

SAINT PIERRE LEARNING RESOURCES

SAINT PIERRE LEARNING RESOURCES

MATHEMATICS | QUARTER 1 | DAY 4

3RD GRADE

Multiplication Patterns on a Hundreds Chart

STANDARDS-FIRST PLANNING

Verified NC alignment: NC.3.OA.9 - Interpret patterns of multiplication on a hundreds board and/or multiplication table.

Student target: I can find and explain patterns in multiplication tables and hundreds charts.

Success criteria: Identify a row pattern, extend it, and explain why it occurs.

Teaching overview

Visual reasoning about multiplication patterns (especially multiples of 4, 5, 6, 8, and 10). The emphasis is on explaining regularity rather than only recalling facts.

Materials & setup

- Printed 1-10 multiplication chart and hundreds chart
- Highlighters in two colors
- Square tiles or array mats
- Dry-erase boards

Exactly 80 minutes: daily flow

COMPONENT	TIME
Warm-Up / Spiral Review	8 min
Visual Mini-Lesson	12 min
I Do	10 min
We Do	12 min
Small Group / Centers	18 min
Independent Practice + Early Finisher	15 min
Exit Ticket / Closure	5 min

Early finisher work is completed within the independent-practice block; it does not add time beyond 80 minutes. Quarter placement is a proposed local instructional sequence, not a state-mandated pacing map.

8 min | Warm-Up

Spiral multiplication/division story representations from Day 3.

12 min | Visual Mini-Lesson

Highlight the 4s row. Show each product increases by 4. Compare 2s and 4s; use arrays to see why 4s are even.

10 min | I Do

Highlight 5, 10, 15, 20, 25. Explain alternating final digits 5 and 0 with groups of five.

12 min | We Do

Students highlight 3s, 6s, 8s and 10s, discuss patterns, and verify with arrays.

18 min | Centers

Rotate 6 minutes: chart detectives, array explanations, and error analysis.

15 min | Independent / Challenge

Students interpret 12 chart patterns. Early finishers compare two multiplication rows and write a generalization.

5 min | Exit

Students identify one pattern and justify it using groups or repeated addition.

Differentiation and access

Support: Use chart 1-5, highlight one row at a time, and skip-count aloud.

Core: Interpret row patterns and explain with equal groups.

Extension: Explain why every multiple of 6 is also a multiple of 3.

Language: Use "Each new group adds ____" and "I notice ____ because ____."

Misconception to watch

A child may describe only the last digit without understanding why it repeats. Connect the pattern to adding the same group each step.

Evidence to collect

Have each student write one pattern rule AND one explanation with a drawing.