Name: _____ Date: _____

Chapter 1 Literacy

Use the terms to answer or complete each sentence. Terms may be used more than once.

adding	figure	outer
base	height	prisms
component areas	lateral face	same
composite	minimum	semi-circle
constraint	net	shape
counter-example	net area	square
cylinders	orientation	subtract
diameter	orthographic projection	twice

1. A half-circle is also called a _____.

2. The area of a composite shape can be found by _____ the areas of its component shapes.

3. A surface of a cylinder that is not a base. _____

4. The maximum rectangular area that can be enclosed on four sides by a fixed perimeter is obtained by forming a _____.

5. A drawing that shows the front, side, or top view of a three-dimensional object. _____

6. The minimum surface area for a given volume of a cylinder occurs when the height is equal to the _____.

7. There are a number of manipulative, technological, and algebraic tools and strategies that are useful when optimizing volume or surface area of _____ and _____.

8. Determine the best solution while adhering to given constraints. _____

9. The surface area of a three-dimensional figure is the sum of the areas of all its _____ faces, measured in square units.

10. Areas of simple shapes that combine to form a composite figure. _____

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11. Nets are useful for counting the faces and identifying their _____.

12. Depending on the _____ of the prism, the bases can be on the top and bottom, the front and back, or the left and right sides.

13. A condition that limits a design option. _____

14. A figure made up of two or more simple geometric shapes. _____

15. The minimum surface area for a given volume of a square-based prism occurs when the _____ is equal to the side length of the base.

16. To find the net area of a shape, _____ the unneeded component areas from the total area.

17. The _____ of a prism refers to one of the two congruent, parallel polygon sides.

18. A two-dimensional pattern that can be folded to make a three-dimensional object. _____

19. Area found by subtracting one or more areas from a total area. _____

20. To apply an area formula, all measures must be in the _____ units.

21. The maximum rectangular area that can be enclosed on three sides by a fixed perimeter is obtained by a rectangle with a length that is _____ the width.

22. The _____ perimeter for a fixed rectangular area is obtained by forming a square.

23. An example that contradicts a proposed truth. _____

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Chapter 1 Literacy Answers

1. semi-circle
2. adding
3. lateral face
4. square
5. orthographic projection
6. diameter
7. prisms, cylinders
8. optimize
9. outer
10. component areas
11. shape
12. orientation
13. constraint
14. composite figure
15. height
16. subtract
17. base
18. net
19. net area
20. same
21. twice
22. minimum
23. counter-example

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