

Lesson Four: Fix the Pattern

Teacher:	Date:
Bridget Maloney	Friday March 14, 2024
Duration:	Grade and Subject:
50 Minutes	Mathematics 1

Desired Results

I Can Statements:	Essential Questions:
- I can identify the core of a pattern. - I can identify errors in a pattern. - I can fix errors in a pattern. - I can describe what the core of a pattern is. - I can describe how to find the core of a pattern. - I can describe how I know there is an error.	- What is a pattern? - What is the core of a pattern? - How do I spot an error in a repeating pattern? - How can I fix a repeating pattern? - How do I spot the core of a repeating pattern?
Students Will Know:	Students Will Be Able To:
- What the core of a pattern is. - How to find the error in a pattern. - How to find the core of a pattern. - How to fix an error in any repeating pattern.	- Find the core of any repeating pattern. - Identify an error in a pattern. - Fix the error they have identified in a pattern.

Outcomes and Indicators:

- P1.1** Demonstrate an understanding of repeating patterns (two to four elements) by
- describing
 - reproducing
 - extending
 - creating patterns using manipulatives, diagrams, sounds, and actions

- (b) Identify errors made in a repeating pattern.
 (c) Identify the missing element(s) in a repeating pattern.

Assessment Plan:

- The assessment I have planned is a formative assessment similar to the assessment I had planned for lesson 2 of this unit.
- Students will be observed during the whiteboard section of the lesson. Students showing understanding will receive a mark on a checklist in order to take note of who needs some extra time/assistance.
- I recognize that observation does not always allow for each aspect of the lesson to be recorded so, I have organized the checklist in table groups.
 - As students raise their white boards I will add marks to the checklist according to the table group to ensure I see all students answers 1-2 times throughout the lesson.
 - Though I am only adding checks for one table group, I will still pay attention to other answers in each question, scanning the room to gain insight.
- Additionally students will be assessed by their completed exit slip. This exit slip will allow me to get a little bit of extra insight into student ideas.
 - Question three on the exit slip is much more challenging. I will encourage all students to try, but this is mostly to allow students who are further ahead to have an extra challenge.

Checklist (Organized By Tables)

[Fixing Patterns Exit Slip](#)

Lesson Outline

Materials:	Resources:
- Checklist (Organized By Tables) - Fixing Patterns Exit Slip - UFLI Whiteboards and Markers - "Pattern Breakers" by Daniel Finkel - Melting Exercise by GoNoodle - "Little Cat" Dance Along by Danny Go! - Salamander Yoga by Scratch Garden - Lesson 4 Powerpoint	- Lesson 4 PowerPoint (made by me in Canva) - Fixing Patterns Exit Slip (made by me in Canva) - Checklist (Organized By Tables) - Melting Exercise by GoNoodle - "Little Cat" Dance Along by Danny Go! - Salamander Yoga by Scratch - Saskatchewan Curriculum

Instructional Strategies:

- Large group activity
 - Students will work in a large group to identify the characteristics of each pattern. During this students will need to work along with the whole class to fix the patterns.
- Guided Practice
 - As a group we will go through a series of examples. As these examples are worked through, students will use their UFLI whiteboards to independently write their answers.
- Individual Practice (exit slip)
 - Students will have time at the end of the lesson to work through an exit slip activity on their own as I circulate the classroom speaking to them about their thought processes.

Lesson Development:

Set (15 min):

- Bathroom Break (if needed - can be omitted due to time or student need).
- Body Break - [Melting Exercise](#) by GoNoodle
- Begin by moving students to the carpet.
 - Have students sit in turtle mode and show they are ready to move.
 - Ask students what a successful spot looks like (take 2-3 answers).
 - Call table groups to move to the carpet.
- Read "Pattern Breakers" by Daniel Finkel.
 - Allow students to join in when the 'your turn' section begins.
 - Read 2-3 examples from the book to keep the review short (as most students grasped this concept well yesterday - students who did not will have more time during the lesson to practice)
- Once reading is completed, call students by colour to move back to their table.
 - Ask students to hop like a bunny back to their table (works as a short body break).

Development (25 min):

- Begin the Lesson 4 PowerPoint Presentation.
- Work through the review and new concept examples (3 examples on PowerPoint).
 - Each examples includes:
 - Broken down core identification
 - For the first example go straight into the breakdown of the core.
 - For the second two questions, ask students about the core before breaking it down on the slides, use the broken down version to explain answers rather than give them.
 - Identification of mistake
 - fixing of mistake
 - During the examples ask students to raise their hands and share (try to call

on a different student each time “I would love to hear from a friend we haven’t heard from yet”).

- Throughout this portion of the lesson remember to set clear boundaries with the students about raising hands and blurting out.
- Body Break - [“Little Cat” Dance Along](#) by Danny Go!
- Have one student from each table give out a UFLI Whiteboard and Whiteboard Marker.
- Using the boards work through the examples on the board.
 - Have students read through the pattern together.
 - Have students draw the core.
 - Have students call out the error.
 - Have students draw the fix.
- During this time be clear that the boards should not be raised until I say so.
- As the examples go more and more scaffolding is removed from the examples, allowing me to see where students are at.
- Remind students that they are only to draw their fix and not the whole pattern.
- As students raise their boards, use a checklist to check on individual tables.
- *TIME PERMITTING* 2-3 minutes of drawing time.
- Have helper students collect the boards from the table.

Closure (10 min):

- Once boards are away, introduce the Fixing Patterns Exit Slip
- Explain to students that the third question is a little bit more challenging to work through.
 - Tell students that I want them to try their best.
 - Remind that “mistakes make our brains grow”.
- Hand out the exit slips and allow students to begin.
- Circulate the room talking to individual students about their work.
- After 5-7 minutes ask students to make a pile of their papers on their table and put their pencils away.
- Body Break - [Salamander Yoga](#) by Scratch Garden

Adaptations:	Key Transitions:
- Use less examples if time is running low (make sure there is time for exit slip). - Omit body or bathroom break if it is not needed. - Go back and re-explain expectations as needed.	- When moving to the carpet ensure that all students are paying close attention and ready to move. - When moving to and from the carpet, call students in groups. - Whiteboards have one person hand out at each table.
Management Strategies:	Safety Considerations:
- Use positive affirmations to encourage behaviours.	- Make sure students are being careful and spacing themselves

- “I love how...” - Use the timer during work time. - Wait for all eyes on me before starting. - Tell students I only will listen to raised hands. - Use the chime. - Frequent body breaks (planned or unplanned).	- during body and movement breaks. - Make sure students are not being silly with their boards.
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Feedback Focus:
- My feedback focus for this lesson is setting clear boundaries with my students. During my lesson I would like to clearly state and follow through on my expectations in order to improve my classroom management.

Professional Development Plan (short term)	
Date: March 15, 2024	Class / context: Mathematics - Patterns
Intern: Bridget Maloney	Observer: Jodie Janzen
Professional Focus / Intention / Goal: My foal for this lesson is setting clear boundaries with my students. During my lesson I would like to clearly state and follow through on my expectations in order to improve my classroom management.	Steps to achieve goal / I will practice: - Clearly state my expectations and boundaries before the lesson/transitional periods. - Re-explain these boundaries any time they are broken (reminders). - Do not let 1-2 students not follow boundaries, make sure to wait for all student to follow before moving on.
Specific instructions for observer: Take note of: - Any time students were not doing as asked and what I did about it. - Did I ignore it? - Did I re-explain? - etc. - The ways I handled when boundaries were broken. - Strategies I used to try and fix behavior. - Did the practice of this goal improve the flow of my lesson?	

Data Collection / Observations:
Comments / Feedback related to professional focus:
Self-reflection related to the professional experience, feedback provided, and/or post-conference conversation: What Went Well: - My challenge questions went really well with the students who needed that extra push. - Aubree made huge progress during this lesson after being away up until this point. - I worked one on one with her to catch up (though she didn't need much.) - I did a good job at setting boundaries with students surrounding bathrooms and hugs. - I waited for students to be ready before moving on (distractions were high at this time, FRIDAYS ARE HARD). - I saw lots of right answers during check-ins. - When I noticed disengagement I adapted. - Brought in stickers - shortened examples - I made sure to call on different students. Problem Areas: - Students were CRAZY which honestly really threw me off. - I had a hard time bouncing back and found myself getting overwhelmed rather than problem solving. - Maybe having a list of strategies could have been helpful at this moment. - My review was not as in depth as I would have liked. - I could have used some extra notes at this moment. - Students 'coloring' on worksheets made it tricky to see their work. - I waited too long to set firm expectations, so students did not take them as seriously as I would have liked. - I was not firm with the consequences. - I ran out of time at the end. - Could have watched the time better. - I used more time managing than teaching I felt. - Could have adapted more to ensure this did not happen. - My checklist was not great. - Management took time away from paying attention to answers. - This turned answers into more of a repetition practice rather than a check.
Next steps / for future practice:

- Set boundaries IMMEDIATELY.
- Stick to consequences.
- Use more management strategies to bring routine together.
- Maybe try aspects of this lesson in small groups.