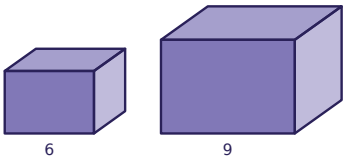
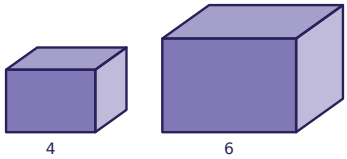
Task card 1 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 28. Find the surface area of the larger solid.



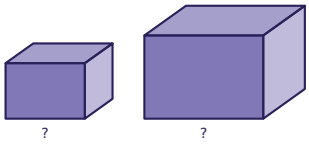
Task card 2 Scale Factor: Effect on Area & Vol...

The smaller solid has a volume of 32. Find the volume of the larger solid.



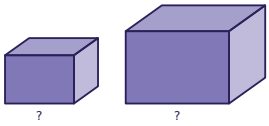
Task card 3 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 16 and 36. What is the ratio of their corresponding lengths (smaller to larger)?



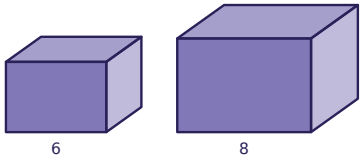
Task card 4 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 24 and 81. What is the ratio of their corresponding lengths (smaller to larger)?



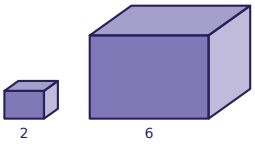
Task card 5 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 27. Find the surface area of the larger solid.



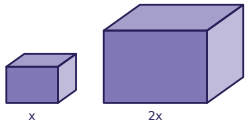
Task card 6 Scale Factor: Effect on Area & Vol...

The smaller solid has a volume of 5. Find the volume of the larger solid.



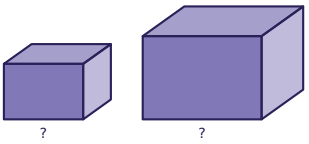
Task card 7 Scale Factor: Effect on Area & Vol...

Every dimension of a rectangular prism is multiplied by 2. By what number is its volume multiplied?



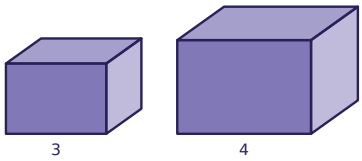
Task card 8 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 8 and 18. What is the ratio of their corresponding lengths (smaller to larger)?



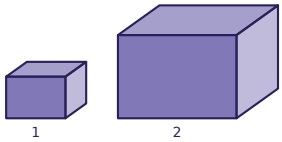
Task card 9 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 27. Find the surface area of the larger solid.



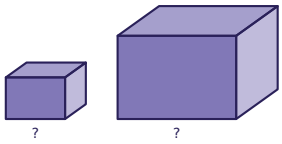
Task card 10 Scale Factor: Effect on Area & Vol...

The smaller solid has a volume of 6. Find the volume of the larger solid.



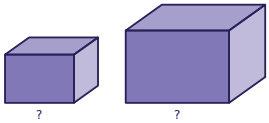
Task card 11 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 1 and 4. What is the ratio of their corresponding lengths (smaller to larger)?



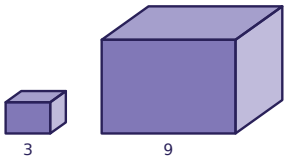
Task card 12 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 16 and 54. What is the ratio of their corresponding lengths (smaller to larger)?



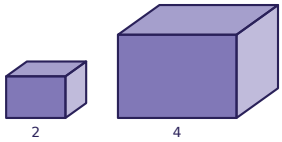
Task card 13 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 6. Find the surface area of the larger solid.



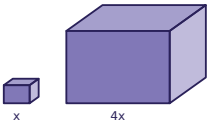
Task card 14 Scale Factor: Effect on Area & Vol...

The smaller solid has a volume of 3. Find the volume of the larger solid.



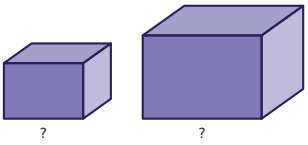
Task card 15 Scale Factor: Effect on Area & Vol...

Every dimension of a rectangular prism is multiplied by 4. By what number is its volume multiplied?



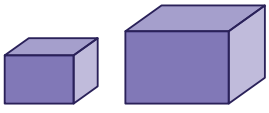
Task card 16 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 12 and 27. What is the ratio of their corresponding lengths (smaller to larger)?



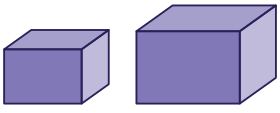
Task card 17 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 12 and 27. What is the ratio of their volumes (smaller to larger)?



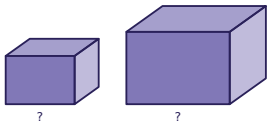
Task card 18 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 81 and 192. What is the ratio of their surface areas (smaller to larger)?



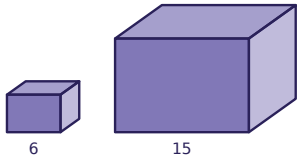
Task card 19 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 8 and 27. What is the ratio of their corresponding lengths (smaller to larger)?



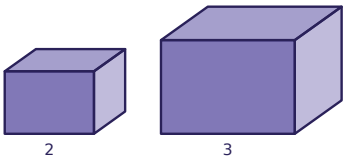
Task card 20 Scale Factor: Effect on Area & Vol...

The smaller solid has a volume of 32. Find the volume of the larger solid.



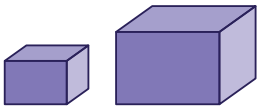
Task card 21 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 36. Find the surface area of the larger solid.



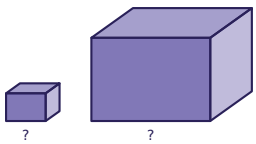
Task card 22 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 27 and 75. What is the ratio of their volumes (smaller to larger)?



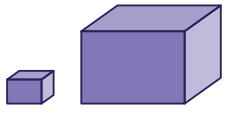
Task card 23 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 4 and 36. What is the ratio of their corresponding lengths (smaller to larger)?



Task card 24 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 2 and 54. What is the ratio of their surface areas (smaller to larger)?



Scale Factor: Effect on Area & Volume Task Cards

Recording sheet · Grade 10 · The solids in each problem are similar. Write ratios as fractions in simplest form.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Scale Factor: Effect on Area & Volume Task Cards: Answer Key

Grade 10 · Medium

The answers online

1. 63	**2.** 108	**3.** $\frac{2}{3}$
4. $\frac{2}{3}$	**5.** 48	**6.** 135
7. 8	**8.** $\frac{2}{3}$	**9.** 48
10. 48	**11.** $\frac{1}{2}$	**12.** $\frac{2}{3}$
13. 54	**14.** 24	**15.** 64
16. $\frac{2}{3}$	**17.** $\frac{8}{27}$	**18.** $\frac{9}{16}$
19. $\frac{2}{3}$	**20.** 500	**21.** 81
22. $\frac{27}{125}$	**23.** $\frac{1}{3}$	**24.** $\frac{1}{9}$