

Game SA1: Extending patterns

Strand: Algebra

Strand Unit: Extending patterns

Curriculum Objectives Covered:

- Identify, copy and extend patterns in colour, shape, size and number (3-4 elements)
- Discover different arrays of the same number
- Recognise patterns and predict subsequent numbers

Name: “Jewellery Making”

Aim: To make bracelets by copying and extending a pattern of beads, and then by creating your own pattern of beads.

Activity Area: Classroom

Duration: 40 minutes

Integration:

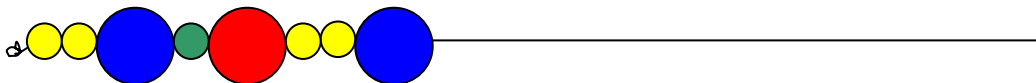
Visual Arts: Fabric and fibre

Resources:

- 1 piece of string for each child (approx 20cm in length)
- A tub of 12 small yellow beads, 6 large blue beads, 3 large red beads and 6 small green beads for each child
- Whiteboard and red, yellow, blue, green and black markers

Set Up:

1. Draw a bracelet on the whiteboard with the beginning pattern of the beads on it for the children to copy and then extend. The drawing should look like this:



2. Draw the following number patterns on the whiteboard:
1, 2, 3, __, 5, 6, __, 8, 9, 10.
10, 9, 8, __, __, 5, 4, 3, __, __.
3. Make a knot at the end of each child's piece of string.
4. Give each child a piece of string and a tub of 12 small yellow beads, 6 large blue beads, 3 large red beads and 6 small green beads.

Start Playing:

1. The teacher shows the children the drawing of the beginning part of the bracelet on the whiteboard, and guides a class discussion around what the children think the next beads on

the bracelet should be and asks their reasons for their choices.

2. After the bead pattern has been discussed, the teacher brings the children's attention to the number patterns on the whiteboard. Together, the teacher and children go through each number pattern and fill in the missing numbers.
3. The children now start making their first of two bracelets. The first bracelet is made by copying the pattern on the whiteboard using beads and string, and then continuing the pattern in the same way.
4. When the children have finished copying and extending the bracelet on the whiteboard they should carefully pour the beads from their bracelets back into their tubs.
5. Each child can now make a second bracelet using the same beads, but should this time make a pattern of their own.
6. When each child has finished making his/her second bracelet, the teacher or a helper ties the two ends of the string together to finish the bracelet.