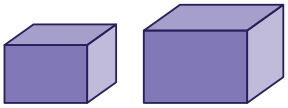
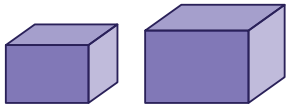
Task card 1 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 16 and 25. What is the ratio of their volumes (smaller to larger)?



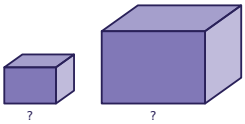
Task card 2 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 64 and 125. What is the ratio of their surface areas (smaller to larger)?



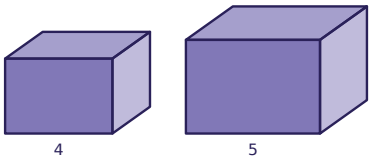
Task card 3 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 2 and 16. What is the ratio of their corresponding lengths (smaller to larger)?



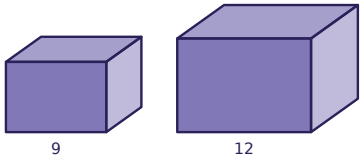
Task card 4 Scale Factor: Effect on Area & Vol...

The smaller solid has a volume of 128. Find the volume of the larger solid.



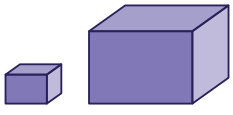
Task card 5 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 72. Find the surface area of the larger solid.



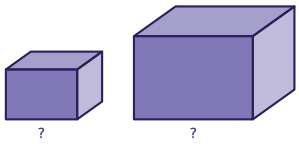
Task card 6 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 12 and 75. What is the ratio of their volumes (smaller to larger)?



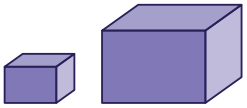
Task card 7 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 36 and 100. What is the ratio of their corresponding lengths (smaller to larger)?



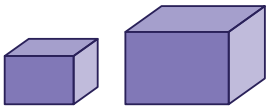
Task card 8 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 3 and 24. What is the ratio of their surface areas (smaller to larger)?



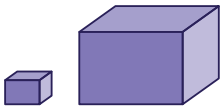
Task card 9 Scale Factor: Effect on Area & Vol...

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



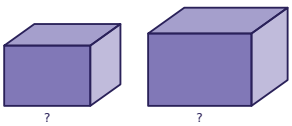
Task card 10 Scale Factor: Effect on Area & Vol...

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



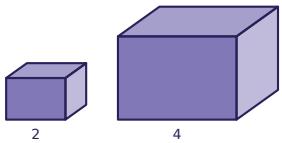
Task card 11 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 250 and 432. What is the ratio of their corresponding lengths (smaller to larger)?



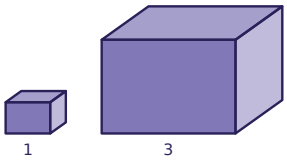
Task card 12 Scale Factor: Effect on Area & Vol...

The smaller solid has a volume of 4. Find the volume of the larger solid.



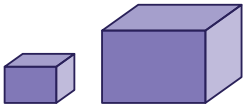
Task card 13 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 5. Find the surface area of the larger solid.



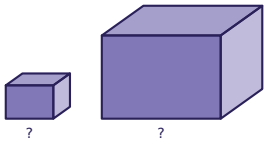
Task card 14 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 3 and 12. What is the ratio of their volumes (smaller to larger)?



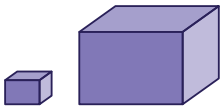
Task card 15 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 8 and 50. What is the ratio of their corresponding lengths (smaller to larger)?



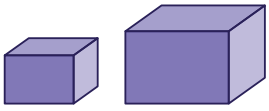
Task card 16 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 1 and 27. What is the ratio of their surface areas (smaller to larger)?



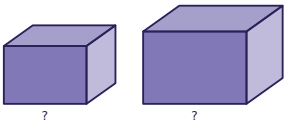
Task card 17 Scale Factor: Effect on Area & Vol...

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



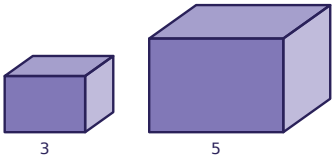
Task card 18 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 128 and 250. What is the ratio of their corresponding lengths (smaller to larger)?



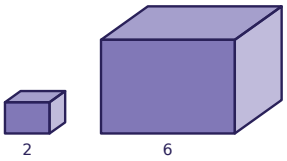
Task card 19 Scale Factor: Effect on Area & Vol...

The smaller solid has a volume of 135. Find the volume of the larger solid.



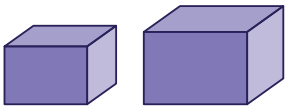
Task card 20 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 8. Find the surface area of the larger solid.



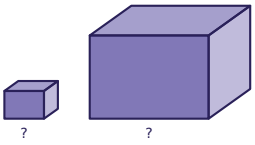
Task card 21 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 32 and 50. What is the ratio of their volumes (smaller to larger)?



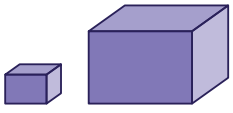
Task card 22 Scale Factor: Effect on Area & Vol...

Two similar solids have surface areas 3 and 27. What is the ratio of their corresponding lengths (smaller to larger)?



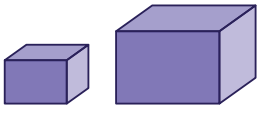
Task card 23 Scale Factor: Effect on Area & Vol...

Two similar solids have volumes 24 and 375. What is the ratio of their surface areas (smaller to larger)?



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

Two similar solids have surface areas 36 and 100. What is the ratio of their volumes (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 · Hard

The answers online

1. $\frac{64}{125}$	**2.** $\frac{16}{25}$	**3.** $\frac{1}{2}$
4. 250	**5.** 128	**6.** $\frac{8}{125}$
7. $\frac{3}{5}$	**8.** $\frac{1}{4}$	**9.** $\frac{8}{27}$
10. $\frac{1}{9}$	**11.** $\frac{5}{6}$	**12.** 32
13. 45	**14.** $\frac{1}{8}$	**15.** $\frac{2}{5}$
16. $\frac{1}{9}$	**17.** $\frac{4}{9}$	**18.** $\frac{4}{5}$
19. 625	**20.** 72	**21.** $\frac{64}{125}$
22. $\frac{1}{3}$	**23.** $\frac{4}{25}$	**24.** $\frac{27}{125}$