## Lesson Plan: Patterns and Sequences

Step One: Preplanning, selection of topic, etc.

- Activity: "Patterns and Sequences"
o Grade 2: Math and Drama Lesson
- Theme: To teach students how to understand the concept of patterns and sequences before applying numerations.
- Source: "Children’s Creative Resources for You and Your Teacher" (online) http://library.thinkquest.org/5291/resources.html
- Drama/Learning Goals:
o To work cooperatively in groups of three or four.
o To understand how patterns are formed to make a sequence.
o To be able to recognize a pattern and what would come next in the sequence.
o To use their imagination to act out or demonstrate patterns to the class.
- Skill Levels:
o Skill 1 Cooperation: Members of the group should be able to work well together.
o Skill 2 Concentration: Members of the group should be able to focus or concentrate on individual and group activities.
Step Two: Presentation of Materials
- Strategies for introducing the activity and establishing the mood:
o Good morning, class! I would like everyone to stand up out of his or her seat.
o Now, I want everyone to reach high, then reach low, then reach high, then reach low.
o Now, I want everyone to take a step to their left, then a step to their right, then a step forward, then take a step to your left, then take a step to your right. Now, who can tell me what step comes next? (Forward)
o Now, I want everyone to stretch wide like a star, then stand straight, then I want everyone to stretch like a star, then stand with your arms out, then I want you to stretch wide like a start, then stand straight. Who can tell me what we should do next? (Stretch wide like a star)
o Tell the students they can take a seat now.
o Ask, does anyone know what we were just creating? (Patterns in a sequence)
- For example, in the sequence the consisted of "reach high, reach low, reach high, reach low," the pattern was "reach high, reach low" and the sequence was the whole thing together as actions. (What came next in the sequence of actions)
- Use prepared cards/papers with examples to show what is the pattern and what is the sequence.
o Can anyone tell me what a sequence is? (The following of one thing after another that follows a particular order and the particular order is the pattern.)
o Tell the students that I was giving them a pattern to follow using their bodies and they were able to figure out what was coming next in our sequence of actions.
o Today, we are going to play a game that allows us to practice putting together patterns, and to practice figuring out what comes next in the sequence.
- Relationship to current unit: Introducing the idea of patterns in a sequence to students before they learn find patterns using numbers.
- Preparation and set-up of materials: Prepare visual cards to explain what a pattern is and what a sequence is. Prepare index cards with different patterns that can be acted out. Then, a play area needs to be cleared of tables and chairs.


## Step Three: Discussion

- Instructions for preparation:
o Assign a couple of students to move the tables and chairs to clear the play area.
- Instructions for playing:
o Split the class into groups of 3 or 4 students.
o Allow each group to pick a card from the cluster of cards so that they can act the pattern.
o Give all the groups a few minutes to prepare the actions they will be doing so that they can clearly express the pattern they are trying to present.
o Choose one group to go first in acting.
o While the first group is acting out their pattern, the audience (rest of the class) needs to be paying attention because they need to be able to notice the pattern being demonstrated.
o When a few students from the audience know what comes next in the sequence being demonstrated, choose two to three people to show what comes next. (This is for you to be able to assess whether or not the other students understand how to pick up on the pattern being demonstrated.)
o After the first group goes, repeat these steps with the remainder of the groups.
0 After each acting session of each pattern, discuss what the pattern was that was demonstrated to explain how the students knew what came next in the sequence.
- Casting, Volunteers, etc.:
o Groups of $\mathbf{3}$ or $\mathbf{4}$ students: Allow students to choose or teacher can choose.
o Group to act first: Chosen by the teacher by volunteers.
o Students from audience to fill in next part of sequence: Chosen by teacher.
- Strategies for Involvement:
o Encourage each student to use their imagination while acting out the patterns.
o Encourage each student to clearly express what the pattern should be through acting.
o Encourage different students from the audience to demonstrate what comes next in each sequence.
o Side coach by helping students to create ideas to actively demonstrate their patterns.
- Check for Understanding and Clarity:
o Ask if there are any questions concerning the activity. Give explanations whenever necessary to make sure that all students understand the object of the activity.
Step Four: Playing the Material
- Instructions: Give helpful suggestions during the activity if needed, but try to allow the students to express their imagination. Encourage students to be creative.
- Sidecoaching Ideas: Give suggestions on their play by using key words such as "What if," "Perhaps," or "Use your imagination." Keep encouraging students to be creative. The sky is the limit.
- Your Participation: The teacher should be a sidecoach during the activity so that the object of learning about patterns is clearly expressed.


## Step Five: Evaluation and Reflection

- Questions to generate discussion and reflection:
o What role was the easiest: acting out the pattern on your cards or figuring out what came next in the sequence then having to act it out? Why?
o What role was the hardest: acting out the pattern on your cards or figuring out what came next in the sequence then having to act it out? Why?
o What were some skills that you put into practice for this activity?
- Examples: Creativity, imagination, concentration, cooperation, expression, thought
o How did you use these skills?
o How can we improve this activity?
o What have you learned about patterns by doing this activity?
Step Six: Replaying
- Be ready to respond to requests to replay the activity!
o Example: If we were to replay the activity, what would you like to do to make this activity better?
o Example: We will replay the activity another time, but now it is time to move onto another subject.
- Strategies to encourage replaying:
o Encourage the students to improve this activity by putting forth more expression into the pantomiming/acting.
o Improve depending on the previous play experience.


## Step Seven: Evaluation and Reflection

## - Questions to generate discussion and reflection:

o What role was the easiest: acting out the pattern on your cards or figuring out what came next in the sequence then having to act it out? Why?
o What role was the easiest: acting out the pattern on your cards or figuring out what came next in the sequence then having to act it out? Why?
o What were some skills that you put into practice for this activity?

- Examples: Creativity, imagination, concentration, cooperation, expression, thought
o How did you use these skills?
o How can we improve this activity?
o What have you learned about patterns by doing this activity?


## Works Cited

"Children’s Creative Resources for You and Your Teacher." 3 Nov. 2010 [http://library.thinkquest.org/5291/resources.html](http://library.thinkquest.org/5291/resources.html).


| Name Phylicla | Project \# | Date $/ /-10$ |
| :--- | :--- | :--- |
| 10-15 minutes made | $\# 2$ |  |
| Evaluation for: | Possible 10 points <br> each |  |
| 1. Selection of subject/topic | 10 |  |
| 2. Selection/use of materials | 10 |  |
| 3. Preparation | 10 |  |
| 4. Organization | 10 |  |
| 5. Supervision/classroom mgmt | 9 |  |
| 6. Oral grammar/vocal techniques | 10 |  |
| 7. Sidecoaching/instructions | 9 |  |
| 8. Questioning techniques | 9 |  |
| 9. Discussion/evaluation/reflection | 9 |  |
| 10. Enthusiasm | 10 |  |
|  |  |  |

$$
\text { 8:56 Nato }-9^{0^{00}} \text { aetritici. }
$$

