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| **Description: Schulich_SOE_logo+NUwordmark_GREYSCALE.jpg** | **Lesson Plan  Template** |

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| **1. Lesson Plan Information** | |
| **Subject/Course:** Math | **Name:** Meghan Moore |
| **Grade Level:** Senior Kindergarten – A class | **Date:** Wed, Oct 20, 2010 |
| **Topic:** Patterning | **Length of Period:** 2:15 – 2:45 |

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| **2. Expectation(s)** |
| **Expectation(s) (*Directly from The Ontario Curriculum):***  P 4.1 – Identify, create, reproduce and extend repeating patterns through investigation, using a variety of materials and actions |

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| **3. Content** |
| ***What do I want the learners to know and/or be able to do?***   * Think, pair and share * Recognize patterns * Know that a pattern is any sets of shapes, numbers, letters or objects that are repeated over and over again     **Today learners will:**  Identify, create, reproduce and extend repeating patterns through investigation, using buttons that will be strung onto pipe cleaners. |

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| **4. Assessment (collect data) / Evaluation (interpret data)**  **(Recording Devices (where applicable): anecdotal record, checklist, rating scale, rubric)** |
| ***Based on the application, how will I know students have learned what I intended?***  -The teacher will observe the students as the complete their placemats and bracelets and make anecdotal notes on each students folders regarding the understanding component  -The teacher will check students understanding of what a pattern is |

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| **5. Learning Context** |
| **A. The Learners**  **(i) *What prior experiences, knowledge and skills do the learners bring with them to this learning experience?***  -can speak in simple sentences  -have experienced patterns in calendar everyday  -know that when the teacher pulls out the big book the students should be sitting criss-cross apple sauce, with their hands folded in their laps  **(ii) *How will I differentiate the instruction (content, process and/or product) to ensure the inclusion of all students?* (Must include where applicable accommodations and/or modifications for learners identified as exceptional.)**  -HK has C.P and requires 100% assistance from EA  -JK and DS have difficulty with their fine motor skills, so the teacher may need to string the beads for them |
| **B. Learning Environment**  -13 students: 7 girls and 6 boys  -The application will be done at the work tables, but the instructional portion will take place on the carpet, as students sit on their name cards |
| **C. Resources/Materials**  “The Necklace” by Larlie Harcourt and Ricki Wortzman  39 red buttons  39 blue buttons  13 pipe cleaners  13 pieces of news print  26 bingo dabbers – 13 green, 13 purple |

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| **6. Teaching/Learning Strategies** |
| **INTRODUCTION**  ***How will I engage the learners?* (e.g., motivational strategy, hook, activation of students’ prior knowledge, activities, procedures, compelling problem)**  3 minutes  The teacher will read “The Necklace” by Larlie Harcourt and Ricki Wortzman.  Have the students pay attention to what the necklace looks like at the very end.  **MIDDLE:**  **Teaching: *How does the lesson develop?***  **How we teach new concepts, processes (e.g., gradual release of responsibility - modeled, shared, and guided instruction).**  5 minutes  The teacher will turn to the last page of the story and point to the picture of the necklace.  Using a problem solving teaching strategy, the teacher will then pull out her own broken necklace that needs to be put back together. The teacher asks the students to help her put it back together based on what we have learned from Lola.   * Ask the students: *“What did you notice about Lola’s necklace?”* * The answer should be that the necklace goes red, blue, red, blue. Here the teacher will insert that this is what we call a pattern in math * The teacher will mention that the concept of patterning is something we see every day. (Make a connection to the students real world) *“When we do calendar we are working with patterns through the days of the week and through the shapes and colors we use to mark off what number of the month we are at. For example this week our calendar looks like orange rectangle, green circle, orange rectangle, green circle.* * Once the necklace is put back together ask the students what happens to the beads. The focus on patterning is that it repeats over and over again. Have the students say “patterns are something that repeat over and over” out loud a few times   -The teacher will then model what a pattern looks like by using bingo dabbers on a piece of newsprint paper  -The teacher should ensure she uses the proper oral language (a pattern is something that repeats itself over and over) so children can make the connection between what is being done and the real world.  **Consolidation and/or Recapitulation Process*: How will I bring all the important ideas from the learning experiences together for/with the students? How will I check for understanding?***  10 minutes  Ask key questions to check understanding:   * What did Lola’s necklace look like when it was all finished? (Red, Blue, Red, Blue) * What did you notice about the pattern? Does it end? What does it do to itself? * How would the pattern have looked if Lola had forgotten to put in a red bead? Would the pattern still repeat? * What other patterns did you notice in the story?   Checking for understanding non-verbally:  The teacher will ask the students to demonstrate they understand by listening to the pattern the teacher gives them and then doing the corresponding action….   * The teacher will say, “Put your finger on your nose if you think that circle, square, circle, square, circle, square is a pattern…” * The teacher will say, “*Put your hands on your head if you think that blue, pink, blue, pink, yellow, pink is a pattern…”*   **The teacher will use a modified (so just very quick version of) “think/pair/share strategy” in order to check for understanding on patterning.**   1. Teacher says: “Please think of a pattern in your head.” (THINK) 2. Teacher then says: “Turn to the friend beside you and share your pattern with them. Talk about why it’s a pattern. What does a pattern do?” (PAIR) 3. Teacher then gathers the attention of the students and selects several students to tell the class the pattern they thought of. The teacher may want to get all 13 students patterns, as they may shout out their answer if not chose. (SHARE)   -Students will work at their table to create a patterning placement from the paper and bingo dabbers provided. The teacher will float through the tables and take note of the abilities and difficulties encountered. The teacher will offer suggestions to students, if they are not grasping the concept of the ABA pattern.    **Application: What *will learners do to demonstrate their learning?* (Moving from guided, scaffolded practice, and gradual release of responsibility.)**  15 minutes  -Students will independently make their own pattern using buttons that are made into colorful shapes. The focus is making patterns with color only right now and not making a pattern from shapes.  -Students will make a pattern from the buttons they are given.  -Students have to orally explain their pattern to the teacher before they are able to put the buttons on the pipe cleaner and fasten it into a bracelet. (example: “*My bracelet is a pattern because it repeats. It goes blue, red, blue, red, blue, red, just like Lola’s necklace from the story”)*  **CONCLUSION: *How will I conclude the lesson?***  2 minutes  Have the students come and sit at the carpet. Pick 2 or 3 students to stand up and show their bracelet to the class. Have them explain their pattern and how they know it’s a pattern.  Having them state how they know it’s a pattern hits on what we have been talking about today: a pattern is something that repeats. |

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| **7. My Reflections on the Lesson** |
| ***What do I need to do to become more effective as a teacher in supporting student learning?***  *I need to improve on my time management skills as my conclusion got cut short and as a result we did not have enough time to go back over the concepts, nor clean up. I think in order to be a more effective teacher I need to allow time for more reflection. Having students reflect on what they did, what they learned and challenges they may have faced is beneficial to the classroom. I need to work on giving more students the opportunity to share. Having special buddy is a great way to ensure one new person each day has an opportunity.*  *What I noticed the most is that the children seemed to love the hands on activities of building jewelry. I was amazed at how engaged they were with the bingo dabbers. I need to find more ways to incorporate those.*  *To become a more effective teacher I need to work more closely with Mrs. McIver (the EA) to ensure HK is benefitting from the lessons as well. See what I need to do to make sure his needs are met.* |

**PART A: LESSON DELIVERY**

Motivation

My lesson was based on my hook, as both incorporated patterning through jewellery. I was successfully able to motivate students to create their very own patterns in the end. I did not address prior knowledge of patterning in my hook, but mentioned it in the new content, recalling patterns throughout calendar time.

Content for New Learning

The information I presented was done in an organized way that needed no real transitions from one section to the next. I clearly explained that patterns were something they saw in a real life context and that patterns were something that repeated over and over. I modelled the new learning by using a problem solving teaching strategy.

Recapitulation Questions

I developed questions that required students to think back to the book and the new learning we did and demonstrate the main ideas of a pattern through oral communication. Before I moved on I checked for understanding by asking questions about what a pattern is, what it looks like and what it is not.

Consolidation

I used the “think-pair-share” strategy to bring the important ideas of patterning together for the students. Students had the opportunity to practice the new learning independently by making patterned placemats, after being guided through the oral discussion of what a pattern was. I offered feedback by way of orally talking through the student’s pattern, if they were struggling to grasp the concept of patterning.

Application

Students were provided with the opportunity for a hands-on independent learning activity. They had to show me their pattern and orally recite it to me before they were able to wear them. Learning was differentiated for students with exceptionalities by way of they had to tell me the pattern and I physically strung the buttons on their bracelet.

Conclusion

I briefly left time for conclusion at the end, allowing 3 students to share what their pattern was and how they knew it was a pattern. I was encouraging them to use the oral language that had been used in the lesson.

Assessment

I used formative assessment on both the pattern placemats and the bracelets by way of anecdotal notes that were in each child’s folders.

**PART B: REFLECTION**

**1. LESSON DELIVERY**

**Effectiveness of the Student Teacher**

**Motivation🡪**Level 3

**Modeling of New Learning🡪**Level 4

**Recapitulation Questions🡪**Level 3

**Consolidation🡪**Level 2

**Application🡪** Level 2

**Lesson Conclusion🡪** Level 1

The motivation behind my lesson instilled excitement and engagement, resulting in the overall success of my lesson. Through emphasizing the concept of a pattern new learning was presented flawlessly. The recapitulation questions helped to summarize the main point and made things clear. The consolidation portion was the most successful part of the lesson, partly because the students were engaged and excited to use the bingo dabbers.

The application portion did not go as smoothly as I would have liked partly because the students were getting restless. Having math on the last period of the day was my biggest barrier. For concluding purposes I did not leave enough time and as a result was rushed to sum up what was learned in a manner that I would have preferred.

**Next Steps**

When implementing lessons I need to make sure I do not include too many activities. My planning needs to reflect the time of day math takes place. Maybe I need to use more hands-on, high energy lessons. Next time I would need better time management skills to ensure adequate timing for all phases of instruction. Non-verbal cues have been the most effective form of management in my kindergarten class, so I will continue to use these.

**2. USE OF PHASES OF INSTRUCTION VISUAL MODEL:**

Based on the model, my lesson plan followed the visual representation beginning with motivation, moving into new learning and recapitulation questions, consolidation and then application.

In terms of writing and analyzing my lesson plan, the model was an effective tool. It kept me focused and organized, and allowed me to also map out my lesson visually. The model is legible and formulated in a way that accompanies our lesson plan. Through the model, it allowed for better time management as I delivered my lesson.

One thing that surprised me most about hearing myself teach a lesson is how confident I sounded when I was teaching my kindergarten class about patterning. After completing the lesson plan and knowing how much time is needed for each area, the actual teaching was quite relaxed.