

# **TITLE: HOW I TEACH PATTERNS IN A GRADE ONE CLASS**

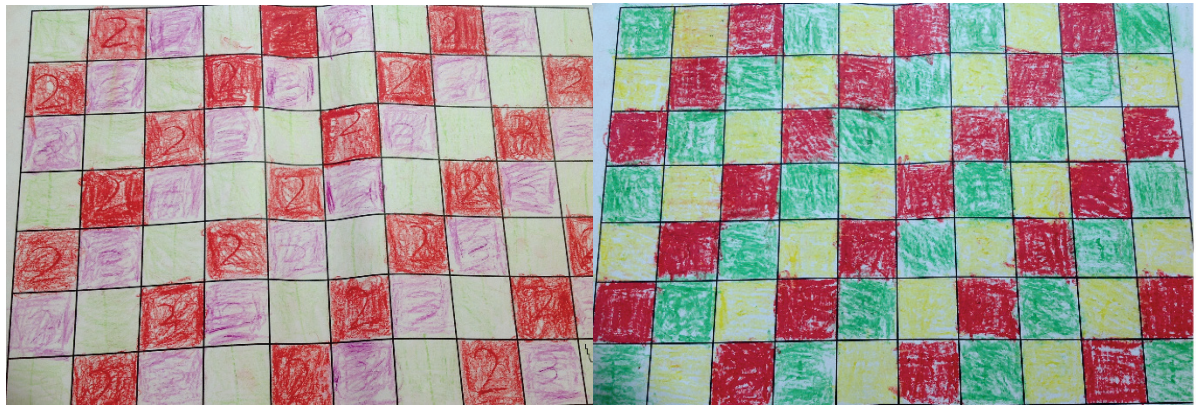
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## **INTRODUCTION**

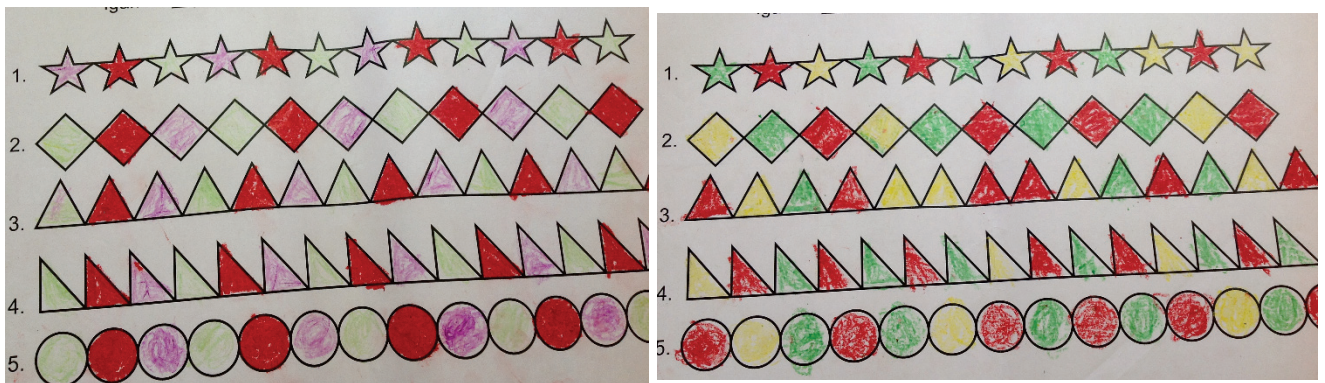
Patterns are things, numbers, shapes, images that repeat in a logical way. Patterns help children learn to make predictions, to understand what comes next, to make logical connections, and to use reasoning skills. The elements of a pattern repeat in a predictable manner. Patterns can be based on a template or model which generates pattern elements, especially if the elements have enough in common for the underlying pattern to be inferred, in which case the things are said to exhibit the unique pattern [www.wikipedia.org](http://www.wikipedia.org). Finding and understanding patterns gives us great power. With patterns we can learn to predict the future, discover new things and have a better understanding of the world around us [www.mathisfun.com](http://www.mathisfun.com). Numbers can be arranged into a pattern, you can make your own patterns with numbers. Number patterns such as 1; 2; 3; ..... are familiar to Foundation Phase learners, these are the first patterns they learn. As learners advance they learn number patterns with different sequences. Patterns can also be formed with shapes, pictures, colours and words.

## **PRESENTATION**

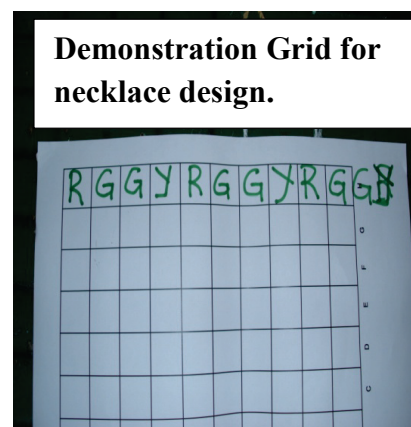
In the first demonstration lesson learners were given square grid papers to write numbers 1; 2; 3 in the first three squares. They were to repeat these numbers until they filled in the whole grid. As they were sitting in groups of three in a desk, they were expected to take turns in writing these numbers on the grid. After completing the writing of numbers they were asked to choose a colour for each number and then colour each square with the selected number, for example if they choose green for number 1, red for 2 and pink for 3 like in the example on the picture below. The competent groups were later given a smaller grid to complete as an individual activity.



In the second demonstration lesson they were given different shapes to colour using their own design. They were also asked to take turns in colouring the design. Others managed to repeat a specific pattern some just colour the shapes to make beautiful decoration but failing to produce a repeating pattern out of the chosen colours.



The third lesson was on application where learners were expected to first make a design of the colours of unifix cubes they will use to make a necklace. A demonstration on how to make a design on the grid was first conducted together with the class. One group was asked to do an activity for the class by first selecting the colour of the unifix required for the design. A demonstration on how to thread the unifix following the pattern on the grid was shown to the learners.



The groups were then asked to make their own designs with not more than three different colours. After finishing the design they collected the colours of the unifix they need for their necklace.

The majority managed to create good patterns but others were still struggling in identifying the pattern they have followed in their design. The picture below



shows the products of different groups as I have stated that others did not managed to follow specific pattern in their design. What I have observed in these lessons is that learners enjoyed working with concrete objects in making their patterns.

The last demonstration lesson was a class activity which combines colour and shapes. We were designing a T-shirt changing it from a plain white to a colourful garment. A plain white T-shirt was pasted on the board, learners were asked to select the shape they will use to design the shirt. They first selected a triangle and a row of triangles with alternating colours was pasted by learners taking turns on the shirt. Different shapes and colours were used and the picture below was a complete product of learners' design with shapes and colours.



### Demonstration Grid for necklace design



### Conclusion

In our discussion with the teachers who observed the lesson; they highlighted high learner participation in the lessons. The majority of learners were able to finish their individual activity after completing the group activity. The teachers were able to see that the group activity provided learners with opportunity of peer support, learners learn more from others while doing an activity in a group. When asking learners to explain how they created their patterns assisted the teachers with ideas of engaging learners not only with the “what” questions but also the “how”. Learners were also able to predict if you give them an idea of the pattern and also count the number of unifix they needed to complete their necklace.

### REFERENCES

1. [www.wikipedia.org](http://www.wikipedia.org)
2. [www.mathisfun.com](http://www.mathisfun.com)