Grade 5
Book of Sprints

New York State Common Core

Mathematics Curriculum

GRADE 5 • MODULE 5

Addition and Multiplication with Volume and Area

COMMON CORE

engage^ny

A

Correct _____

Solve.

1	$\frac{1}{5}$ x 2 =		23	$\frac{5}{6}$ x 12 =	
2	$\frac{1}{5}$ x 3 =		24	$\frac{1}{3}$ x 15 =	
3	$\frac{1}{5}$ x 4 =		25	$\frac{2}{3}$ x 15 =	
4	4 x $\frac{1}{5}$ =		26	15 x $\frac{2}{3}$ =	
5	$\frac{1}{8}$ x 3 =		27	$\frac{1}{5}$ x 15 =	
6	$\frac{1}{8}$ x 5 =		28	$\frac{2}{5}$ x 15 =	
7	$\frac{1}{8}$ x 7 =		29	$\frac{4}{5}$ x 15 =	
8	7 x $\frac{1}{8}$ =		30	$\frac{3}{5}$ x 15 =	
9	3 x $\frac{1}{10}$ =		31	15 x $\frac{3}{5}$ =	
10	7 x $\frac{1}{10}$ =		32	18 x $\frac{1}{6}$ =	
11	$\frac{1}{10}$ x 7 =		33	18 x $\frac{5}{6}$ =	
12	4 ÷ 2 =		34	$\frac{5}{6}$ x 18 =	
13	4 x $\frac{1}{2}$ =		35	24 x $\frac{1}{4}$ =	
14	6 ÷ 3 =		36	$\frac{3}{4}$ x 24 =	
15	$\frac{1}{3}$ x 6 =		37	32 x $\frac{1}{8}$ =	
16	10 ÷ 5 =		38	32 x $\frac{3}{8}$ =	
17	10 x $\frac{1}{5}$ =		39	$\frac{5}{8}$ x 32 =	
18	$\frac{1}{3}$ x 9 =		40	32 x $\frac{7}{8}$ =	
19	$\frac{2}{3}$ x 9 =		41	$\frac{5}{9}$ x 54 =	
20	$\frac{1}{4}$ x 8 =		42	63 x $\frac{7}{9}$ =	
21	$\frac{3}{4}$ x 8 =		43	56 x $\frac{3}{7}$ =	
22	$\frac{1}{6}$ x 12 =		44	$\frac{6}{7}$ x 49 =	

COMMON CORE

Lesson 3: Compose and decompose right rectangular prisms using layers.
Date: 1/10/14

engage^{ny}

5.A.34

B

Solve.

Improvement _____   # Correct _____

1	$\frac{1}{7}$ x 2 =			23	$\frac{3}{4}$ x 8 =	
2	$\frac{1}{7}$ x 3 =			24	$\frac{1}{5}$ x 15 =	
3	$\frac{1}{7}$ x 4 =			25	$\frac{2}{5}$ x 15 =	
4	4 x $\frac{1}{7}$ =			26	$\frac{4}{5}$ x 15 =	
5	$\frac{1}{10}$ x 3 =			27	$\frac{3}{5}$ x 15 =	
6	$\frac{1}{10}$ x 7 =			28	15 x $\frac{3}{5}$ =	
7	$\frac{1}{10}$ x 9 =			29	$\frac{1}{3}$ x 15 =	
8	9 x $\frac{1}{10}$ =			30	$\frac{2}{3}$ x 15 =	
9	3 x $\frac{1}{8}$ =			31	15 x $\frac{2}{3}$ =	
10	5 x $\frac{1}{8}$ =			32	24 x $\frac{1}{6}$ =	
11	$\frac{1}{8}$ x 5 =			33	24 x $\frac{5}{6}$ =	
12	10 ÷ 5 =			34	$\frac{5}{6}$ x 24 =	
13	10 x $\frac{1}{5}$ =			35	20 x $\frac{1}{4}$ =	
14	9 ÷ 3 =			36	$\frac{3}{4}$ x 20 =	
15	$\frac{1}{3}$ x 9 =			37	24 x $\frac{1}{8}$ =	
16	10 ÷ 2 =			38	24 x $\frac{3}{8}$ =	
17	10 x $\frac{1}{2}$ =			39	$\frac{5}{8}$ x 24 =	
18	$\frac{1}{3}$ x 6 =			40	24 x $\frac{7}{8}$ =	
19	$\frac{2}{3}$ x 6 =			41	$\frac{5}{9}$ x 63 =	
20	$\frac{1}{6}$ x 12 =			42	54 x $\frac{7}{9}$ =	
21	$\frac{5}{6}$ x 12 =			43	49 x $\frac{3}{7}$ =	
22	$\frac{1}{4}$ x 8 =			44	$\frac{6}{7}$ x 56 =	

2

A   # Correct _____

Multiply, but don't simplify.

1	$\frac{1}{2}$ x $\frac{1}{2}$ =		23	$\frac{2}{5}$ x $\frac{5}{3}$ =	
2	$\frac{1}{2}$ x $\frac{1}{3}$ =		24	$\frac{3}{5}$ x $\frac{5}{2}$ =	
3	$\frac{1}{2}$ x $\frac{1}{4}$ =		25	$\frac{1}{3}$ x $\frac{1}{3}$ =	
4	$\frac{1}{2}$ x $\frac{1}{7}$ =		26	$\frac{1}{3}$ x $\frac{2}{3}$ =	
5	$\frac{1}{7}$ x $\frac{1}{2}$ =		27	$\frac{2}{3}$ x $\frac{2}{3}$ =	
6	$\frac{1}{3}$ x $\frac{1}{2}$ =		28	$\frac{2}{3}$ x $\frac{3}{2}$ =	
7	$\frac{1}{3}$ x $\frac{1}{3}$ =		29	$\frac{2}{3}$ x $\frac{4}{3}$ =	
8	$\frac{1}{3}$ x $\frac{1}{6}$ =		30	$\frac{2}{3}$ x $\frac{5}{3}$ =	
9	$\frac{1}{3}$ x $\frac{1}{5}$ =		31	$\frac{3}{2}$ x $\frac{3}{5}$ =	
10	$\frac{1}{5}$ x $\frac{1}{3}$ =		32	$\frac{3}{4}$ x $\frac{1}{5}$ =	
11	$\frac{1}{5}$ x $\frac{2}{3}$ =		33	$\frac{3}{4}$ x $\frac{4}{5}$ =	
12	$\frac{2}{5}$ x $\frac{2}{3}$ =		34	$\frac{3}{4}$ x $\frac{5}{5}$ =	
13	$\frac{1}{4}$ x $\frac{1}{3}$ =		35	$\frac{3}{4}$ x $\frac{6}{5}$ =	
14	$\frac{1}{4}$ x $\frac{2}{3}$ =		36	$\frac{1}{4}$ x $\frac{6}{5}$ =	
15	$\frac{3}{4}$ x $\frac{2}{3}$ =		37	$\frac{1}{7}$ x $\frac{1}{7}$ =	
16	$\frac{1}{6}$ x $\frac{1}{3}$ =		38	$\frac{1}{8}$ x $\frac{3}{5}$ =	
17	$\frac{5}{6}$ x $\frac{1}{3}$ =		39	$\frac{5}{6}$ x $\frac{1}{4}$ =	
18	$\frac{5}{6}$ x $\frac{2}{3}$ =		40	$\frac{3}{4}$ x $\frac{3}{4}$ =	
19	$\frac{5}{4}$ x $\frac{2}{3}$ =		41	$\frac{2}{3}$ x $\frac{6}{6}$ =	
20	$\frac{1}{5}$ x $\frac{1}{5}$ =		42	$\frac{3}{4}$ x $\frac{6}{2}$ =	
21	$\frac{2}{5}$ x $\frac{2}{5}$ =		43	$\frac{7}{8}$ x $\frac{7}{9}$ =	
22	$\frac{2}{5}$ x $\frac{3}{5}$ =		44	$\frac{7}{12}$ x $\frac{9}{8}$ =	

Lesson 7: Solve word problems involving the volume of rectangular prisms with whole number edge lengths.

Date: 1/10/14

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engage^ny   5.B.47

B

Improvement _____   # Correct _____

Multiply, but don't simplify.

1	$\frac{1}{2} \times \frac{1}{3} =$		23	$\frac{3}{5} \times \frac{5}{4} =$	
2	$\frac{1}{2} \times \frac{1}{4} =$		24	$\frac{4}{5} \times \frac{5}{3} =$	
3	$\frac{1}{2} \times \frac{1}{5} =$		25	$\frac{1}{4} \times \frac{1}{4} =$	
4	$\frac{1}{2} \times \frac{1}{9} =$		26	$\frac{1}{4} \times \frac{3}{4} =$	
5	$\frac{1}{9} \times \frac{1}{2} =$		27	$\frac{3}{4} \times \frac{3}{4} =$	
6	$\frac{1}{5} \times \frac{1}{2} =$		28	$\frac{3}{4} \times \frac{4}{3} =$	
7	$\frac{1}{5} \times \frac{1}{3} =$		29	$\frac{3}{4} \times \frac{5}{4} =$	
8	$\frac{1}{5} \times \frac{1}{7} =$		30	$\frac{3}{4} \times \frac{6}{4} =$	
9	$\frac{1}{5} \times \frac{1}{3} =$		31	$\frac{4}{3} \times \frac{4}{6} =$	
10	$\frac{1}{3} \times \frac{1}{5} =$		32	$\frac{2}{3} \times \frac{1}{5} =$	
11	$\frac{1}{3} \times \frac{2}{5} =$		33	$\frac{2}{3} \times \frac{4}{5} =$	
12	$\frac{2}{3} \times \frac{2}{5} =$		34	$\frac{2}{3} \times \frac{5}{5} =$	
13	$\frac{1}{3} \times \frac{1}{4} =$		35	$\frac{2}{3} \times \frac{6}{5} =$	
14	$\frac{1}{3} \times \frac{3}{4} =$		36	$\frac{1}{3} \times \frac{6}{5} =$	
15	$\frac{2}{3} \times \frac{3}{4} =$		37	$\frac{1}{9} \times \frac{1}{9} =$	
16	$\frac{1}{3} \times \frac{1}{6} =$		38	$\frac{1}{5} \times \frac{3}{8} =$	
17	$\frac{2}{3} \times \frac{1}{6} =$		39	$\frac{3}{4} \times \frac{1}{6} =$	
18	$\frac{2}{3} \times \frac{5}{6} =$		40	$\frac{2}{3} \times \frac{2}{3} =$	
19	$\frac{3}{2} \times \frac{3}{4} =$		41	$\frac{3}{4} \times \frac{8}{8} =$	
20	$\frac{1}{5} \times \frac{1}{5} =$		42	$\frac{2}{3} \times \frac{6}{3} =$	
21	$\frac{3}{5} \times \frac{3}{5} =$		43	$\frac{6}{7} \times \frac{8}{9} =$	
22	$\frac{3}{5} \times \frac{4}{5} =$		44	$\frac{7}{12} \times \frac{8}{7} =$	

Lesson 7: Solve word problems involving the volume of rectangular prisms with whole number edge lengths.

Date: 1/10/14

4

engage^{ny}

5.B.48

A

Correct _____

Multiply.

1	3 x 2 =		23	0.6 x 2 =	
2	3 x 0.2 =		24	0.6 x 0.2 =	
3	3 x 0.02 =		25	0.6 x 0.02 =	
4	3 x 3 =		26	0.2 x 0.06 =	
5	3 x 0.3 =		27	5 x 7 =	
6	3 x 0.03 =		28	0.5 x 7 =	
7	2 x 4 =		29	0.5 x 0.7 =	
8	2 x 0.4 =		30	0.5 x 0.07 =	
9	2 x 0.04 =		31	0.7 x 0.05 =	
10	5 x 3 =		32	2 x 8 =	
11	5 x 0.3 =		33	9 x 0.2 =	
12	5 x 0.03 =		34	3 x 7 =	
13	7 x 2 =		35	8 x 0.03 =	
14	7 x 0.2 =		36	4 x 6 =	
15	7 x 0.02 =		37	0.6 x 7 =	
16	4 x 3 =		38	0.7 x 0.7 =	
17	4 x 0.3 =		39	0.8 x 0.06 =	
18	0.4 x 3 =		40	0.09 x 0.6 =	
19	0.4 x 0.3 =		41	6 x 0.8 =	
20	0.4 x 0.03 =		42	0.7 x 0.9 =	
21	0.3 x 0.04 =		43	0.08 x 0.8 =	
22	6 x 2 =		44	0.9 x 0.08 =	

COMMON CORE

Lesson 11: Find the area of rectangles with mixed-by-mixed and fraction-by-fraction side lengths by tiling, record by drawing, and relate to fraction multiplication.

Date: 1/10/14

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5.C.21

B

Multiply.

Improvement _____   # Correct _____

1	4 x 2 =		23	0.8 x 2 =	
2	4 x 0.2 =		24	0.8 x 0.2 =	
3	4 x 0.02 =		25	0.8 x 0.02 =	
4	2 x 3 =		26	0.2 x 0.08 =	
5	2 x 0.3 =		27	5 x 9 =	
6	2 x 0.03 =		28	0.5 x 9 =	
7	3 x 3 =		29	0.5 x 0.9 =	
8	3 x 0.3 =		30	0.5 x 0.09 =	
9	3 x 0.03 =		31	0.9 x 0.05 =	
10	4 x 3 =		32	2 x 6 =	
11	4 x 0.3 =		33	7 x 0.2 =	
12	4 x 0.03 =		34	3 x 8 =	
13	9 x 2 =		35	9 x 0.03 =	
14	9 x 0.2 =		36	4 x 8 =	
15	9 x 0.02 =		37	0.7 x 6 =	
16	5 x 3 =		38	0.6 x 0.6 =	
17	5 x 0.3 =		39	0.6 x 0.08 =	
18	0.5 x 3 =		40	0.06 x 0.9 =	
19	0.5 x 0.3 =		41	8 x 0.6 =	
20	0.5 x 0.03 =		42	0.9 x 0.7 =	
21	0.3 x 0.05 =		43	0.07 x 0.7 =	
22	8 x 2 =		44	0.8 x 0.09 =	

COMMON CORE | **Lesson 11:** Find the area of rectangles with mixed-by-mixed and fraction-by-fraction side lengths by tiling, record by drawing, and relate to fraction multiplication.

engageny   5.C.22

Date: 1/10/14

6

A

Correct _____

Divide.

1	$\frac{1}{2} \div 2 =$		23	$4 \div \frac{1}{4} =$	
2	$\frac{1}{2} \div 3 =$		24	$\frac{1}{3} \div 3 =$	
3	$\frac{1}{2} \div 4 =$		25	$\frac{2}{3} \div 3 =$	
4	$\frac{1}{2} \div 7 =$		26	$\frac{1}{4} \div 2 =$	
5	$7 \div \frac{1}{2} =$		27	$\frac{3}{4} \div 2 =$	
6	$6 \div \frac{1}{2} =$		28	$\frac{1}{5} \div 2 =$	
7	$5 \div \frac{1}{2} =$		29	$\frac{3}{5} \div 2 =$	
8	$3 \div \frac{1}{2} =$		30	$\frac{1}{6} \div 2 =$	
9	$2 \div \frac{1}{5} =$		31	$\frac{5}{6} \div 2 =$	
10	$3 \div \frac{1}{5} =$		32	$\frac{5}{6} \div 3 =$	
11	$4 \div \frac{1}{5} =$		33	$\frac{1}{6} \div 3 =$	
12	$7 \div \frac{1}{5} =$		34	$3 \div \frac{1}{6} =$	
13	$\frac{1}{5} \div 7 =$		35	$6 \div \frac{1}{6} =$	
14	$\frac{1}{3} \div 2 =$		36	$7 \div \frac{1}{7} =$	
15	$2 \div \frac{1}{3} =$		37	$8 \div \frac{1}{8} =$	
16	$\frac{1}{4} \div 2 =$		38	$9 \div \frac{1}{9} =$	
17	$2 \div \frac{1}{4} =$		39	$\frac{1}{8} \div 7 =$	
18	$\frac{1}{5} \div 2 =$		40	$9 \div \frac{1}{8} =$	
19	$2 \div \frac{1}{5} =$		41	$\frac{1}{8} \div 7 =$	
20	$3 \div \frac{1}{4} =$		42	$7 \div \frac{1}{6} =$	
21	$\frac{1}{4} \div 3 =$		43	$9 \div \frac{1}{7} =$	
22	$\frac{1}{4} \div 4 =$		44	$\frac{1}{8} \div 9 =$	

COMMON CORE

Lesson 18: Draw rectangles and rhombuses to clarify their attributes, and define rectangles and rhombuses based on those attributes.

Date: 1/10/14

engage^ny

5.D.39

7

B

Improvement _____   # Correct _____

Divide.

1	$\frac{1}{2} \div 2 =$		23	$3 \div \frac{1}{3} =$	
2	$\frac{1}{5} \div 3 =$		24	$\frac{1}{4} \div 4 =$	
3	$\frac{1}{5} \div 4 =$		25	$\frac{3}{4} \div 4 =$	
4	$\frac{1}{5} \div 7 =$		26	$\frac{1}{3} \div 3 =$	
5	$7 \div \frac{1}{5} =$		27	$\frac{2}{3} \div 3 =$	
6	$6 \div \frac{1}{5} =$		28	$\frac{1}{6} \div 2 =$	
7	$5 \div \frac{1}{5} =$		29	$\frac{5}{6} \div 2 =$	
8	$3 \div \frac{1}{5} =$		30	$\frac{1}{5} \div 5 =$	
9	$2 \div \frac{1}{2} =$		31	$\frac{3}{5} \div 5 =$	
10	$3 \div \frac{1}{2} =$		32	$\frac{3}{5} \div 4 =$	
11	$4 \div \frac{1}{2} =$		33	$\frac{1}{5} \div 6 =$	
12	$7 \div \frac{1}{2} =$		34	$6 \div \frac{1}{5} =$	
13	$\frac{1}{2} \div 7 =$		35	$6 \div \frac{1}{4} =$	
14	$\frac{1}{4} \div 2 =$		36	$7 \div \frac{1}{6} =$	
15	$2 \div \frac{1}{4} =$		37	$8 \div \frac{1}{7} =$	
16	$\frac{1}{3} \div 2 =$		38	$9 \div \frac{1}{8} =$	
17	$2 \div \frac{1}{3} =$		39	$\frac{1}{8} \div 8 =$	
18	$\frac{1}{2} \div 2 =$		40	$9 \div \frac{1}{9} =$	
19	$2 \div \frac{1}{2} =$		41	$\frac{1}{9} \div 8 =$	
20	$4 \div \frac{1}{3} =$		42	$7 \div \frac{1}{7} =$	
21	$\frac{1}{3} \div 4 =$		43	$9 \div \frac{1}{6} =$	
22	$\frac{1}{3} \div 3 =$		44	$\frac{1}{8} \div 6 =$	

8

A

Multiply.

Correct _____

1	2 x 10 =		23	33 x 20 =	
2	12 x 10 =		24	33 x 200 =	
3	12 x 100 =		25	24 x 10 =	
4	4 x 10 =		26	24 x 20 =	
5	34 x 10 =		27	24 x 100 =	
6	34 x 100 =		28	24 x 200 =	
7	7 x 10 =		29	23 x 30 =	
8	27 x 10 =		30	23 x 300 =	
9	27 x 100 =		31	71 x 2 =	
10	3 x 10 =		32	71 x 20 =	
11	3 x 2 =		33	14 x 2 =	
12	3 x 20 =		34	14 x 3 =	
13	13 x 10 =		35	14 x 30 =	
14	13 x 2 =		36	14 x 300 =	
15	13 x 20 =		37	82 x 20 =	
16	13 x 100 =		38	15 x 300 =	
17	13 x 200 =		39	71 x 600 =	
18	2 x 4 =		40	18 x 40 =	
19	22 x 4 =		41	75 x 30 =	
20	22 x 40 =		42	84 x 300 =	
21	22 x 400 =		43	87 x 60 =	
22	33 x 2 =		44	79 x 800 =	

B

Improvement _____   # Correct _____

Multiply.

1	3 x 10 =		23	44 x 20 =	
2	13 x 10 =		24	44 x 200 =	
3	13 x 100 =		25	42 x 10 =	
4	5 x 10 =		26	42 x 20 =	
5	35 x 10 =		27	42 x 100 =	
6	35 x 100 =		28	42 x 200 =	
7	8 x 10 =		29	32 x 30 =	
8	28 x 10 =		30	32 x 300 =	
9	28 x 100 =		31	81 x 2 =	
10	4 x 10 =		32	81 x 20 =	
11	4 x 2 =		33	13 x 3 =	
12	4 x 20 =		34	13 x 4 =	
13	14 x 10 =		35	13 x 40 =	
14	14 x 2 =		36	13 x 400 =	
15	14 x 20 =		37	72 x 30 =	
16	14 x 100 =		38	15 x 300 =	
17	14 x 200 =		39	81 x 600 =	
18	2 x 3 =		40	16 x 40 =	
19	22 x 3 =		41	65 x 30 =	
20	22 x 30 =		42	48 x 300 =	
21	22 x 300 =		43	89 x 60 =	
22	44 x 2 =		44	76 x 800 =	

COMMON CORE

Lesson 19:   Draw kites and squares to clarify their attributes, and define kites and squares based on those attributes.

Date: 1/10/14

engage^ny   5.D.56

A

Divide.

Correct _____

1	30 ÷ 10 =	23	480 ÷ 4 =
2	430 ÷ 10 =	24	480 ÷ 40 =
3	4,300 ÷ 10 =	25	6,300 ÷ 3 =
4	4,300 ÷ 100 =	26	6,300 ÷ 30 =
5	43,000 ÷ 100 =	27	6,300 ÷ 300 =
6	50 ÷ 10 =	28	8,400 ÷ 2 =
7	850 ÷ 10 =	29	8,400 ÷ 20 =
8	8,500 ÷ 10 =	30	8,400 ÷ 200 =
9	8,500 ÷ 100 =	31	96,000 ÷ 3 =
10	85,000 ÷ 100 =	32	96,000 ÷ 300 =
11	600 ÷ 10 =	33	96,000 ÷ 30 =
12	60 ÷ 3 =	34	900 ÷ 30 =
13	600 ÷ 30 =	35	1,200 ÷ 30 =
14	4,000 ÷ 100 =	36	1,290 ÷ 30 =
15	40 ÷ 2 =	37	1,800 ÷ 300 =
16	4,000 ÷ 200 =	38	8,000 ÷ 200 =
17	240 ÷ 10 =	39	12,000 ÷ 200 =
18	24 ÷ 2 =	40	12,800 ÷ 200 =
19	240 ÷ 20 =	41	2,240 ÷ 70 =
20	3,600 ÷ 100 =	42	18,400 ÷ 800 =
21	36 ÷ 3 =	43	21,600 ÷ 90 =
22	3,600 ÷ 300 =	44	25,200 ÷ 600 =

B   Improvement _____   # Correct _____

Divide.

1	20 ÷ 10 =	23	840 ÷ 4 =
2	420 ÷ 10 =	24	840 ÷ 40 =
3	4,200 ÷ 10 =	25	3,600 ÷ 3 =
4	4,200 ÷ 100 =	26	3,600 ÷ 30 =
5	42,000 ÷ 100 =	27	3,600 ÷ 300 =
6	40 ÷ 10 =	28	4,800 ÷ 2 =
7	840 ÷ 10 =	29	4,800 ÷ 20 =
8	8,400 ÷ 10 =	30	4,800 ÷ 200 =
9	8,400 ÷ 100 =	31	69,000 ÷ 3 =
10	84,000 ÷ 100 =	32	69,000 ÷ 300 =
11	900 ÷ 10 =	33	69,000 ÷ 30 =
12	90 ÷ 3 =	34	800 ÷ 40 =
13	900 ÷ 30 =	35	1,200 ÷ 40 =
14	6,000 ÷ 100 =	36	1,280 ÷ 40 =
15	60 ÷ 2 =	37	1,600 ÷ 400 =
16	6,000 ÷ 200 =	38	8,000 ÷ 200 =
17	240 ÷ 10 =	39	14,000 ÷ 200 =
18	24 ÷ 2 =	40	14,600 ÷ 200 =
19	240 ÷ 20 =	41	2,560 ÷ 80 =
20	6,300 ÷ 100 =	42	16,100 ÷ 700 =
21	63 ÷ 3 =	43	14,400 ÷ 60 =
22	6,300 ÷ 300 =	44	37,800 ÷ 900 =

COMMON CORE

Lesson 21: Draw and identify varied two-dimensional figures from given attributes.

Date: 1/10/14

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engageny

5.D.82

Learning Resources
CoSer 501
Educational Media