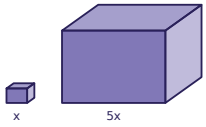
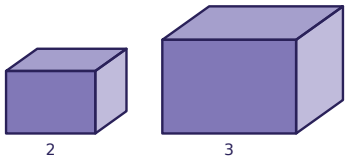
Task card 1 Scale Factor: Effect on Area & Vol...

Every dimension of a rectangular prism is multiplied by 5. By what number is its surface area multiplied?



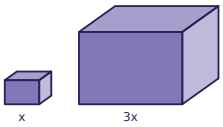
Task card 2 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 20. Find the surface area of the larger solid.



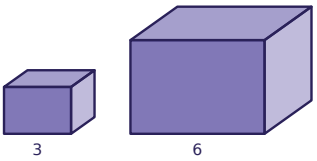
Task card 3 Scale Factor: Effect on Area & Vol...

Every dimension of a rectangular prism is multiplied by 3. By what number is its volume multiplied?



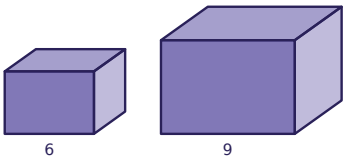
Task card 4 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 9. Find the surface area of the larger solid.



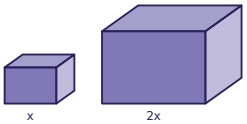
Task card 5 Scale Factor: Effect on Area & Vol...

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



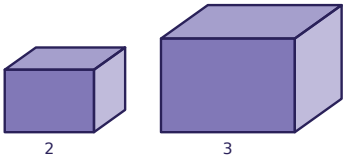
Task card 6 Scale Factor: Effect on Area & Vol...

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



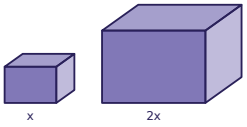
Task card 7 Scale Factor: Effect on Area & Vol...

The smaller solid has a volume of 48. Find the volume of the larger solid.



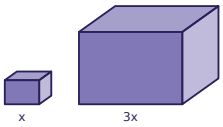
Task card 8 Scale Factor: Effect on Area & Vol...

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



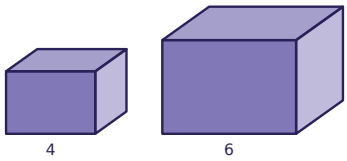
Task card 9 Scale Factor: Effect on Area & Vol...

Every dimension of a rectangular prism is multiplied by 3. By what number is its surface area multiplied?



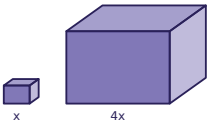
Task card 10 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 24. Find the surface area of the larger solid.



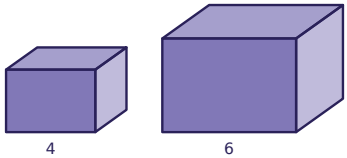
Task card 11 Scale Factor: Effect on Area & Vol...

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



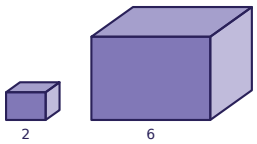
Task card 12 Scale Factor: Effect on Area & Vol...

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



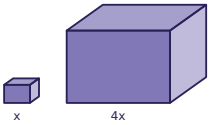
Task card 13 Scale Factor: Effect on Area & Vol...

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



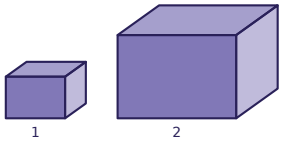
Task card 14 Scale Factor: Effect on Area & Vol...

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



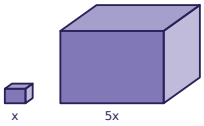
Task card 15 Scale Factor: Effect on Area & Vol...

The smaller solid has a volume of 2. Find the volume of the larger solid.



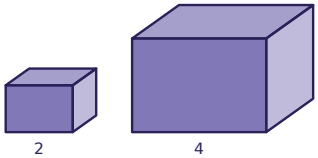
Task card 16 Scale Factor: Effect on Area & Vol...

Every dimension of a rectangular prism is multiplied by 5. By what number is its volume multiplied?



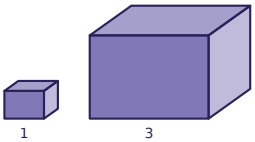
Task card 17 Scale Factor: Effect on Area & Vol...

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



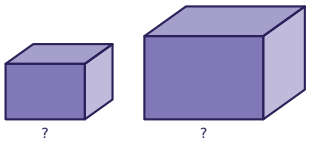
Task card 18 Scale Factor: Effect on Area & Vol...

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



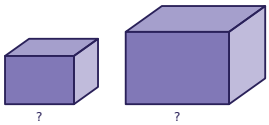
Task card 19 Scale Factor: Effect on Area & Vol...

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



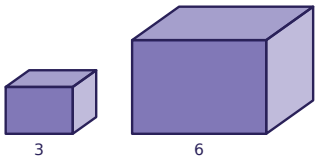
Task card 20 Scale Factor: Effect on Area & Vol...

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



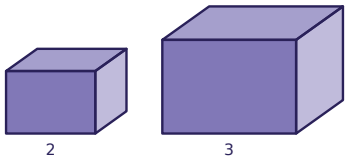
Task card 21 Scale Factor: Effect on Area & Vol...

The smaller solid has a surface area of 4. Find the surface area of the larger solid.



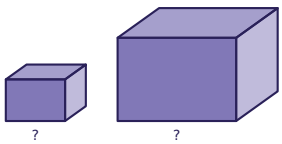
Task card 22 Scale Factor: Effect on Area & Vol...

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



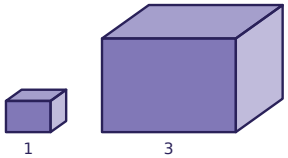
Task card 23 Scale Factor: Effect on Area & Vol...

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



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

The smaller solid has a surface area of 2. Find the surface area of the larger solid.



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 · Easy

The answers online

1. 25	**2.** 45	**3.** 27
4. 36	**5.** 108	**6.** 4
7. 162	**8.** 8	**9.** 9
10. 54	**11.** 64	**12.** 63
13. 162	**14.** 16	**15.** 16
16. 125	**17.** 24	**18.** 135
19. $\frac{2}{3}$	**20.** $\frac{2}{3}$	**21.** 16
22. 108	**23.** $\frac{1}{2}$	**24.** 18