



Iterative Processes and Patterns

Lesson Plan: Class 04 / IPP / 01



Overall goal of the lesson: Children learn to observe and look for patterns.

Prior knowledge required: Knowledge of simple patterns

MODULE 1:

Module time: 35 X 2 minutes

Goal: To introduce patterns through exercises and explain what is a pattern after they learn to intuitively recognize patterns

Description: Children will learn to look for patterns in a group of things or in sequences or in visual designs.

Material required:

Physical:

1. One copy of the worksheet per child.
2. Writing material to solve the worksheet: pencil and eraser.

Electronic:

PPT Presentation

Procedure Summary:

1. Run through the presentation
2. Do all the activities that are in the presentation
3. Distribute the worksheets
4. Let children try to solve them in class and help them with the answers

Procedure Details:

1. Slide 2,3 and 4:
Introduction to pattern. We don't introduce what is pattern. Rather we give some sample sequences and series to solve and ask them why are they able to solve. They themselves will come up with what is pattern.
2. Slide 5,6 and 7:
We introduce what is MOTIF and then present examples of various patterns with MOTIF. Before going ahead with slide 6 and 7, we recommend to ask and identify patterns with MOTIF around them. Same can be repeated after slide 6 and 7.
3. Slide 8 :
We officially introduce tessellation in this slide. We also explain with an example why something is not a tessellation. Again here also, asking kids to come up with examples of what are not tessellations is recommended. In this slide itself, please introduce and discuss the idea of creating tessellation. Ask kids about what how will they go about creating simple tessellations. How will they **break a complex problem of making tessellation into small steps** .
4. Slide 9:
We give them the answer to making tessellations. But now ask them to make tessellations with all the shapes i.e. - Square, rectangle and triangle. Also, ask them if they can make a tessellation with circles. Why or Why not?
5. Slide 10 through 15
These are support slides. Only to be gone through ones all the kids have made their tessellations
6. Slide 16 and 17
Introduction to multi shape tessellations, examples and how to create various multi shape tessellations using same shapes like make at least 2 different tessellations using square and triangle. Also, can we make a multi shape tessellation using circles. What are various examples of multi shape tessellation in real life.

7. Slide 18 and 19
Identify patterns in rangoli.
8. Slide 20
Most important slide of the chapter. Here it is explained through examples - patterns and tessellations that what is a Loop.
9. Slide 21 and 22
Some examples of patterns and tessellations to reinforce the concept
10. Slide 23
Chapter at a glance.
11. On to the worksheets!