Making Sense of...

Purposeful Practice

Educators recognize the important role practice plays within a balanced program. Purposeful practice allows students to clarify, refine, consolidate, and apply new learning through a variety of experiences. In *Addison Wesley Mathematics Makes Sense*, purposeful practice is offered in every lesson to suit a range of learner needs.

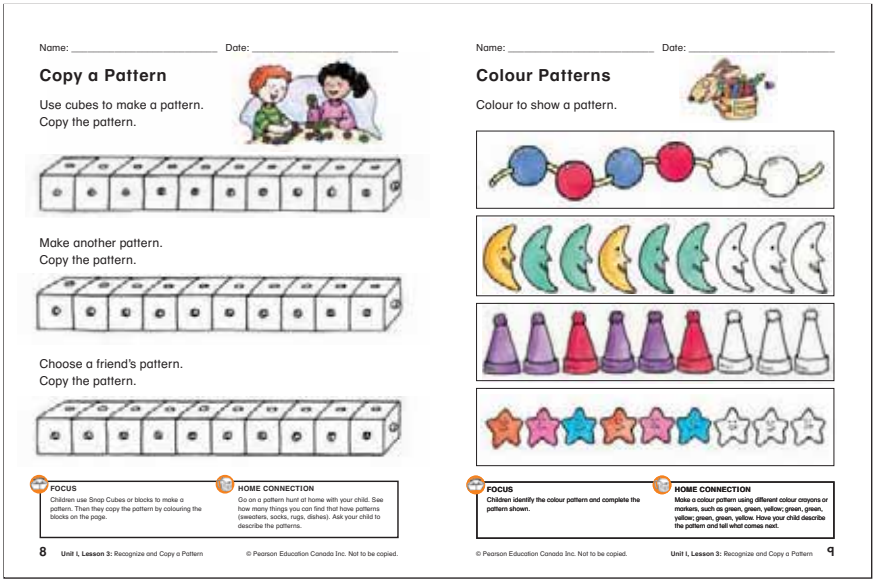
At K to 2

Teacher Guide **Practice** suggestions for each core lesson include

- **Reinforcement** for all students
- **Extra Support** for students who may face ESL challenges, or need more experiences with early concepts, problem solving, or applying procedures
- *Extension* for students who are ready to take concepts further

Lessons also regularly include **Numbers Every Day,** and **Activity Banks.** These additional ideas for activities provide hands-on practice.

At grades 1 and 2, the Student Book provides a mechanism for students to record a selection of their mathematics practice.



Name: _____ Date: _____

Copy a Pattern

Use cubes to make a pattern.
Copy the pattern.

Make another pattern.
Copy the pattern.

Choose a friend's pattern.
Copy the pattern.

FOCUS
Children use Snap Cubes or blocks to make a pattern. Then they copy the pattern by colouring the blocks on the page.

HOME CONNECTION
Go on a pattern hunt at home with your child. See how many things you can find that have patterns (sweaters, socks, rugs, dishes). Ask your child to describe the patterns.

8 **Unit I, Lesson 3:** Recognize and Copy a Pattern

Name: _____ Date: _____

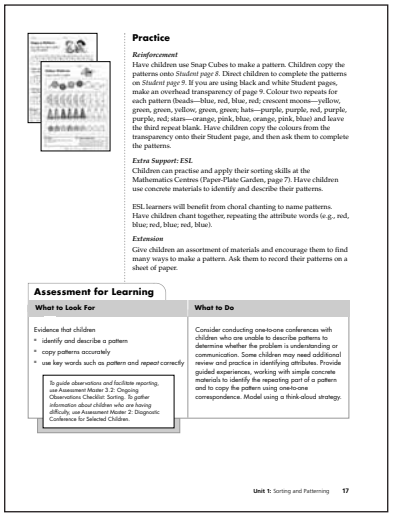
Colour Patterns

Colour to show a pattern.

FOCUS
Children identify the colour pattern and complete the pattern shown.

HOME CONNECTION
Make a colour pattern using different colour crayons or markers, such as green, green, yellow; green, green, yellow; green, green, yellow. Have your child describe the pattern and tell what comes next.

Unit I, Lesson 3: Recognize and Copy a Pattern 9



Practice

Reinforcement
Have children use Snap Cubes to make a pattern. Children copy the patterns onto *Student page 8*. Direct children to complete the patterns on *Student page 9*. If you are using black and white Student pages, make an overhead transparency of page 9. Colour two repeats for each pattern (boats—blue, red, blue, red; crescent moons—yellow, green, green, yellow, green, green; hats—purple, purple, red, purple, purple, red; stars—orange, pink, blue, orange, pink, blue) and leave the third repeat blank. Have children copy the colours from the transparency onto their Student page, and then ask them to complete the patterns.

Extra Support: ESL
Children can practise and apply their sorting skills at the Mathematics Centres (Paper-Plate Garden, page 7). Have children use concrete materials to identify and describe their patterns.

ESL learners will benefit from choral chanting to name patterns. Have children chant together, repeating the attribute words (e.g., red, blue; red, blue; red, blue).

Extension
Give children an assortment of materials and encourage them to find many ways to make a pattern. Ask them to record their patterns on a sheet of paper.

Assessment for Learning

What to Look For	What to Do
Evidence that children • identify and describe a pattern • copy patterns accurately • use key words such as *pattern* and *repeat* correctly	Consider conducting one-to-one conferences with children who are unable to describe patterns to determine whether the problem is understanding or communication. Some children may need additional review and practice in identifying attributes. Provide guided experiences, working with simple concrete materials to identify the repeating part of a pattern and to copy the pattern using one-to-one correspondence. Model using a think-aloud strategy.

To guide observations and facilitate reporting, use Assessment Master 3.2: Ongoing Observations Checklist: Sorting. To gather information about children who are having difficulty, use Assessment Master 2: Diagnostic Conference for Selected Children.

Unit I: Sorting and Patterning 17

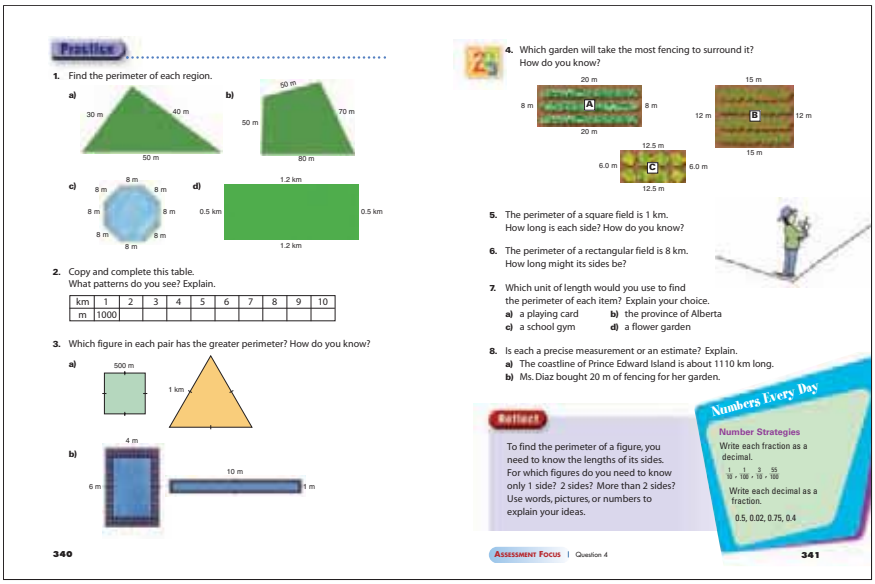
Students naturally solve mathematical problems daily.
Purposeful practice authenticates our classroom instruction.
– Jeananne Thomas, Program Author

At Grades 3 and up

Each lesson in the Student Book provides one to two pages of **Practice**.

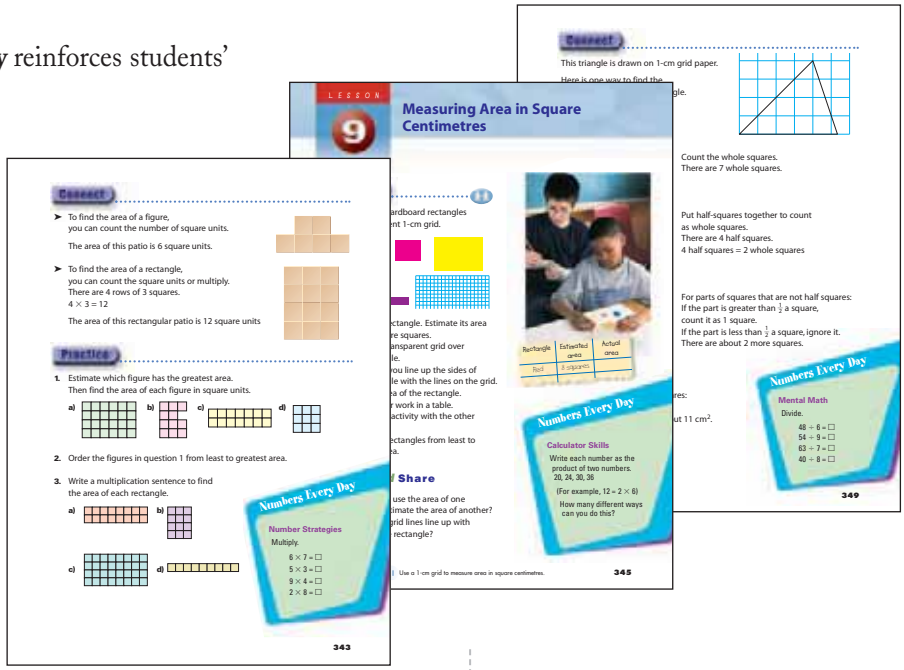
This exercise set includes patterning and visual estimation, as well as reinforcement and problem-solving opportunities.

One question in each Practice is identified as an **Assessment Focus:** it provides a good barometer of students' level of conceptual understanding.



In each lesson, **Numbers Every Day** reinforces students'

- Number Sense
- Calculator Skills
- Mental Math



The **Teacher Guide** provides

- Answers and sample responses to **Practice** questions
- Answers and strategy suggestions for **Numbers Every Day**
- **Extra Practice** masters to support specific student needs

Also available at grade 3 and beyond: A **Practice and Homework Book** with two pages of additional support for each lesson in the Student Book