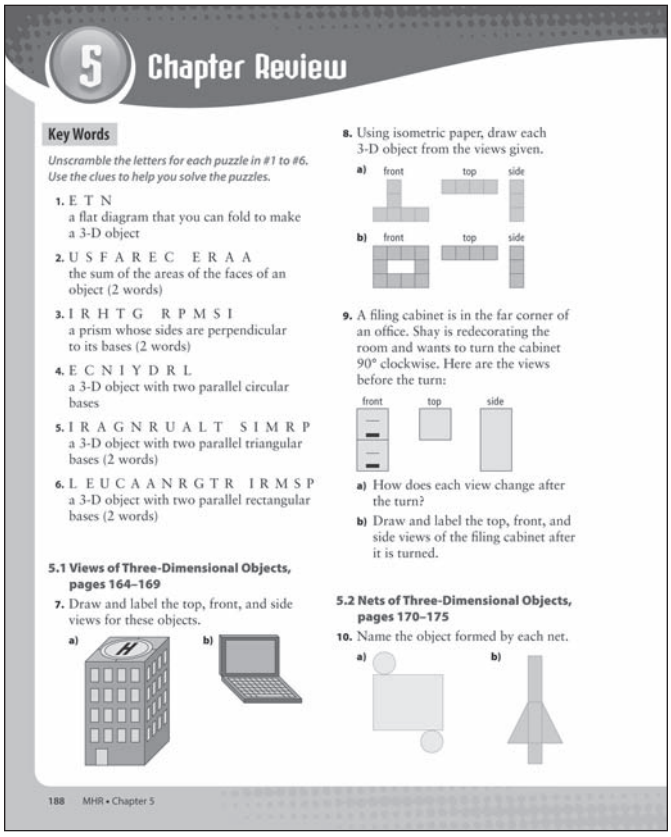
Chapter Review 5


5 Chapter Review

Key Words

Unscramble the letters for each puzzle in #1 to #6. Use the clues to help you solve the puzzles.

1. E T N
a flat diagram that you can fold to make a 3-D object
2. U S F A R E C E R A A
the sum of the areas of the faces of an object (2 words)
3. I R H T G R P M S I
a prism whose sides are perpendicular to its bases (2 words)
4. E C N I Y D R L
a 3-D object with two parallel circular bases
5. I R A G N R U A L T S I M R P
a 3-D object with two parallel triangular bases (2 words)
6. L E U C A A N R G T R I R M S P
a 3-D object with two parallel rectangular bases (2 words)

5.1 Views of Three-Dimensional Objects, pages 164–169

7. Draw and label the top, front, and side views for these objects.

a) b)

8. Using isometric paper, draw each 3-D object from the views given.

a) front top side

b) front top side

9. A filing cabinet is in the far corner of an office. Shay is redecorating the room and wants to turn the cabinet 90° clockwise. Here are the views before the turn:

front top side

a) How does each view change after the turn?

b) Draw and label the top, front, and side views of the filing cabinet after it is turned.

5.2 Nets of Three-Dimensional Objects, pages 170–175

10. Name the object formed by each net.

a) b)

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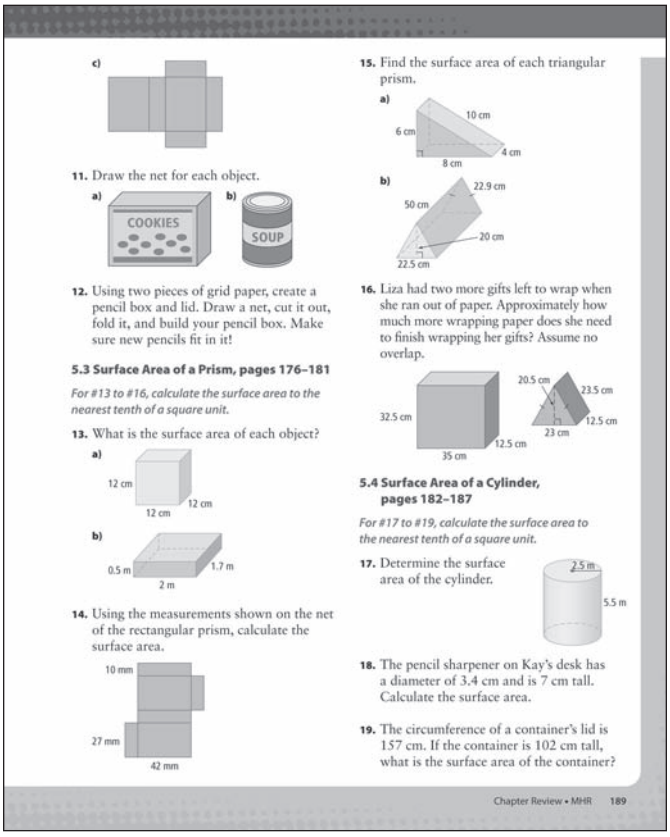
c)

11. Draw the net for each object.

a) b)

COOKIES SOUP

12. Using two pieces of grid paper, create a pencil box and lid. Draw a net, cut it out, fold it, and build your pencil box. Make sure new pencils fit in it!

5.3 Surface Area of a Prism, pages 176–181

For #13 to #16, calculate the surface area to the nearest tenth of a square unit.

13. What is the surface area of each object?

a) 12 cm 12 cm 12 cm

b) 0.5 m 1.7 m 2 m

14. Using the measurements shown on the net of the rectangular prism, calculate the surface area.

10 mm 27 mm 42 mm

15. Find the surface area of each triangular prism.

a) 10 cm 6 cm 8 cm 4 cm

b) 22.9 cm 50 cm 20 cm 22.5 cm

16. Liza had two more gifts left to wrap when she ran out of paper. Approximately how much more wrapping paper does she need to finish wrapping her gifts? Assume no overlap.

32.5 cm 35 cm 12.5 cm 20.5 cm 23.5 cm 12.5 cm 23 cm

5.4 Surface Area of a Cylinder, pages 182–187

For #17 to #19, calculate the surface area to the nearest tenth of a square unit.

17. Determine the surface area of the cylinder.

2.5 m 5.5 m

18. The pencil sharpener on Kay's desk has a diameter of 3.4 cm and is 7 cm tall. Calculate the surface area.

19. The circumference of a container's lid is 157 cm. If the container is 102 cm tall, what is the surface area of the container?

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***MathLinks 8*, pages 188–189**

Suggested Timing
40–50 minutes

Materials
- grid paper
- ruler
- scissors

Blackline Masters
Master 7 Isometric Dot Paper
Master 8 Centimetre Grid Paper
BLM 5–6 Section 5.1 Extra Practice
BLM 5–9 Section 5.2 Extra Practice
BLM 5–11 Section 5.3 Extra Practice
BLM 5–14 Section 5.4 Extra Practice

Planning Notes

Have students work individually or in pairs. If they encounter difficulties, remind them to refer to their chapter Foldable, worked examples, and previously completed questions in the related sections of the student resource.

Have students list the answers to the Key Words on paper. When they are done, have them look through the four chapter sections in the student resource. If there is a particular section they had difficulties with, encourage them to do every question in that section of the review. In the other sections, students could do parts a) or b) if they understand the concept.

Meeting Student Needs

- Encourage students to use their chapter Foldable and add new notes if they wish.
- Have students check each other's answers so they can go back and try to correct their mistakes.
- Students who require more practice on a particular topic may refer to **BLM 5–6 Section 5.1 Extra Practice**, **BLM 5–9 Section 5.2 Extra Practice**, **BLM 5–11 Section 5.3 Extra Practice**, and **BLM 5–14 Section 5.4 Extra Practice**.

ELL

- Give students the vocabulary words to use for the puzzle review of Key Words.

Gifted and Enrichment

- Some students may already be familiar with the skills handled in this review. To provide enrichment and extra challenge for gifted students, go to www.mathlinks8.ca and follow the links.

Assessment	Supporting Learning
Assessment *for* Learning	
Chapter 5 Review The Chapter 5 Review is an opportunity for students to assess themselves by completing selected questions in each section and checking their answers against the answers in the back of the student resource.	• Have students check the contents of the What I Need to Work On section of their chapter Foldable and do at least one question related to each listed item. • Have students revisit any section that they are having difficulty with prior to working on the chapter test.