

3 Develop the Concept: Visual



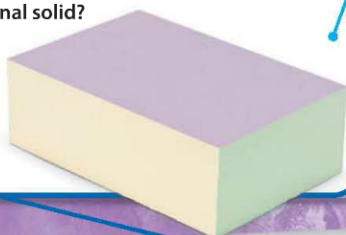
Visual Learning

Relating Shapes and Solids

How can you use a two-dimensional shape to represent a three-dimensional solid?

A **net** is a plane figure which, when folded, gives a solid figure.

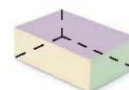
How can you draw a net for this solid figure?



Have you ever completely taken apart a box? Describe what you did and what the box looked like after you took it apart. [Sample answer: The box had fold lines and looked flat after it was taken apart.]

Step 1

Imagine making cuts along some edges of a solid and opening it into a plane.



1 Visual Learning

Set the Purpose Call students' attention to the **Visual Learning Bridge** at the top of the page. *In this lesson, you will learn to use a two-dimensional shape to represent a three-dimensional solid.*



Animated Glossary Students can see highlighted words defined in the Online Student Edition.

net

www.pearsonsuccessnet.com

2 Guided Practice



Formative Assessment

Remind students to imagine what the shape would look like if the pieces were all folded to make a solid.

Reteaching For another example and more practice, assign **Reteaching** Set B on p. 344.

3 Independent Practice

Remind students to think about the shapes of the figures in each net. *In Exercise 6, the net is curved in parts, so what solids can you eliminate?* [Cube, pyramid, prism]

Lesson 13-2

Relating Shapes and Solids

How can you use a two-dimensional shape to represent a three-dimensional solid?

A **net** is a plane figure which, when folded, gives a solid figure.

How can you draw a net for this solid figure?

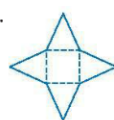


Guided Practice*

Do you know HOW?

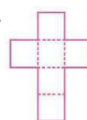
Predict what solid each net will make.

1.



Square pyramid

2.



Cube

Do you UNDERSTAND?

3. **Writing to Explain** How did you make your predictions in Exercises 1 and 2?

See margin.

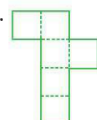
4. A solid may have different nets. Draw a different net for the solid you identified in Exercise 2.

See margin.

Independent Practice

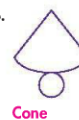
For 5 through 7, predict what solid each net will make.

5.



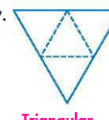
Cube

6.



Cone

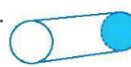
7.



Triangular pyramid

In 8 and 9, draw a net for each solid.

8.



See margin.

9.



See margin.



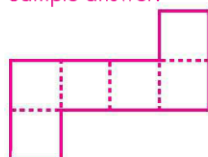
Animated Glossary
www.pearsonsuccessnet.com

326

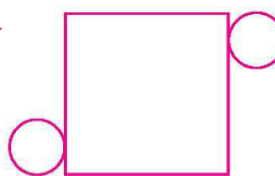
*For another example, see Set B on page 344.

3. Sample answer: I looked at each net, and built each shape in my mind.

4. Sample answer:



8.



9.

