.	8.6 ≈	
34.	39.5 ≈	
35.	4.45 ≈	
36.	18.46 ≈	
37.	12.76 ≈	
38.	6.2 ≈	
39.	13.8 ≈	
40.	49.5 ≈	
41.	6.45 ≈	
42.	19.48 ≈	
43.	19.78 ≈	
44.	59.51 ≈	



Lesson 9:

 $\label{lem:conditional} \mbox{Add decimals using place value strategies, and relate those strategies}$ to a written method.

Add Decimals

1.	3 + 1 =	
2.	3.5 + 1 =	
3.	3.52 + 1 =	
4.	0.3 + 0.1 =	
5.	0.37 + 0.1 =	
6.	5.37 + 0.1 =	
7.	0.03 + 0.01 =	
8.	0.83 + 0.01 =	
9.	2.83 + 0.01 =	
10.	30 + 10 =	
11.	32 + 10 =	
12.	32.5 + 10 =	
13.	32.58 + 10 =	
14.	40.789 + 1 =	
15.	4 + 1 =	
16.	4.6 + 1 =	
17.	4.62 + 1 =	
18.	4.628 + 1 =	
19.	4.628 + 0.1 =	
20.	4.628 + 0.01 =	
21.	4.628 + 0.001 =	
22.	27.048 + 0.1 =	

Number Correct:	

23.	5 + 0.1 =	
24.	5.7 + 0.1 =	
25.	5.73 + 0.1 =	
26.	5.736 + 0.1 =	
27.	5.736 + 1 =	
28.	5.736 + 0.01 =	
29.	5.736 + 0.001 =	
30.	6.208 + 0.01 =	
31.	3 + 0.01 =	
32.	3.5 + 0.01 =	
33.	3.58 + 0.01 =	
34.	3.584 + 0.01 =	
35.	3.584 + 0.001 =	
36.	3.584 + 0.1 =	
37.	3.584 + 1 =	
38.	6.804 + 0.01 =	
39.	8.642 + 0.001 =	
40.	7.65 + 0.001 =	
41.	3.987 + 0.1 =	
42.	4.279 + 0.001 =	
43.	13.579 + 0.01 =	
44.	15.491 + 0.01 =	



B

Add Decimals

Number Correct:	
Improvement:	

1.	2 + 1 =
2.	2.5 + 1 =
3.	2.53 + 1 =
4.	0.2 + 0.1 =
5.	0.27 + 0.1 =
6.	5.27 + 0.1 =
7.	0.02 + 0.01 =
8.	0.82 + 0.01 =
9.	4.82 + 0.01 =
10.	20 + 10 =
11.	23 + 10 =
12.	23.5 + 10 =
13.	23.58 + 10 =
14.	30.789 + 1 =
15.	3 + 1 =
16.	3.6 + 1 =
17.	3.62 + 1 =
18.	3.628 + 1 =
19.	3.628 + 0.1 =
20.	3.628 + 0.01 =
21.	3.628 + 0.001 =
22.	37.048 + 0.1 =

23.	4 + 0.1 =	
24.	4.7 + 0.1 =	
25.	4.73 + 0.1 =	
26.	4.736 + 0.1 =	
27.	4.736 + 1 =	
28.	4.736 + 0.01 =	
29.	4.736 + 0.001 =	
30.	5.208 + 0.01 =	
31.	2 + 0.01 =	
32.	2.5 + 0.01 =	
33.	2.58 + 0.01 =	
34.	2.584 + 0.01 =	
35.	2.584 + 0.001 =	
36.	2.584 + 0.1 =	
37.	2.584 + 1 =	
38.	5.804 + 0.01 =	
39.	7.642 + 0.001 =	
40.	6.75 + 0.001 =	
41.	2.987 + 0.1 =	
42.	3.279 + 0.001 =	
43.	12.579 + 0.01 =	
44.	14.391 + 0.01 =	



Number Correct: _____

Subtract Decimals

1.	5 – 1 =	
2.	5.9 – 1 =	
3.	5.93 – 1 =	
4.	5.932 – 1 =	
5.	5.932 – 2 =	
6.	5.932 – 4 =	
7.	0.5 – 0.1 =	
8.	0.53 – 0.1 =	
9.	0.539 – 0.1 =	
10.	8.539 – 0.1 =	
11.	8.539 – 0.2 =	
12.	8.539 – 0.4 =	
13.	0.05 - 0.01 =	
14.	0.057 - 0.01 =	
15.	1.057 – 0.01 =	
16.	1.857 – 0.01 =	
17.	1.857 – 0.02 =	
18.	1.857 – 0.04 =	
19.	0.005 - 0.001 =	
20.	7.005 – 0.001 =	
21.	7.905 – 0.001 =	
22.	7.985 – 0.001 =	

	T T T T T T T T T T T T T T T T T T T	
23.	7.985 – 0.002 =	
24.	7.985 – 0.004 =	
25.	2.7 – 0.1 =	
26.	2.785 – 0.1 =	
27.	2.785 – 0.5 =	
28.	4.913 – 0.4 =	
29.	3.58 – 0.01 =	
30.	3.586 – 0.01 =	
31.	3.586 – 0.05 =	
32.	7.982 – 0.04 =	
33.	6.126 – 0.001 =	
34.	6.126 – 0.004 =	
35.	9.348 – 0.006 =	
36.	8.347 – 0.3 =	
37.	9.157 – 0.05 =	
38.	6.879 – 0.009 =	
39.	6.548 – 2 =	
40.	6.548 – 0.2 =	
41.	6.548 – 0.02 =	
42.	6.548 – 0.002 =	
43.	6.196 – 0.06 =	

9.517 - 0.004 =



44.

Subtract Decimals

1.	6 – 1 =	
2.	6.9 – 1 =	
3.	6.93 – 1 =	
4.	6.932 – 1 =	
5.	6.932 – 2 =	
6.	6.932 – 4 =	
7.	0.6 – 0.1 =	
8.	0.63 – 0.1 =	
9.	0.639 – 0.1 =	
10.	8.639 – 0.1 =	
11.	8.639 – 0.2 =	
12.	8.639 – 0.4 =	
13.	0.06 – 0.01 =	
14.	0.067 – 0.01 =	
15.	1.067 – 0.01 =	
16.	1.867 – 0.01 =	
17.	1.867 – 0.02 =	
18.	1.867 – 0.04 =	
19.	0.006 - 0.001 =	
1		

Number Correct:	
Improvement:	

23.	7.986 – 0.002 =	
24.	7.986 – 0.004 =	
25.	3.7 – 0.1 =	
26.	3.785 – 0.1 =	
27.	3.785 – 0.5 =	
28.	5.924 – 0.4 =	
29.	4.58 – 0.01 =	
30.	4.586 – 0.01 =	
31.	4.586 – 0.05 =	
32.	6.183 – 0.04 =	
33.	7.127 – 0.001 =	
34.	7.127 – 0.004 =	
35.	1.459 – 0.006 =	
36.	8.457 – 0.4 =	
37.	1.267 – 0.06 =	
38.	7.981 – 0.001 =	
39.	7.548 – 2 =	
40.	7.548 – 0.2 =	
41.	7.548 – 0.02 =	
42.	7.548 – 0.002 =	
43.	7.197 – 0.06 =	
44.	1.627 – 0.004 =	



20.

21.

22.

7.006 - 0.001 =

7.906 - 0.001 =

7.986 – 0.001 =

Number Correct: _____

Multiply by Exponents

1.	10 × 10 =	
2.	10 ² =	
3.	10 ² × 10 =	
4.	10 ³ =	
5.	10 ³ × 10 =	
6.	10 ⁴ =	
7.	3 × 100 =	
8.	3 × 10 ² =	
9.	3.1 × 10 ² =	
10.	3.15 × 10 ² =	
11.	3.157 × 10 ² =	
12.	4 × 1,000 =	
13.	4 × 10 ³ =	
14.	4.2 × 10 ³ =	
15.	4.28 × 10 ³ =	
16.	4.283 × 10 ³ =	
17.	5 × 10,000 =	
18.	5 × 10 ⁴ =	
19.	5.7 × 10 ⁴ =	
20.	5.73 × 10 ⁴ =	
21.	5.731 × 10 ⁴ =	
22.	24 × 100 =	

23.	24 × 10 ² =	
24.	24.7 × 10 ² =	
25.	24.07 × 10 ² =	
26.	24.007 × 10 ² =	
27.	53 × 1,000 =	
28.	53 × 10 ³ =	
29.	53.8 × 10 ³ =	
30.	53.08 × 10 ³ =	
31.	53.082 × 10 ³ =	
32.	9.1 × 10,000 =	
33.	9.1 × 10 ⁴ =	
34.	91.4 × 10 ⁴ =	
35.	91.104 × 10 ⁴ =	
36.	91.107 × 10 ⁴ =	
37.	1.2 × 10 ² =	
38.	0.35 × 10 ³ =	
39.	5.492 × 10 ⁴ =	
40.	8.04 × 10 ³ =	
41.	7.109 × 10 ⁴ =	
42.	0.058 × 10 ² =	
43.	20.78 × 10 ³ =	
44.	420.079 × 10 ² =	

Multiply by Exponents

1.	10 × 10 × 1 =	
2.	10 ² =	
3.	10 ² × 10 =	
4.	10 ³ =	
5.	10 ³ × 10 =	
6.	10 ⁴ =	
7.	4 × 100 =	
8.	4 × 10 ² =	
9.	4.1 × 10 ² =	
10.	4.15 × 10 ² =	
11.	4.157 × 10 ² =	
12.	5 × 1,000 =	
13.	5 × 10 ³ =	
14.	5.2 × 10 ³ =	
15.	5.28 × 10 ³ =	
16.	5.283 × 10 ³ =	
17.	7 × 10,000 =	
18.	7 × 10 ⁴ =	
19.	7.5 × 10 ⁴ =	
20.	7.53 × 10 ⁴ =	
21.	7.531 × 10 ⁴ =	
22.	42 × 100 =	

Number Correct:	
Improvement:	

23.	42 × 10 ² =	
24.	42.7 × 10 ² =	
25.	42.07 × 10 ² =	
26.	42.007 × 10 ² =	
27.	35 × 1,000 =	
28.	35 × 10 ³ =	
29.	35.8 × 10 ³ =	
30.	35.08 × 10 ³ =	
31.	35.082 × 10 ³ =	
32.	8.1 × 10,000 =	
33.	8.1 × 10 ⁴ =	
34.	81.4 × 10 ⁴ =	
35.	81.104 × 10 ⁴ =	
36.	81.107 × 10 ⁴ =	
37.	$1.3 \times 10^2 =$	
38.	0.53 × 10 ³ =	
39.	4.391 × 10 ⁴ =	
40.	7.03 × 10 ³ =	
41.	6.109 × 10 ⁴ =	
42.	$0.085 \times 10^2 =$	
43.	30.87 × 10 ³ =	
44.	530.097 × 10 ² =	

Number Correct: _____

Multiply and Divide by Exponents

1.	10 × 10 =	
2.	10 ² =	
3.	10 ² × 10 =	
4.	10 ³ =	
5.	10 ³ × 10 =	
6.	10 ⁴ =	
7.	3 × 100 =	
8.	3 × 10 ² =	
9.	$3.1 \times 10^2 =$	
10.	3.15 × 10 ² =	
11.	$3.157 \times 10^2 =$	
12.	4 × 1,000 =	
13.	4 × 10 ³ =	
14.	$4.2 \times 10^3 =$	
15.	4.28 × 10 ³ =	
16.	$4.283 \times 10^3 =$	
17.	5 × 10,000 =	
18.	5 × 10 ⁴ =	
19.	5.7 × 10 ⁴ =	
20.	5.73 × 10 ⁴ =	
21.	5.731 × 10 ⁴ =	
22.	24 × 100 =	

23.	3,400 ÷ 10 ² =	
24.	3,470 ÷ 10 ² =	
25.	3,407 ÷ 10 ² =	
26.	$3,400.7 \div 10^2 =$	
27.	63,000 ÷ 1,000 =	
28.	63,000 ÷ 10 ³ =	
29.	63,800 ÷ 10 ³ =	
30.	$63,080 \div 10^3 =$	
31.	63,082 ÷ 10 ³ =	
32.	81,000 ÷ 10,000 =	
33.	81,000 ÷ 10 ⁴ =	
34.	81,400 ÷ 10 ⁴ =	
35.	81,040 ÷ 10 ⁴ =	
36.	91,070 ÷ 10 ⁴ =	
37.	120 ÷ 10 ² =	
38.	350 ÷ 10 ³ =	
39.	45,920 ÷ 10 ⁴ =	
40.	6,040 ÷ 10 ³ =	
41.	61,080 ÷ 10 ⁴ =	
42.	7.8 ÷ 10 ² =	
43.	40,870 ÷ 10 ³ =	
44.	52,070.9 ÷ 10 ² =	



Lesson 16: Solve word problems using decimal operations. B

Multiply and Divide by Exponents

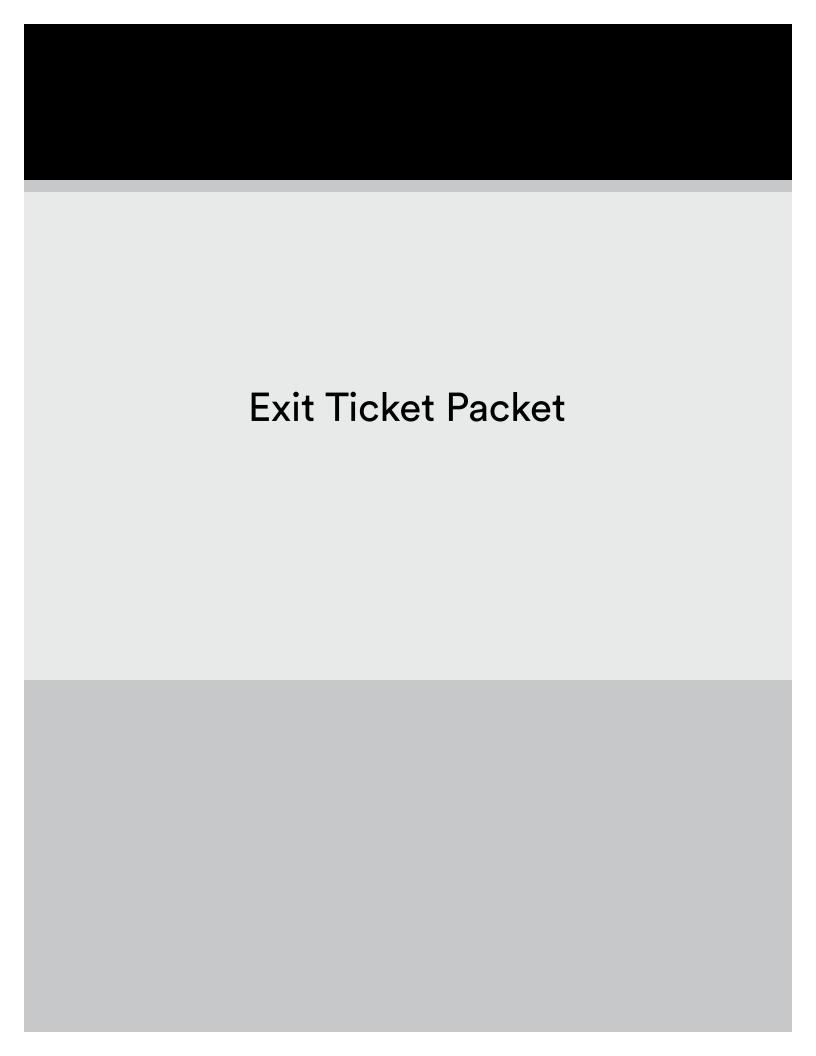
1.	10 × 10 × 1 =	
2.	10 ² =	
3.	10 ² × 10 =	
4.	10 ³ =	
5.	10 ³ × 10 =	
6.	10 ⁴ =	
7.	500 ÷ 100 =	
8.	500 ÷ 10 ² =	
9.	510 ÷ 10 ² =	
10.	516 ÷ 10 ² =	
11.	516.7 ÷ 10 ² =	
12.	6,000 ÷ 1,000 =	
13.	6,000 ÷ 10 ³ =	
14.	6,200 ÷ 10 ³ =	
15.	6,280 ÷ 10 ³ =	
16.	6,283 ÷ 10 ³ =	
17.	70,000 ÷ 10,000 =	
18.	70,000 ÷ 10 ⁴ =	
19.	76,000 ÷ 10 ⁴ =	
20.	76,300 ÷ 10 ⁴ =	
21.	76,310 ÷ 10 ⁴ =	
22.	4,300 ÷ 100 =	

Number Correct:	
Improvement:	

23.	$4,300 \div 10^2 =$	
24.	$4,370 \div 10^2 =$	
25.	$4,307 \div 10^2 =$	
26.	$4,300.7 \div 10^2 =$	
27.	73,000 ÷ 1,000	
28.	73,000 ÷ 10 ³ =	
29.	73,800 ÷ 10 ³ =	
30.	73,080 ÷ 10 ³ =	
31.	73,082 ÷ 10 ³ =	
32.	91,000 ÷ 10,000 =	
33.	91,000 ÷ 10 ⁴ =	
34.	91,400 ÷ 10 ⁴ =	
35.	91,040 ÷ 10 ⁴ =	
36.	81,070 ÷ 10 ⁴ =	
37.	170 ÷ 10 ² =	
38.	450 ÷ 10 ³ =	
39.	54,920 ÷ 10 ⁴ =	
40.	4,060 ÷ 10 ³ =	
41.	71,080 ÷ 10 ⁴ =	
42.	8.7 ÷ 10 ² =	
43.	$60,470 \div 10^3 =$	
44.	72,050.9 ÷ 10 ² =	

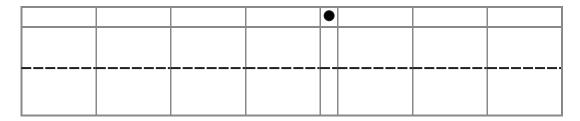


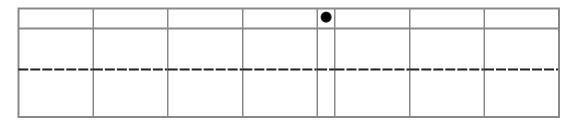
Lesson 16: Solve word problems using decimal operations.



Name	Date

Use the place value chart and arrows to show how the value of each digit changes.





Date _____ Name _____

- 1. Solve.
 - a. 32.1 × 10 = _____
- b. 3632.1 ÷ 10 = _____

- 2. Solve.
 - a. 455 × 1,000 = _____
- b. 455 ÷ 1,000 = _____

Date _____

1. Write the following in exponential form and as a multiplication sentence using only 10 as a factor (e.g., $100 = 10^2 = 10 \times 10$).

a. 1,000

=____=

b. 100 × 100

= _____= ____=

2. Write the following in standard form (e.g., $4 \times 10^2 = 400$).

a. $3 \times 10^2 =$ _____

c. $800 \div 10^3 =$ _____

b. $2.16 \times 10^4 =$ _____

d. $754.2 \div 10^2 =$ _____



Name _____ Date _____

1. Convert using an equation with an exponent.

a. 2 meters to centimeters

2 m = ____ cm

b. 40 millimeters to meters

40 mm = ____ m

- 2. Read each aloud as you write the equivalent measures.
 - a. A piece of fabric measures 3.9 meters. Express this length in centimeters.
 - b. Ms. Ramos's thumb measures 4 centimeters. Express this length in meters.

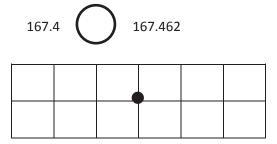


Naı	me	Date
1.	Express nine thousandths as a decimal.	
2.	Express twenty-nine thousandths as a fraction.	
3.	Express 24.357 in words.	
	a. Write the expanded form using fractions or decimals.	
	b. Express in unit form.	



Name	Date	

1. Show the numbers on the place value chart using digits. Use >, <, or = to compare. Explain your thinking in the space to the right.



2. Use >, <, and = to compare the numbers.



3. Arrange the numbers in decreasing order.

76.342 76.332 76.232 76.343

Use the table to round the number to the given places. Label the number lines, and circle the rounded value.

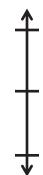
8.546

Tens	Ones	•	Tenths	Hundredths	Thousandths
	8	•	5	4	6
		•	85	4	6
		•		854	6
		•			8546

a. Hundredths



b. Tens



Name	Date	_ Date		
Round the quantity to the given place value.	Draw number lines to explain your thinking.	Circle the rounded		
Round the quantity to the given place value. value on the number line.	Draw number lines to explain your thinking.	Circle the rounded		

a. 13.989 to the nearest tenth

b. 382.993 to nearest hundredth



Name _____ Date _____

- 1. Solve.
 - a. 4 hundredths + 8 hundredths = _____ hundredths = _____ tenth(s) _____ hundredths
 - b. 64 hundredths + 8 hundredths = _____ hundredths = _____ tenths _____ hundredths
- 2. Solve using the standard algorithm.

b. 36.25 + 8.67 = _____

Name _____ Date _____

1. Subtract.

1.7 - 0.8 = ______ tenths - _____ tenths = _____ tenths = ____

2. Subtract vertically, showing all work.

a. 84.637 – 28.56 = _____

b. 7 – 0.35 = ____



Name			Date		
1.	Solve by drawing form.	disks on a place value	chart. Write an equati	on, and express the produc	ct in standard
	4 copies of 3 tent	hs			
2.	Complete the are	a model, and then find	I the product.		
	3 × 9.63				
	Г				\neg
		3 × ones	3 × tenths	3 × hundredths	5

Name _____ Date ____

- 1. Use estimation to choose the correct value for each expression.
 - a. 5.1×2
- 0.102
- 1.02

10.2

102

- b. 4 × 8.93
- 3.572
- 35.72
- 357.2
- 3572
- 2. Estimate the answer for 7.13×6 . Explain your reasoning using words, pictures, or numbers.

Date _____

1. Complete the sentences with the correct number of units, and then complete the equation.

a. 2 groups of _____ tenths is 1.8.

1.8 ÷ 2 = _____

b. 4 groups of _____ hundredths is 0.32.

0.32 ÷ 4 = _____

c. 7 groups of _____ thousandths is 0.021.

0.021 ÷ 7 = _____

2. Complete the number sentence. Express the quotient in unit form and then in standard form.

a. $4.5 \div 5 =$ ______ tenths $\div 5 =$ _____ tenths =

b. $6.12 \div 6 =$ _____ ones $\div 6 +$ _____ hundredths $\div 6$

= _____ ones + _____ hundredths

Name _____

Date _____

1. Draw place value disks on the place value chart to solve. Show each step using the standard algorithm.

5.372 ÷ 2 = _____

Ones	Tenths	Hundredths	Thousandths

2 5. 3 7 2

2. Solve using the standard algorithm.

0.576 ÷ 4 = _____

Name	Date	
_		

1. Draw place value disks on the place value chart to solve. Show each step in the standard algorithm.

0.9 ÷ 4 = _____

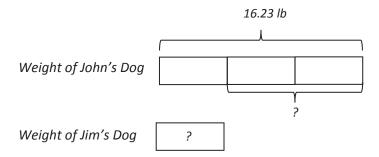
Ones	•	Tenths	Hundredths	Thousandths

2. Solve using the standard algorithm.

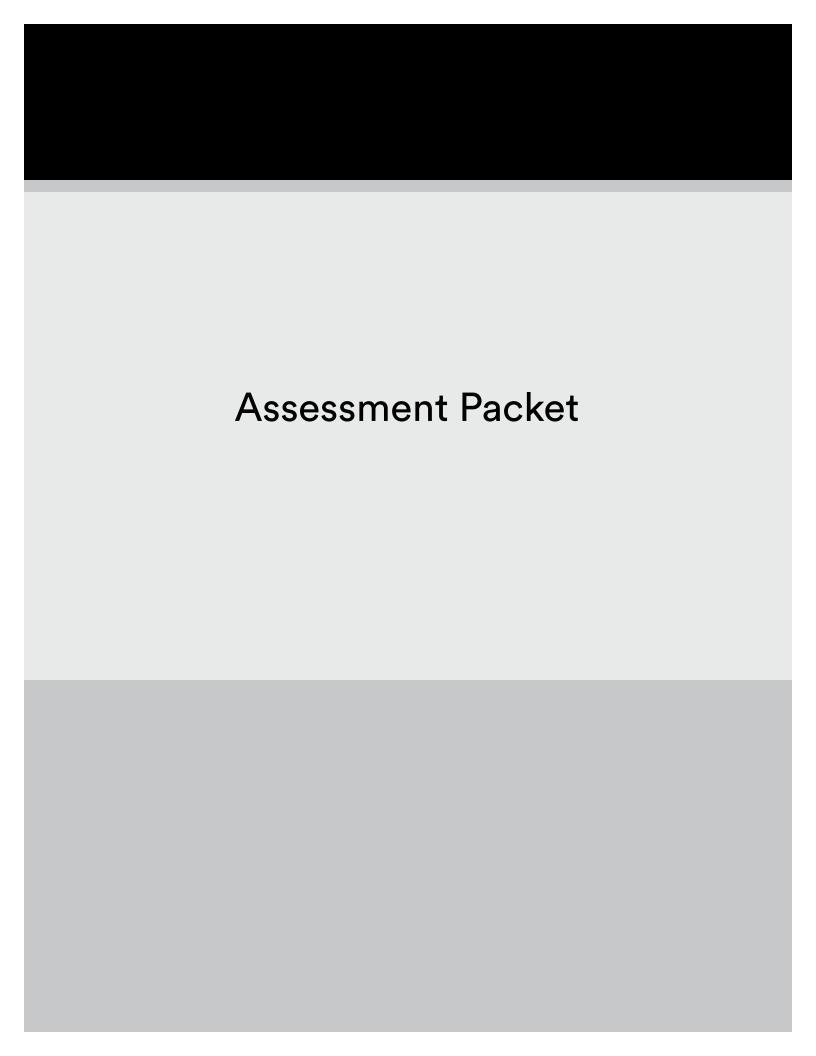
 $9.8 \div 5 =$

Name	Date
INATITE	Date

Write a word problem with two questions that matches the tape diagram below, and then solve.







Name __ Date __

Compare using >, <, or =.

a.

0.127

b. 2 thousandths + 4 hundredths

0.036

2 tens 3 tenths 1 thousandth

d.

24 tenths



 $4 \times 10^3 + 2 \times 100 + 3 \times \frac{1}{10}$



 $4 \times 1000 + 2 \times 10^2 + 3 \times \frac{1}{10}$

f.

 $3 \times \frac{1}{10} + 4 \times \frac{1}{1000}$

- 2. Model the number 8.88 on the place value chart.

Use words, numbers, and your model to explain why each of the digits has a different value. Be sure to use "ten times as large" and "one tenth as large" in your explanation.

b.	Multiply 8.88×10^4 .	Explain the shift	of the digits and the	change in the va	alue of each digit.

c. Divide the product from (b) by 10². Explain the shift of the digits and the change in the value of each digit.

- 3. Rainfall collected in a rain gauge was found to be 2.3 cm when rounded to the nearest tenth of a centimeter.
 - a. Circle all the measurements below that could be the actual measurement of the rainfall.

2.251 cm

2.349 cm

2.352 cm

2.295 cm

b. Convert the rounded measurement to meters. Write an equation to show your work.



Module 1:

Place Value and Decimal Fractions

4. Average annual rainfall totals for cities in New York are listed below.

Rochester 0.97 meters Ithaca 0.947 meters Saratoga Springs 1.5 meters New York City 1.268 meters

Put the rainfall measurements in order from least to greatest. Write the smallest total rainfall in word form and expanded form.

Round each of the rainfall totals to the nearest tenth.

Imagine New York City's rainfall is the same every year. How much rain would fall in 100 years?

d. Write an equation using an exponent that would express the 100-year total rainfall. Explain how the digits have shifted position and why.



Module 1: Place Value and Decimal Fractions

Name	Date	

1. The following equations involve different quantities and use different operations, yet produce the same result. Use a place value chart and words to explain why this is true.

$$4.13 \times 10^3 = 4130$$

$$413,000 \div 10^2 = 4130$$

2. Use an area model to explain the product of 4.6 and 3. Write the product in standard form, word form, and expanded form.



Module 1:

Place Value and Decimal Fractions

- 3. Compare using >, <, or =.
 - a. 2 tenths + 11 hundredths



b. 13 tenths + 8 tenths + 32 hundredths



c. 342 hundredths + 7 tenths



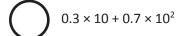
d. $2 + 31 \times \frac{1}{10} + 14 \times \frac{1}{100}$



e. $14 + 72 \times \frac{1}{10} + 4 \times \frac{1}{1000}$



f. $0.3 \times 10^2 + 0.007 \times 10^3$



- 4. Dr. Mann mixed 10.357 g of chemical A, 12.062 g of chemical B, and 7.506 g of chemical C to make 5 doses of medicine.
 - a. About how much medicine did he make in grams? Estimate the amount of each chemical by rounding to the nearest tenth of a gram before finding the sum. Show all your thinking.

b. Find the actual amount of medicine mixed by Dr. Mann. What is the difference between your estimate and the actual amount?

c. How many grams are in one dose of medicine? Explain your strategy for solving this problem.

d. Round the weight of one dose to the nearest gram.



Module 1: Place Value and Decimal Fractions