Using the Linking Pegboard Pattern Cards

Introduction
As with the Giant Pegboard Pattern Cards, the copying of these patterns, first on to the pegboard and then on to the blank dots' sheet or paper using coloured pens, helps to develop a child’s ability to perceive and analyse visual forms, skills which are essential to the development of literacy and numeracy. The smaller 5 x 5 Linking Pegboards offer an additional advantage over the Giant Pegboards in two ways. First, because each row has an odd number of holes, true middles can be found. Second, because the boards can be linked both horizontally and vertically, the child is able to copy and extend each pattern in either direction. FH or she can also learn the difference between copying and mirroring (bilateral symmetry), something which is often confusing for a child with laterality problems, as seen in the reversal of letters and numbers. Finally, using the cards can teach rotational symmetry.

About the pattern cards
The child copies the design on each card on to the pegboard with the pegs – the coloured dots representing the pegs and the grey dots representing the holes. The cards in the set increase in difficulty. Because the patterns are designed to reflect the development of the child’s understanding of line and form, the cards should be completed in the correct order.

Cards 1 - 3 establish making a square and finding the middles of lines. This providing a spatial framework around ‘the basic 9 positions’ (M, MT, MB, ML, MR, TL, TR, BL, BR)

Card 4 should be used to copy the pattern using just one board, then learning to extend it by adding one, two or three more boards horizontally.

Cards 5 – 6 can be used first to copy, then to mirror, each pattern, working in the direction suggested at the top of the card (i.e. across or down). Any number of boards can be added to extend this activity.

Cards 7 – 8 introduce the concept of rotational symmetry. The boards are linked to form a large 10 x 10 square enabling the pattern to be reversed (or mirrored) both horizontally and vertically.
Cards 9 – 12 introduce basic shapes – triangle, diamond, rectangle and zig zag -and can be copied or mirrored in either direction using the linked boards. Cards 13 – 15 use pictures to be copied linking the boards horizontally. Cards 16 -18 again use pictures but this time the boards must be linked vertically.

With all these activities the child must be careful to position each form accurately on the board when copying and when transferring the pattern on to the blank dots’ sheet or paper. To ensure accuracy it is suggested that the child counts down the rows (1st, 2nd, 3rd, etc.) and numbers across the rows (1 – 5).

**Copying the patterns**
In order to maximise the benefit of the pattern cards, it is suggested that the child describes in words what s/he sees on each card before placing the pegs in the board. Once the child has verbalised what is on the card and completed the pattern with the pegs, s/he should then draw what has been done on to a 5 x 5 sheet of dots, circling the relevant dots with the correct colours using pens. The recording of the peg patterns on to paper increases the impact of the activity by linking the idea, through language on to the page. All three aspects of the activity – saying, doing and drawing – contribute to the child’s understanding.

**How to use the pegs**
It is recommended that the child uses the dominant hand for working with the pegs. The gripping of the peg and the force required to insert it into the board strengthen the muscles of the hand, wrist and arm and help to develop the tripod grasp for holding a pencil or pen. If the box of pegs is placed on the child’s non-dominant side (i.e. left for right-handers and right for left-handers), the pegs can be picked up by the non-dominant hand and transferred across to the dominant hand for pushing in. This integration of movement of the two hands, along with the strengthening of the writing hand, stimulates sound motor development and improves manual dexterity.