A Lot of Noise

Teacher's Guide



Lalie Harcourt and Ricki Wortzman

Line Masters

This Teacher's Guide includes access to modifiable and PDF line masters.

To access these Mathology Little Book Line Masters, please log in at Pearson Places, www.pearsonplaces.com.au and select the Mathology Little Books icon. The Line Masters can be found in the 'Explore Resources' section.

If the icon doesn't appear or if you are new to Pearson Places, please contact our digital helpdesk at help@pearson.com.au and we will set up a teacher account for you.

Once you have your Pearson Places account details you can record them below for reference.

Log-in Name		
Password		

You can use these log-in details to access all your Pearson Places titles.



Mathology Little Books

This series recognizes that children's understanding of maths concepts develops over time, and so the series allows you to choose the book that best matches a child's or group's level of mathematical understanding. The books engage children at just the right level in a wide range of mathematical ideas, thinking, and activities in a variety of real world and imaginary contexts.

A Lot of Noise engages children in conversations, investigations, and activities that help to develop their understanding of the big maths idea that "Patterns can be described mathematically."

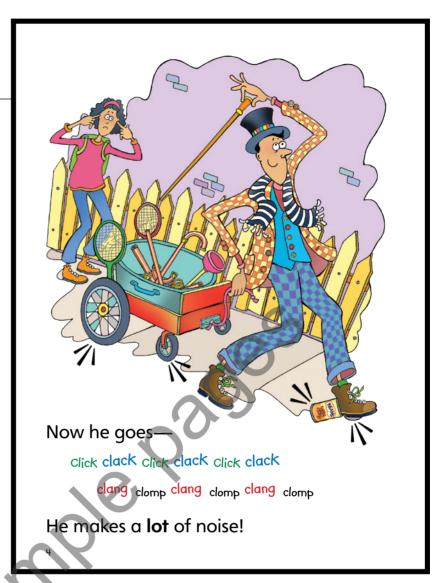
Big Idea: Patterns can be described mathematically (Sort and Classify, Copy, continue and create patterns.) STRATEGIES **KEY MATHS FOCUS MATHS SKILLS ADDITIONAL FOCUS** Predict a missing Count how many Identify and extend repeating Find the repeating core of a pattern patterns Distinguish between repeating and element Recognise 2-D shapes non-repeating sequences. Reproduce and create repeating Represent the same pattern in different ways (action, colour, shape) Identify and describe repeating Identify the repeating core of a Use positional language to Use the repeating patterns core to extend describe location Distinguish repeating and nonpatterns Count by 2s Compare and create patterns repeating patterns Represent patterns in different ways Identify missing elements Sort, create and describe patterns Explore growing and shrinking Identify, describe, extend and create Identify missing terms Story problems patterns number patterns and pattern rules Addition strings to show pattern (including increasing and decreasing Combining 2-D shapes Investigate number patterns patterns) Identifying congruent shapes Make connections to addition and subtraction

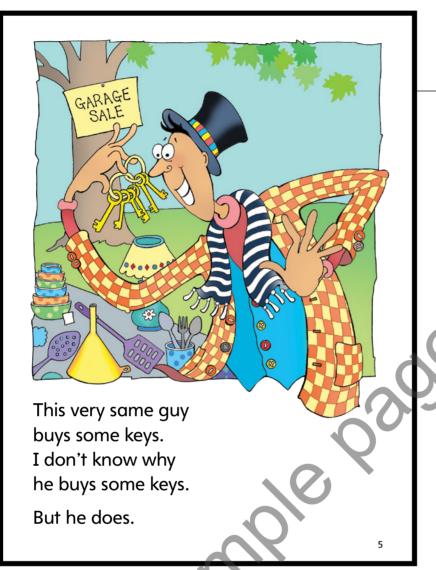
Identifying and extending patterns

- Listen as I make the sound of the boot and can. Join in when you are ready. (clang, clomp; clang, clomp; clang, clomp; ...) Is that a pattern? (yes) How do you know? (e.g., the same part repeats; clang and clomp repeat)
- I am going to chant the sound pattern made by the wheels. Join in when you are ready. Keep the pattern going after I stop. Ready? (click, clack; click, clack; click, clack; click, clack; click, clack; ...) Why was it easy to keep the pattern going? (the same part repeats over and over)

Reproducing and creating patterns

• Let's use the sounds "clang" and "clomp" to make a different pattern. Who has an idea? (use suggestions to create different patterns)





Identifying and extending patterns

- What patterns do you see in the illustration? How would you describe the pattern? (e.g., the lampshade has a colour pattern: blue, red; blue, red; blue, red; blue, red; ...) What is a different way to describe the pattern? (e.g., a shape pattern: circle, diamond; circle, diamond; circle, diamond; ...)
- Suppose the guy's scarf was another stripe longer. What colour would come next? (white) How do you know?

CONNECTING TO NUMBER

Counting How Many: Ask: **How many keys is the guy holding?** (6) **How many bowls are on the table?** (6) **Use numbers to tell about something you see.**

Large Group Options

If you read *A Lot of Noise* to a large group or whole class, you might project the book to facilitate reading aloud and better engage children with repeating patterns. These activities engage children in identifying, representing, extending, and creating patterns; choose the activities that best address your children's learning needs.

LET'S MAKE SOUND PATTERNS

ENGAGE

Draw attention to the sound patterns in *A Lot of Noise*. For example, pages 4–5:

- What sounds are the objects making? (cart: click clack; can: clang; boot: clomp)
- Let's read the cart sounds together. What do you notice? (e.g., the sounds repeat; it's a pattern; or other response children can justify)
- This time, let's keep the sound pattern going. Join in when you are ready. Stop when I raise my hand.

Then invite children to identify and extend the sound pattern made by the can (clang) and the boot (clomp). (clang, clomp; clang, clomp; clang, clomp; clang, clomp; clang, clomp; ...) Vary the sounds (e.g., high/low; loud soft; fast/slow; sad/happy). Repeat using other examples from A Lot of Noise.

WORK ON IT

Post drawings cut from *A Lot of Noise* Objects (LM 4) or display real objects. Explain they will use the objects to make sound patterns. To begin, invite volunteers to select 2 of the objects. Ask:

- What sound will the (cart) make? What sound will the (can) make?
- When I point to the drawing, you make the sound. If I tap the drawing twice (three times), you say the sound twice (three times). When I raise my hand, stop. Ready?

"Conduct" an AB sound pattern, then discuss: We just made a sound pattern. What did you notice? (e.g., it used 2 sounds; sounds repeated or other reasonable response) Repeat using two different objects (drawings) to make a different AB pattern. You might consider asking: How were the sound patterns the same? How were they different? Invite volunteers to act as conductor. Over time, expose children to other types of sound patterns, such as ABB, ABC, AAB, AABB.

SHARE AND REFLECT

Invite children to reflect on each pattern by asking questions such as:

- Is this a pattern? How do you know?
- What sounds repeat over and over again?

MATHS FOCUS: identify and extend repeating patterns; identify the repeating unit (core) of a pattern

MATERIALS: A Lot of Noise; A Lot of Noise Objects (LM 4)

Our Sound Patterns





jingle jingle, clang jingle jingle, clang jingle jingle, clang jingle jingle, clang

WATCH FOR...

- Does the child join in the chanting of the pattern?
- Does the child identify the pattern core (the sounds that repeat)?
- Does the child identify and describe the sounds as a pattern?

DIFFERENTIATE: You might consider posting a pattern starter (created by gluing drawings from LM 4 or Action Cards, LM 5) onto a long strip of paper and using it to "conduct" a sound pattern.

Line Masters

To access the Mathology Little Book Line Masters, please log in at Pearson Places, www.pearsonplaces.com.au and select the Mathology Little Books icon. The Line Masters can be found in the 'Explore Resources' section.

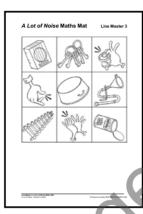
If the icon doesn't appear or if you are new to Pearson Places, please contact our digital helpdesk at help@pearson.com.au.



Line Master 1Assessment Master



Line Master 2
Connecting Home and School
Letter Template



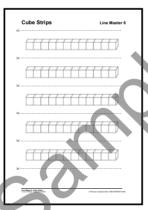
Line Master 3
A Lot of Noise Maths Mat



Line Master 4A Lot of Noise Objects



Line Master 5
Action Cards



Line Master 6Cube Strips



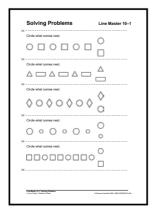
Line Master 7
Pattern Starters



Line Master 8Musical Patterns



Line Master 9Sounds Are Everywhere!



Line Master 10Solving Problems