A Story of Units[®]

Eureka Math[™] Grade 5, Module 2

Student File_B

Contains Sprint and Fluency, Exit Ticket, and Assessment Materials

Published by the non-profit Great Minds.

Copyright © 2015 Great Minds. All rights reserved. No part of this work may be reproduced or used in any form or by any means — graphic, electronic, or mechanical, including photocopying or information storage and retrieval systems — without written permission from the copyright holder. "Great Minds" and "Eureka Math" are registered trademarks of Great Minds.

Printed in the U.S.A. This book may be purchased from the publisher at eureka-math.org 10 9 8 7 6 5 4 3 2 1

Sprint and Fluency Packet

	Δ

Multiply by 10, 100, and 1,000

9 × 10 =	
9 × 100 =	
9 × 1,000 =	
8 × 10 =	
80 × 10 =	
80 × 100 =	
80 × 1,000 =	
7 × 10 =	
70 × 10 =	
700 × 10 =	
700 × 100 =	
700 × 1,000 =	
2 × 10 =	
30 × 10 =	
32 × 10 =	
4 × 10 =	
50 × 10 =	
54 × 10 =	
37 × 10 =	
84 × 10 =	
84 × 100 =	
84 × 1,000 =	
	$9 \times 10 =$ $9 \times 100 =$ $9 \times 1,000 =$ $8 \times 10 =$ $80 \times 10 =$ $80 \times 100 =$ $80 \times 1,000 =$ $7 \times 10 =$ $70 \times 10 =$ $700 \times 10 =$ $700 \times 100 =$ $2 \times 10 =$ $30 \times 10 =$ $30 \times 10 =$ $32 \times 10 =$ $4 \times 10 =$ $50 \times 10 =$ $51 \times 10 =$ $51 \times 10 =$ $37 \times 10 =$ $84 \times 10 =$ $84 \times 10 =$ $84 \times 100 =$

23.	73 × 1,000 =	
24.	60 × 10 =	
25.	600 × 10 =	
26.	600 × 100 =	
27.	65 × 100 =	
28.	652 × 100 =	
29.	342 × 100 =	
30.	800 × 100 =	
31.	800 × 1,000 =	
32.	860 × 1,000 =	
33.	867 × 1,000 =	
34.	492 × 1,000 =	
35.	34 × 10 =	
36.	629 × 10 =	
37.	94 × 100 =	
38.	238 × 100 =	
39.	47 × 1,000 =	
40.	294 × 1,000 =	
41.	174 × 100 =	
42.	285 × 1,000 =	
43.	951 × 100 =	
44.	129 × 1,000 =	



2: Estimate multi-digit products by rounding factors to a basic fact and using place value patterns.

Multiply by 10, 100, and 1,000

B

Number Correct: _____

Improvement: _____

1.	8 × 10 =	
2.	8 × 100 =	
3.	8 × 1,000 =	
4.	7 × 10 =	
5.	70 × 10 =	
6.	70 × 100 =	
7.	70 × 1,000 =	
8.	6 × 10 =	
9.	60 × 10 =	
10.	600 × 10 =	
11.	600 × 100 =	
12.	600 × 1,000 =	
13.	3 × 10 =	
14.	20 × 10 =	
15.	23 × 10 =	
16.	5 × 10 =	
17.	40 × 10 =	
18.	45 × 10 =	
19.	73 × 10 =	
20.	48 × 10 =	
21.	48 × 100 =	
22.	48 × 1,000 =	

23.	37 × 1,000 =	
24.	50 × 10 =	
25.	500 × 10 =	
26.	500 × 100 =	
27.	56 × 100 =	
28.	562 × 100 =	
29.	432 × 100 =	
30.	700 × 100 =	
31.	700 × 1,000 =	
32.	760 × 1,000 =	
33.	765 × 1,000 =	
34.	942 × 1,000 =	
35.	74 × 10 =	
36.	269 × 10 =	
37.	49 × 100 =	
38.	328 × 100 =	
39.	37 × 1,000 =	
40.	924 × 1,000 =	
41.	147 × 100 =	
42.	825 × 1,000 =	
43.	651 × 100 =	
44.	192 × 1,000 =	



2: Estimate multi-digit products by rounding factors to a basic fact and using place value patterns.

		/.			
1	29 x 11 ≈		23	801 x 31 ≈	
2	29 x 21 ≈		24	803 x 31 ≈	
3	29 x 31 ≈		25	703 x 31 ≈	
4	23 x 12 ≈		26	43 x 34 ≈	
5	23 x 22 ≈		27	53 x 34 ≈	
6	23 x 32 ≈		28	53 x 31 ≈	
7	23 x 42 ≈		29	53 x 51 ≈	
8	37 x 13 ≈		30	93 x 31 ≈	
9	37 x 23 ≈		31	913 x 31 ≈	
10	36 x 24 ≈		32	73 x 31 ≈	
11	24 x 36 ≈		33	723 x 31 ≈	
12	43 x 11 ≈		34	78 x 34 ≈	
13	43 x 21 ≈		35	798 x 34 ≈	
14	403 x 21 ≈		36	62 x 33 ≈	
15	303 x 21 ≈		37	642 x 33 ≈	
16	203 x 21 ≈		38	374 x 64 ≈	
17	41 x 11 ≈		39	64 x 374 ≈	
18	41 x 21 ≈		40	740 x 36 ≈	
19	41 x 31 ≈		41	750 x 36 ≈	
20	401 x 31 ≈		42	65 x 680 ≈	
21	501 x 31 ≈		43	849 x 84 ≈	
22	601 x 31 ≈		44	85 x 849 ≈	

Estimate and then multiply.

estimate products



Connect visual models and the distributive property to partial products of the standard algorithm without renaming.

	Solve.				
1	5 x 100 =	23		5000 - 50 =	
2	500 - 5 =	24		50 x 99 =	
3	5 x 99 =	25		80 x 100 =	
4	3 x 100 =	26		80 x 99 =	
5	300 - 3 =	27	·	60 x 100 =	
6	3 x 99 =	28		60 x 99 =	
7	2 x 100 =	29		11 x 100 =	
8	200 - 2 =	30		1100 - 11 =	
9	2 x 99 =	31		11 x 99 =	
10	6 x 100 =	32	2	21 x 100 =	
11	600 - 6 =	33		2100 - 21 =	
12	6 x 99 =	34		21 x 99 =	
13	4 x 100 =	35		31 x 100 =	
14	4 x 99 =	36		31 x 99 =	
15	7 x 100 =	37	·	71 x 100 =	
16	7 x 99 =	38		71 x 99 =	
17	9 x 100 =	39		42 x 100 =	
18	9 x 99 =	40		42 x 99 =	
19	8 x 100 =	41		53 x 99 =	
20	8 x 99 =	42		64 x 99 =	
21	5 x 100 =	43		75 x 99 =	
22	50 x 100 =	44		97 x 99 =	

mental multiplication



Α

Multiply by Multiples of 10 and 100

1.	2 × 10 =	
2.	12 × 10 =	
3.	12 × 100 =	
4.	4 × 10 =	
5.	34 × 10 =	
6.	34 × 100 =	
7.	7 × 10 =	
8.	27 × 10 =	
9.	27 × 100 =	
10.	3 × 10 =	
11.	3 × 2 =	
12.	3 × 20 =	
13.	13 × 10 =	
14.	13 × 2 =	
15.	13 × 20 =	
16.	13 × 100 =	
17.	13 × 200 =	
18.	2 × 4 =	
19.	22 × 4 =	
20.	22 × 40 =	
21.	22 × 400 =	
22.	33 × 2 =	

23.	33 × 20 =	
24.	33 × 200 =	
25.	24 × 10 =	
26.	24 × 20 =	
27.	24 × 100 =	
28.	24 × 200 =	
29.	23 × 30 =	
30.	23 × 300 =	
31.	71 × 2 =	
32.	71 × 20 =	
33.	14 × 2=	
34.	14 × 3 =	
35.	14 × 30 =	
36.	14 × 300 =	
37.	82 × 20 =	
38.	15 × 300 =	
39.	71 × 600 =	
40.	18 × 40 =	
41.	75 × 30 =	
42.	84 × 300 =	
43.	87 × 60 =	
44.	79 × 800 =	



Lesson 7:

7: Connect area models and the distributive property to partial products of the standard algorithm with renaming.

Improvement: _____

Multiply by Multiples of 10 and 100

1.	3 × 10 =	
2.	13 × 10 =	
3.	13 × 100 =	
4.	5 × 10 =	
5.	35 × 10 =	
6.	35 × 100 =	
7.	8 × 10 =	
8.	28 × 10 =	
9.	28 × 100 =	
10.	4 × 10 =	
11.	4 × 2 =	
12.	4 × 20 =	
13.	14 × 10 =	
14.	14 × 2 =	
15.	14 × 20 =	
16.	14 × 100 =	
17.	14 × 200 =	
18.	2 × 3 =	
19.	22 × 3 =	
20.	22 × 30 =	
21.	22 × 300 =	
22.	44 × 2 =	

23.	44 × 20 =	
24.	44 × 200 =	
25.	42 × 10 =	
26.	42 × 20 =	
27.	42 × 100 =	
28.	42 × 200 =	
29.	32 × 30 =	
30.	32 × 300 =	
31.	81 × 2 =	
32.	81 × 20 =	
33.	<u>13 × 3 =</u>	
34.	13 × 4 =	
35.	13 × 40 =	
36.	13 × 400 =	
37.	72 × 30 =	
38.	15 × 300 =	
39.	81 × 600 =	
40.	16 × 40 =	
41.	65 × 30 =	
42.	48 × 300 =	
43.	89 × 60 =	
44.	76 × 800 =	



7: Connect area models and the distributive property to partial products of the standard algorithm with renaming.

A

Г

Multiply Decimals

1.	3 × 3 =	
2.	0.3 × 3 =	
3.	0.03 × 3 =	
4.	3 × 2 =	
5.	0.3 × 2 =	
6.	0.03 × 2 =	
7.	2 × 2 =	
8.	0.2 × 2 =	
9.	0.02 × 2 =	
10.	5 × 3 =	
11.	0.5 × 3 =	
12.	0.05 × 3 =	
13.	0.04 × 3 =	
14.	0.4 × 3 =	
15.	4 × 3 =	
16.	5 × 5 =	
17.	0.5 × 5 =	
18.	0.05 × 5 =	
19.	7 × 4 =	
20.	0.7 × 4 =	
21.	0.07 × 4 =	
22.	0.9 × 4 =	

23.	8 × 5 =	
24.	0.8 × 5 =	
25.	0.08 × 5 =	
26.	0.06 × 5 =	
27.	0.06 × 3 =	
28.	0.6 × 5 =	
29.	0.06 × 2 =	
30.	0.06 × 7 =	
31.	0.9 × 6 =	
32.	0.06 × 9 =	
33.	0.09 × 9 =	
34.	0.8 × 8 =	
35.	0.07 × 7 =	
36.	0.6 × 6 =	
37.	0.05 × 5 =	
38.	0.6 × 8 =	
39.	0.07 × 9 =	
40.	0.8 × 3 =	
41.	0.09 × 6 =	
42.	0.5 × 7 =	
43.	0.12 × 4 =	
44.	0.12 × 9 =	



Lesson 11:

: Multiply decimal fractions by multi-digit whole numbers through conversion to a whole number problem and reasoning about the placement of the decimal.

Improvement: _____

B

Multiply Decimals

2 × 2 = 1. 0.2 × 2 = 2. $0.02 \times 2 =$ 3. 4. 4 × 2 = 0.4 × 2 = 5. 0.04 × 2 = 6. 3 × 3 = 7. 0.3 × 3 = 8. $0.03 \times 3 =$ 9. 10. 4 × 3 = 0.4 × 3 = 11. 0.04 × 3 = 12. 0.05 × 3 = 13. 14. 0.5 × 3 = 5 × 3 = 15. 4 × 4 = 16. $0.4 \times 4 =$ 17. $0.04 \times 4 =$ 18. 8 × 4 = 19. 0.8 × 4 = 20. 0.08 × 4 = 21. 0.6 × 4 = 22.

23.	6 × 5 =	
24.	0.6 × 5 =	
25.	0.06 × 5 =	
26.	0.08 × 5 =	
27.	0.08 × 3 =	
28.	0.8 × 5 =	
29.	0.08 × 2 =	
30.	0.08 × 7 =	
31.	0.9 × 8 =	
32.	0.08 × 9 =	
33.	0.9 × 9 =	
34.	0.08 × 8 =	
35.	0.7 × 7 =	
36.	0.06 × 6 =	
37.	0.5 × 5 =	
38.	0.06 × 8 =	
39.	0.7 × 9 =	
40.	0.08 × 3 =	
41.	0.9 × 6 =	
42.	0.05 × 7 =	
43.	0.12 × 6 =	
44.	0.12 × 8 =	



Lesson 11:

: Multiply decimal fractions by multi-digit whole numbers through conversion to a whole number problem and reasoning about the placement of the decimal.

A

Convert Inches to Feet and Inches

Т

٦

1.	12 in. =	ft.	in.
2.	13 in. =	ft.	in.
3.	14 in. =	ft.	in.
4.	15 in. =	ft.	in.
5.	22 in. =	ft.	in.
6.	20 in. =	ft.	in.
7.	24 in. =	ft.	in.
8.	25 in. =	ft.	in.
9.	26 in. =	ft.	in.
10.	30 in. =	ft.	in.
11.	34 in. =	ft.	in.
12.	35 in. =	ft.	in.
13.	36 in. =	ft.	in.
14.	37 in. =	ft.	in.
15.	46 in. =	ft.	in.
16.	40 in. =	ft.	in.
17.	48 in. =	ft.	in.
18.	58 in. =	ft.	in.
19.	49 in. =	ft.	in.
20.	47 in. =	ft.	in.
21.	50 in. =	ft.	in.
22.	12 in. =	ft.	in.

23.	17 in. =	ft.	in.
24.	24 in. =	ft.	in.
25.	28 in. =	ft.	in.
26.	36 in. =	ft.	in.
27.	45 in. =	ft.	in.
28.	48 in. =	ft.	in.
29.	59 in. =	ft.	in.
30.	60 in. =	ft.	in.
31.	64 in. =	ft.	in.
32.	68 in. =	ft.	in.
33.	71 in. =	ft.	in.
34.	73 in. =	ft.	in.
35.	72 in. =	ft.	in.
36.	80 in. =	ft.	in.
37.	84 in. =	ft.	in.
38.	90 in. =	ft.	in.
39.	96 in. =	ft.	in.
40.	100 in. =	ft.	in.
41.	108 in. =	ft.	in.
42.	117 in. =	ft.	in.
43.	104 in. =	ft.	in.
44.	93 in. =	ft.	in.



Lesson 15: Solve two-step word problems involving measurement conversions.

Improvement: _____

B

Convert Inches to Feet and Inches

1.	120 in. =	ft.	in.
2.	12 in. =	ft.	in.
3.	13 in. =	ft.	in.
4.	14 in. =	ft.	in.
5.	20 in. =	ft.	in.
6.	22 in. =	ft.	in.
7.	24 in. =	ft.	in.
8.	25 in. =	ft.	in.
9.	26 in. =	ft.	in.
10.	34 in. =	ft.	in.
11.	30 in. =	ft.	in.
12.	35 in. =	ft.	in.
13.	36 in. =	ft.	in.
14.	46 in. =	ft.	in.
15.	37 in. =	ft.	in.
16.	40 in. =	ft.	in.
17.	48 in. =	ft.	in.
18.	49 in. =	ft.	in.
19.	58 in. =	ft.	in.
20.	47 in. =	ft.	in.
21.	50 in. =	ft.	in.
22.	12 in. =	ft.	in.

23.	16 in. =	ft.	in.
24.	24 in. =	ft.	in.
25.	29 in. =	ft.	in.
26.	36 in. =	ft.	in.
27.	42 in. =	ft.	in.
28.	48 in. =	ft.	in.
29.	59 in. =	ft.	in.
30.	60 in. =	ft.	in.
31.	63 in. =	ft.	in.
32.	67 in. =	ft.	in.
33.	70 in. =	ft.	in.
34.	73 in. =	ft.	in.
35.	72 in. =	ft.	in.
36.	77 in. =	ft.	in.
37.	84 in. =	ft.	in.
38.	89 in. =	ft.	in.
39.	96 in. =	ft.	in.
40.	99 in. =	ft.	in.
41.	108 in. =	ft.	in.
42.	115 in. =	ft.	in.
43.	103 in. =	ft.	in.
44.	95 in. =	ft.	in.



Lesson 15: Solve two-step word problems involving measurement conversions.

A

Divide by Multiples of 10 and 100

1.	30 ÷ 10 =	
2.	430 ÷ 10 =	
3.	4,300 ÷ 10 =	
4.	4,300 ÷ 100 =	
5.	43,000 ÷ 100 =	
6.	50 ÷ 10 =	
7.	850 ÷ 10 =	
8.	8,500 ÷ 10 =	
9.	8,500 ÷ 100 =	
10.	85,000 ÷ 100 =	
11.	600 ÷ 10 =	
12.	60 ÷ 3 =	
13.	600 ÷ 30 =	
14.	4,000 ÷ 100 =	
15.	40 ÷ 2 =	
16.	4,000 ÷ 200 =	
17.	240 ÷ 10 =	
18.	24 ÷ 2 =	
19.	240 ÷ 20 =	
20.	3,600 ÷ 100 =	
21.	36 ÷ 3 =	
22.	3,600 ÷ 300 =	

23.	480 ÷ 4 =	
24.	480 ÷ 40 =	
25.	6,300 ÷ 3 =	
26.	6,300 ÷ 30 =	
27.	6,300 ÷ 300 =	
28.	8,400 ÷ 2 =	
29.	8,400 ÷ 20 =	
30.	8,400 ÷ 200 =	
31.	96,000 ÷ 3 =	
32.	96,000 ÷ 300 =	
33.	96,000 ÷ 30 =	
34.	900 ÷ 30 =	
35.	1,200 ÷ 30 =	
36.	1,290 ÷ 30 =	
37.	1,800 ÷ 300 =	
38.	8,000 ÷ 200 =	
39.	12,000 ÷ 200 =	
40.	12,800 ÷ 200 =	
41.	2,240 ÷ 70 =	
42.	18,400 ÷ 800 =	
43.	21,600 ÷ 90 =	
44.	25,200 ÷ 600 =	



Lesson 16: Use *divide by 10* patterns for multi-digit whole number division.

B

Number Correct: _____

Improvement: _____

1.	20 ÷ 10 =	
2.	420 ÷ 10 =	
3.	4,200 ÷ 10 =	
4.	4,200 ÷ 100 =	
5.	42,000 ÷ 100 =	
6.	40 ÷ 10 =	
7.	840 ÷ 10 =	
8.	8,400 ÷ 10 =	
9.	8,400 ÷ 100 =	
10.	84,000 ÷ 100 =	
11.	900 ÷ 10 =	
12.	90 ÷ 3 =	
13.	900 ÷ 30 =	
14.	6,000 ÷ 100 =	
15.	60 ÷ 2 =	
16.	6,000 ÷ 200 =	
17.	240 ÷ 10 =	
18.	24 ÷ 2 =	
19.	240 ÷ 20 =	
20.	6,300 ÷ 100 =	
21.	63 ÷ 3 =	
22.	6,300 ÷ 300 =	

23.	840 ÷ 4 =	
24.	840 ÷ 40 =	
25.	3,600 ÷ 3 =	
26.	3,600 ÷ 30 =	
27.	3,600 ÷ 300 =	
28.	4,800 ÷ 2 =	
29.	4,800 ÷ 20 =	
30.	4,800 ÷ 200 =	
31.	69,000 ÷ 3 =	
32.	69,000 ÷ 300 =	
33.	69,000 ÷ 30 =	
34.	800 ÷ 40 =	
35.	1,200 ÷ 40 =	
36.	1,280 ÷ 40 =	
37.	1,600 ÷ 400 =	
38.	8,000 ÷ 200 =	
39.	14,000 ÷ 200 =	
40.	14,600 ÷ 200 =	
41.	2,560 ÷ 80 =	
42.	16,100 ÷ 700 =	
43.	14,400 ÷ 60 =	
44.	37,800 ÷ 900 =	



A

Divide Decimals by Multiples of 10

1.	6 ÷ 10 =	•
2.	6 ÷ 20 =	•
3.	6 ÷ 60 =	•
4.	8 ÷ 10 =	
5.	8 ÷ 40 =	•
6.	8 ÷ 20 =	•
7.	4 ÷ 10 =	
8.	4 ÷ 20 =	•
9.	4 ÷ 40 =	
10.	9 ÷ 3 =	
11.	9 ÷ 30 =	•
12.	12 ÷ 3 =	•
13.	12 ÷ 30 =	•
14.	12 ÷ 40 =	•
15.	12 ÷ 60 =	•
16.	12 ÷ 20 =	•
17.	15 ÷ 3 =	•
18.	15 ÷ 30 =	•
19.	15 ÷ 50 =	•
20.	18 ÷ 30 =	•
21.	24 ÷ 30 =	•
22.	16 ÷ 40 =	•

23.	25 ÷ 50 =	•
24.	2.5 ÷ 50 =	•
25.	4.5 ÷ 50 =	•
26.	4.5 ÷ 90 =	
27.	0.45 ÷ 90 =	•
28.	0.45 ÷ 50 =	•
29.	0.24 ÷ 60 =	
30.	0.63 ÷ 90 =	•
31.	0.48 ÷ 80 =	•
32.	0.49 ÷ 70 =	•
33.	6 ÷ 30 =	•
34.	14 ÷ 70 =	•
35.	72 ÷ 90 =	•
36.	6.4 ÷ 80 =	•
37.	0.48 ÷ 40 =	•
38.	0.36 ÷ 30 =	•
39.	0.55 ÷ 50 =	•
40.	1.36 ÷ 40 =	•
41.	2.04 ÷ 60 =	•
42.	4.48 ÷ 70 =	•
43.	6.16 ÷ 80 =	•
44.	5.22 ÷ 90 =	•



Lesson 28:

128:Solve division word problems involving multi-digit division with group
size unknown and the number of groups unknown.

Improvement: _____

B

Divide Decimals by Multiples of 10

1.	4 ÷ 10 =	•
2.	4 ÷ 20 =	•
3.	4 ÷ 40 =	•
4.	8 ÷ 10 =	
5.	8 ÷ 20 =	•
6.	8 ÷ 40 =	•
7.	9 ÷ 10 =	•
8.	9 ÷ 30 =	
9.	9 ÷ 90 =	
10.	6 ÷ 2=	
11.	6 ÷ 20 =	•
12.	12 ÷ 2 =	•
13.	12 ÷ 20 =	•
14.	12 ÷ 30 =	•
15.	12 ÷ 40 =	•
16.	12 ÷ 60 =	•
17.	15 ÷ 5 =	•
18.	15 ÷ 50 =	•
19.	15 ÷ 30 =	•
20.	21 ÷ 30 =	•
21.	27 ÷ 30 =	•
22.	36 ÷ 60 =	•

23.	25 ÷ 50 =	•
24.	2.5 ÷ 50 =	•
25.	3.5 ÷ 50 =	•
26.	3.5 ÷ 70 =	•
27.	0.35 ÷ 70 =	•
28.	0.35 ÷ 50 =	•
29.	0.42 ÷ 60 =	•
30.	0.54 ÷ 90 =	•
31.	0.56 ÷ 80 =	•
32.	0.63 ÷ 70 =	•
33.	6 ÷ 30 =	•
34.	18÷90 =	•
35.	72 ÷ 80 =	•
36.	4.8 ÷ 80 =	•
37.	0.36 ÷ 30 =	•
38.	0.48 ÷ 40 =	•
39.	0.65 ÷ 50 =	•
40.	1.38 ÷ 30 =	•
41.	2.64 ÷ 60 =	•
42.	5.18 ÷ 70 =	•
43.	6.96 ÷ 80 =	•
44.	6.12 ÷ 90 =	•



Lesson 28: Solve division word problems involving multi-digit division with group size unknown and the number of groups unknown.



Name			Date
1.	Find the products.		
	a. 1,900 × 20	b. 6,000 × 50	c. 250 × 300

2. Explain how knowing $50 \times 4 = 200$ helps you find 500×400 .



Date _____

Round the factors and estimate the products.

a. 656 × 106 ≈

b. 3,108 × 7,942 ≈

c. 425 × 9,311 ≈

d. 8,633 × 57,008 ≈



Lesson 2:

2: Estimate multi-digit products by rounding factors to a basic fact and using place value patterns.

Date _____

1. Draw a model. Then, write the numerical expressions.

a.	The difference between 8 forty-sevens and 7 forty-sevens	b.	6 times the sum of 12 and 8

2. Compare the two expressions using >, <, or =.

62 × (70 + 8)	\bigcirc	(70 + 8) × 26	
---------------	------------	---------------	--



г

Date _____

Solve using mental math. Draw a tape diagram and fill in the blanks to show your thinking.

a. 49 × 11 = elevens	b. 25 × 13 = twenty-fives
Think: 50 elevens – 1 eleven	Think: twenty-fives + twenty-fives
= (×11) – (×11)	= (× 25) + (× 25)
=	= +
=	=



Convert numerical expressions into unit form as a mental strategy for multi-digit multiplication.

Name	Date
Draw an area model, and then solve using the standard algorithm. a. $21 \times 23 =$	
	2 1
	<u>× 2 3</u>

b. 143 × 12 = _____

143 × 12



Lesson 5:

Connect visual models and the distributive property to partial products of the standard algorithm without renaming.

Name _____ Date _____

Draw an area model. Then, solve using the standard algorithm. Use arrows to match the partial products from your area model to the partial products in the algorithm.

a. 78 × 42

78

<u>× 42</u>

b. 783 × 42

7	8	3
×	4	2



Lesson 6:

Connect area models and the distributive property to partial products of the standard algorithm with renaming.

Name	Date	
Draw an area model. Then, solve using the standard algorithm. a. 642 × 257		
	642	
	<u>× 257</u>	

b. 642 × 207

642 × 207



7: Connect area models and the distributive property to partial products of the standard algorithm with renaming.

=_____

Date
e by using the standard algorithm. Use your estimate to check the
283
<u>× 416</u>
2,803
<u>× 406</u>

Lesson 8:

Name _____ Date _____

Solve.

Juwad picked 30 bags of apples on Monday and sold them at his fruit stand for \$3.45 each. The following week he picked and sold 26 bags.

a. How much money did Juwad earn in the first week?

b. How much money did he earn in the second week?

c. How much did Juwad earn selling bags of apples these two weeks?

d. **Extension:** Each bag Juwad picked holds 15 apples. How many apples did he pick in two weeks? Write an expression to represent this problem.



Date _____

1. Estimate the product. Solve using an area model and the standard algorithm. Remember to express your products in standard form.

a. 33.2 × 21 ≈ _____ × ____ = ____

b. 1.7 × 55 ≈ _____ × ____ = ____

2. If the product of 485 × 35 is 16,975, what is the product of 485 × 3.5? How do you know?



Lesson 10:

10: Multiply decimal fractions with tenths by multi-digit whole numbers using place value understanding to record partial products.

	A STORY OF UNITS	Lesson 11 Exit Ticket	5•2
ſ	Name	Date	
ι	Jse estimation and place value reasoning to find the unknown product.	Explain how you know.	

6.47 × 63 = _____

2. Solve using the standard algorithm.

a. 6.13 × 14

If 647 × 63 = 40,761

then

1.

b. 104.35 × 34



Multiply decimal fractions by multi-digit whole numbers through conversion to a whole number problem and reasoning about the placement of the decimal.

Date _____

Estimate. Then, solve using the standard algorithm.

a. 3.03 × 402 ≈ _____ × ____ = ____

b. 667 × 1.25 ≈ _____ × ____ = ____



Lesson 12:

12: Reason about the product of a whole number and a decimal with hundredths using place value understanding and estimation.

Α	ST	0	RY	OF	UN	IITS
---	----	---	----	----	----	------

ſ	Name	Date
5	Solve.	
	a. Convert pounds to ounces.(1 pound = 16 ounces)	b. Convert kilograms to grams.
	14 pounds = × (1 pound)	18.2 kilograms = × ()
	= × (ounces)	= × ()
	= ounces	= grams



Name _____ Date _____

1. Convert days to weeks by completing the number sentences.

35 days = ______ × (______ day) = ______ × (______ week) = ______

2. Convert grams to kilograms by completing the number sentences.

4,567 grams = _____ × _____

=_____×_____

=

=



Name _____ Date _____

Solve.

To practice for an Ironman competition, John swam 0.86 kilometer each day for 3 weeks. How many meters did he swim in those 3 weeks?



Date _____

Divide. Show your thinking.

a. 17,000 ÷ 100	b. 59,000 ÷ 1,000
c. 12,000 ÷ 40	d. 480,000 ÷ 600
c. 12,000 ÷ 40	d. 480,000 ÷ 600
c. 12,000 ÷ 40	d. 480,000 ÷ 600
c. 12,000 ÷ 40	d. 480,000 ÷ 600
c. 12,000 ÷ 40	d. 480,000 ÷ 600



Use basic facts to approximate quotients with two-digit divisors.

Estimate the quotient for the following problems.

Name _____



Lesson 17:

Date _____

17

Date _____

Estimate the quotients for the following problems.





Date _____

Divide, and then check using multiplication.

a. 73÷20

b. 291÷30



Name

Date _____

Divide. Then, check with multiplication.

a. 78÷21

b. 89÷37



Lesson 20:

20: Divide two- and three-digit dividends by two-digit divisors with single digit quotients, and make connections to a written method.

Date _____

Divide. Then, check using multiplication.

a. 326÷53

b. 192÷38



n 21: Divide two- and three-digit dividends by two-digit divisors with single digit quotients, and make connections to a written method.

Date _____

Divide. Then, check using multiplication.

a. 413÷19

b. 708 ÷ 67



Lesson 22:

Divide three- and four-digit dividends by two-digit divisors resulting in two- and three-digit quotients, reasoning about the decomposition of successive remainders in each place value.

Date _____

Divide. Then, check using multiplication.

a. 8,283÷19

b. 1,056 ÷ 37



: Divide three- and four-digit dividends by two-digit divisors resulting in two- and three-digit quotients, reasoning about the decomposition of successive remainders in each place value.

Name			Date		
1.	Divide.				
	a. 27.3 ÷ 3	b. 2.73 ÷ 30		c.	273 ÷ 300

2. If 7.29 ÷ 9 = 0.81, then the quotient of 7.29 ÷ 90 is ______. Use place value reasoning to explain the placement of the decimal point.

Date _____

Estimate the quotients.

a. 1.64÷22 ≈

b. 123.8 ÷ 62 ≈

c. 6.15÷31 ≈



Lesson 25:

25: Use basic facts to approximate decimal quotients with two-digit divisors, reasoning about the placement of the decimal point.

Name			Date	
1.	Estimate.	Then, divide using the standard algorithm and check.		

a. 45.15÷21

b. 14.95 ÷ 65

2. We learned today that division expressions that have the same quotient and remainders are not necessarily equal to each other. Explain how this is possible.



Divide decimal dividends by two-digit divisors, estimating quotients, reasoning about the placement of the decimal point, and making connections to a written method. Name _____ Date _____

Divide.

a. 28÷32

b. 68.25 ÷ 65



Name

Date _____

Solve this problem, and show all of your work.

Kenny is ordering uniforms for both the girls' and boys' tennis clubs. He is ordering shirts for 43 players and two coaches at a total cost of \$658.35. Additionally, he is ordering visors for each player at a total cost of \$368.51. How much will each player pay for the shirt and visor?



28: Solve division word problems involving multi-digit division with group size unknown and the number of groups unknown.

Name

Date _____

Solve.

Hayley borrowed \$1,854 from her parents. She agreed to repay them in equal installments throughout the next 18 months. How much will Hayley still owe her parents after a year?



29: Solve division word problems involving multi-digit division with group size unknown and the number of groups unknown.

Assessment Packet

 Name
 Date

1. Fill in the chart.

	Words	Expression	The Value of the Expression
a. 50 times	s the sum of 64 and 36		
b. Divide tl 1,200 ar	ne difference between nd 700 by 5		
c. The sum fifteens	n of 3 fifteens and 17		
d. 15 times	s the sum of 14 and 6		
е.		10 × (250 + 45)	
f.		(560 + 440) × 14	

2. Compare the two expressions using < , > , or = . For each, explain how you can determine the answer without calculating.





- 3. Solve. Use words, numbers, or pictures to explain how your answers to Parts (a) and (b) are related.
 - a. 25 × 30 = _____ tenths × 30 = _____

- 4. Multiply using the standard algorithm. Show your work below each problem. Write the product in the blank.
 - a. 514 × 33 = _____ b. 546 × 405 = _____

5. For a field trip, the school bought 47 sandwiches for \$4.60 each and 39 bags of chips for \$1.25 each. How much did the school spend in all?



- 6. Jeanne makes hair bows to sell at the craft fair. Each bow requires 1.5 yards of ribbon.
 - a. At the fabric store, ribbon is sold by the foot. If Jeanne wants to make 84 bows, how many feet of ribbon must she buy? Show all your work.

b. If the ribbon costs 10¢ per foot, what is the total cost of the ribbon in dollars? Explain your reasoning, including how you decided where to place the decimal.

c. A manufacturer is making 1,000 times as many bows as Jeanne to sell in stores nationwide. Write an expression using exponents to show how many yards of ribbon the manufacturer will need. Do not calculate the total.



Name	Da	te

1. Express the missing divisor using a power of 10. Explain your reasoning using a place value model.

a. 5.2÷= 0.052	a. 5	5.2 ÷		= 0.052	
----------------	------	-------	--	---------	--

b. 7,650 ÷ _____ = 7.65

- 2. Estimate the quotient by rounding the expression to relate to a one-digit fact. Explain your thinking in the space below.
 - a. 432 ÷ 73 ≈ _____

b. 1,275 ÷ 588 ≈ _____



3. Generate and solve another division problem with the same quotient and remainder as the two problems below. Explain your strategy for creating the new problem.

4. Sarah says that 26 ÷ 8 equals 14 ÷ 4 because both are "3 R2." Show her mistake using decimal division.



5. A rectangular playground has an area of 3,392 square meters. If the width of the rectangle is 32 meters, find the length.



- 6. A baker uses 5.5 pounds of flour daily.
 - a. How many ounces of flour will he use in two weeks? Use words, numbers, or pictures to explain your thinking. (1 lb = 16 oz)



b. The baker's recipe for a loaf of bread calls for 12 ounces of flour. If he uses all of his flour to make loaves of bread, how many full loaves can he bake in two weeks?

c. The baker sends all his bread to one store. If he can pack up to 15 loaves of bread in a box for shipping, what is the minimum number of boxes required to ship all the loaves baked in two weeks? Explain your reasoning.



d. The baker pays \$0.80 per pound for sugar and \$1.25 per pound for butter. Write an expression that shows how much the baker will spend if he buys 6 pounds of butter and 20 pounds of sugar.

e. Chocolate sprinkles cost as much per pound as sugar. Find $\frac{1}{10}$ the baker's total cost for 100 pounds of chocolate sprinkles. Explain the number of zeros and the placement of the decimal in your answer using a place value chart.

