Foundation

# Hidden Patterns

*Teacher notes*

**Why this activity:** This playful activity requires students to think about and describe their hidden pattern accurately so that their partner can recreate it.
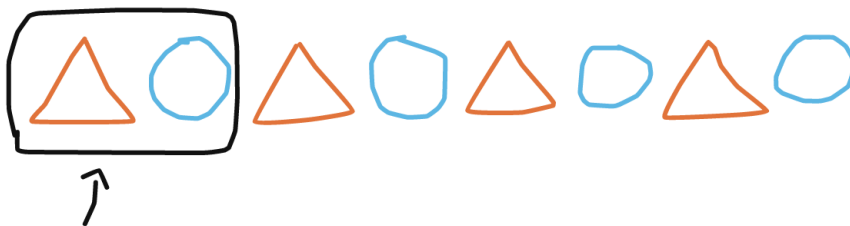
**Materials:**

- Blank page (1 per student)
- Coloured pencils (2 different colours - both students in a pair will need the same colour set)
- A way of hiding drawings (e.g. stand a clipboard up between or use a book)

**Set up:** Organise students into pairs and have them set up their tables with the required materials.

**Model the activity:**

1. Invite a volunteer to be your partner and help demonstrate. This person won't be able to see the pattern you draw.
2. Explain that you are creating a **repeating pattern;** a pattern where **the same terms repeat** over and over.
3. First, model the drawing of a **repeating pattern** where each **repeating element** contains two elements (e.g. triangle, circle). Keep the pattern hidden from your partner.



repeating element

4. Describe the pattern to your volunteer partner but model this in a way that doesn't provide enough information. For example:

   *The repeating element in my pattern is 'triangle, square'.*

   Ask the group whether that's enough information for them to draw. Someone will point out colour needs to be mentioned. Try again:

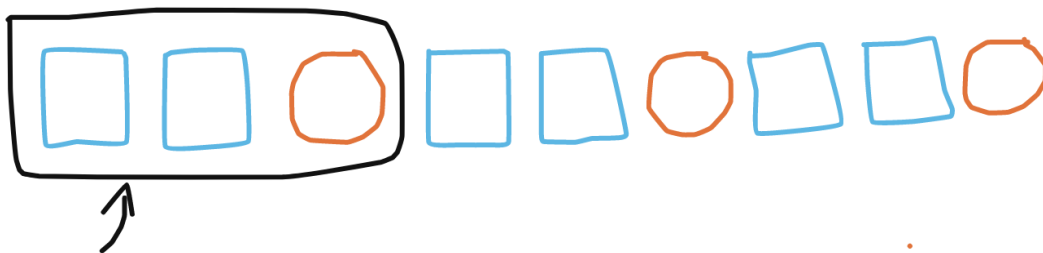   *The repeating element in my pattern is 'orange triangle, blue square'.*

Ask the group again - is that enough information? Continue adjusting your description until the group decides there is enough information.

5.  Once the volunteer listener has finished drawing, reveal the hidden pattern and invite the group to compare and check that they match completely.

    If they don't match, ask - *What extra details could I have used in my description?*

    Remind students that mistakes help us see that we are learning. It's good to challenged this is when our brains learn and grow.

6.  Do a second demonstration with a different volunteer. This time use three elements (e.g. square, square, circle).



**repeating element**

7.  Observe and monitor students as they take turns playing in pairs.

**Variations**:

- **Letters**: Create and describe hidden patterns using lower and/or upper case letters.

ABABABAB

- **Numbers**: Create and                                    describe hidden patterns using numbers.

13131313

- **Manipulatives**: Create and describe hidden patterns using manipulatives such as coloured teddies, other counters or attribute blocks.