

Peg to Pen

In partnership with Nexus TEC Ltd

Introduction

Learning to write letterforms requires the mastery of a series of different processes: motor, cognitive and perceptual. Motor processes involve learning to hold the writing implement in a comfortable and efficient way for writing; the cognitive ones lead to understanding the different lines which make up the letters; the perceptual ones help the child to create an internal representation of each letterform, prior to performing the right movement sequences to write them down. The '**Peg to Pen**' programme, devised by Nexus, provides experience in these three areas in a stepped progression which reflects the natural development of the child. It achieves continuity by offering exercises at each stage to be used with different types of apparatus. These stimulate the development of writing skills through the copying of patterns which are fundamental to handwriting.

- At **Step 1**, the Giant Pegboard, provides basic motor exercises for strengthening and refining the muscles of the hand and fingers. Resistance offered by the pegboard when the pegs are inserted, acts as to stimulate the required muscle groups involved in handwriting.
- **Step 2** uses the 'Link and Lace Playboard'. Here, coloured laces are threaded into a form board using a triangular applicator shaped like a pencil. This activity links the peg work to handwriting as, by pressing the tool into the board for lacing, the same muscles invoked during the peg exercises are again employed but with apparatus resembling a writing implement.
- Once the writing patterns have been mastered using these two types of apparatus, the child moves to **Step 3**, using the Nexus Triangular White and Colour Chalk on the Lined Chalk Board. This is another important stepping stone towards writing as not only does the chalk on board provide vital sensory feedback from the fingers to the brain, the chalk sticks have been designed in a triangular shape, again to encourage correct grasp of the pencil and pen.
- **Step 4** uses colour markers on dotted paper and whiteboards. This transition provides further sensory experience for the child, as the smooth surface of the whiteboard allows the pen to move easily, and encourages fluency. First, sheets of plain dots spaced in two different sizes enable the child to make circular movements ready for writing curved letters, and second, the patterns established earlier can be connected using more flowing movements.
- **Step 5** takes the child from the early sensory motor stage where fluency of movement is the focus, to the intermediate learning stage where the writing patterns are refined to achieve greater accuracy. This stage is introduced using the HB Jumbo Triangular Handwriter Pencil with a wide barrel followed by a narrower barrelled pencil. Sheets of dots, as before, act as a guide for the now well-established patterns, helping the child to exert greater control of the pencil whilst forming the letter-like strokes.
- **Step 6** uses the Nexus Mini Triangular Handwriter Pen to perform all the writing patterns and variations learned earlier, making the final link between the pegs and the pen.

This thoughtfully designed sequence of exercises using the different types of apparatus lead the child in a developmentally logical way from the early sensory experience of mark-making through to being able to make controlled, flowing writing movements which are the pre-cursor to producing fluent handwriting.

Step 1. The Giant Pegboard

In order to get the maximum benefit from using the giant pegboard and pegs it is recommended that the 5 steps set out below are followed:

1. The child should sit up at a table as for writing with the pegboard centred in front of him/her.
2. The pegs should be placed in an open container on the *non-writing* side of the pegboard, i.e. on the left for right-handers or on the right for left-handers.
3. The pattern cards to be copied should be placed above the pegboard in clear view of the child.
4. Before making the patterns the child should be asked to say out loud what s/he sees on the card in terms of the number of pegs, the colour, the position (top/bottom/left/right) and the direction of movement (e.g. down from the top).
5. When copying the patterns the child should pick up the pegs one by one with the *non-writing* hand and transfer them to the *writing* hand for placement.

After the pattern has been completed with the pegs it should be recorded by circling round the relevant dots using the blank sheet of dots, either on paper or on wipe-clean whiteboards using the recommended Nexus writing implements (see later).



Step 2. The Link and Lace Playboard

The Nexus 'Link and Lace' Board is designed to complement the giant pegboard using the 10 x 10 hole format. This allows the same pattern cards to be used for both pieces of apparatus but in different contexts, encouraging teaching for transfer. As with **Step 1**, the following approach is recommended for maximum benefit to the child:

1. The child should sit up at a table as for writing with the lacing board centred in front of him/her.
2. The pattern cards to be copied should be placed above the pegboard in clear view of the child.
3. Before making the patterns the child should be asked to say out loud what s/he sees on the card in terms of the number of pegs, the colour, the position (top/bottom/left/right) and the direction of movement (e.g. down from the top).
4. To prepare for the exercises the child needs to thread one of the applicators with the first colour to be used. S/he can do this in any way s/he chooses but it is important that the teacher does not intervene as threading is part of the exercise.
5. When copying the patterns the child should decide where on the board to start and to push the applicator into each hole and out again, leaving a continuous line of colour to represent the lines copied from the pattern card. This should be repeated with each colour shown on the card.

After each pattern is completed it should be recorded on the dots sheets provided, or on a wipe-clean whiteboard, but this time as continuous lines joining the dots using the recommended Nexus writing implements (see later).

Step 3. The Nexus Triangular White & Colour Chalk & Lined Chalk Board

Once the child has copied and become familiar with the six writing patterns by physically making the lines (first with the pegs and then with the coloured laces), the next step for the child is to convert the patterns into flowing writing movements. The lines which were created using separate holes on the previous apparatus are now copied as continuous writing traces, an important step towards handwritten lines.

The Nexus Triangular White and Colour Chalk on the A4 lined chalkboard provide the perfect vehicle for this development as they are designed for the younger child to hold comfortably. The chalk sticks are shaped to assist the child in adopting a good grasp prior to using a pencil or pen and, in addition, the combination of chalk on board gives sensory feedback which is essential for learning how much pressure to apply to the writing surface.

1. It is recommended that the child copies the patterns using the printed horizontal lines as a guide, working from left to right and from top to bottom, as with handwriting.
2. For patterns 1-5 the chalk does not leave the board throughout the drawing of the pattern, providing experience of the continuous lateral movement from left to right.
3. For pattern 6, the child can choose how to perform it. S/he may first draw a continuous first zig-zag line starting at the top line (as in line 5) then add the opposite zig-zag starting at the bottom line. Alternatively, the pattern may be perceived as series of 'X's where the child lifts the chalk for each new form.

Once this step has been practiced and can be confidently performed, the child is ready to move towards working on paper with the Nexus pencils and pens.



Step 4. Triangular Colour Markers

Triangular Colour Markers mark the next stage of progression for the developing writer. To begin with, the markers are used with the paper dot sheets to copy the peg patterns, circle by circle, with the dots as a guide. These patterns can also be copied onto whiteboards using whiteboard markers.

The circling is important as, if performed in an anti-clockwise direction starting above then round the dot, it helps to establish the curved movement which all the letters in the 'Curly C' group start with. By copying every peg on to the 10 x 10 dots' sheet, the child gains a great deal of experience exercising the fingers with rotating movements of the pen. As control of the pen increases, the patterns can be copied again but this time in a continuous movement, joining the dots.

Step 5. The Nexus HB Jumbo Triangular Handwriter Pencil

This pencil continues the progressive journey for the emergent writer when s/he is ready to move on to recording the patterns on to paper. The 9.6 mm Triangular Handwriter is suitable for the younger child and can be used first for copying the patterns on to the printed paper dots' sheets. As the child gains more control, s/he can move to a narrower barrelled pencil. With both styles of pencil, once the child is able to perform the patterns using dots as a guide s/he can progress to copying the patterns using the standard lined paper provided in schools and then from memory.

At this point, the dots' sheets can be used to write each letter more accurately, both the upper and the lower case forms, enabling the child to appreciate the relative size and alignment of each letter.



Step 6. The Nexus Mini Triangular Handwriter Pen

The final step in sequence from 'Peg to Pen' is the move to using ink, something which may prove challenging for some children. To reduce the stresses of making this move, Nexus provides the Mini Triangular Handwriter Pen to support the child when using ink. This pen may be used with the patterns as in **Step 5**, in order that they get used to the accommodations which need to be made in learning to use adult writing implements. The continued practice which the patterns provide allow the child to become proficient, and they will be able subsequently to use these ink pens as their primary writing tool in the classroom.

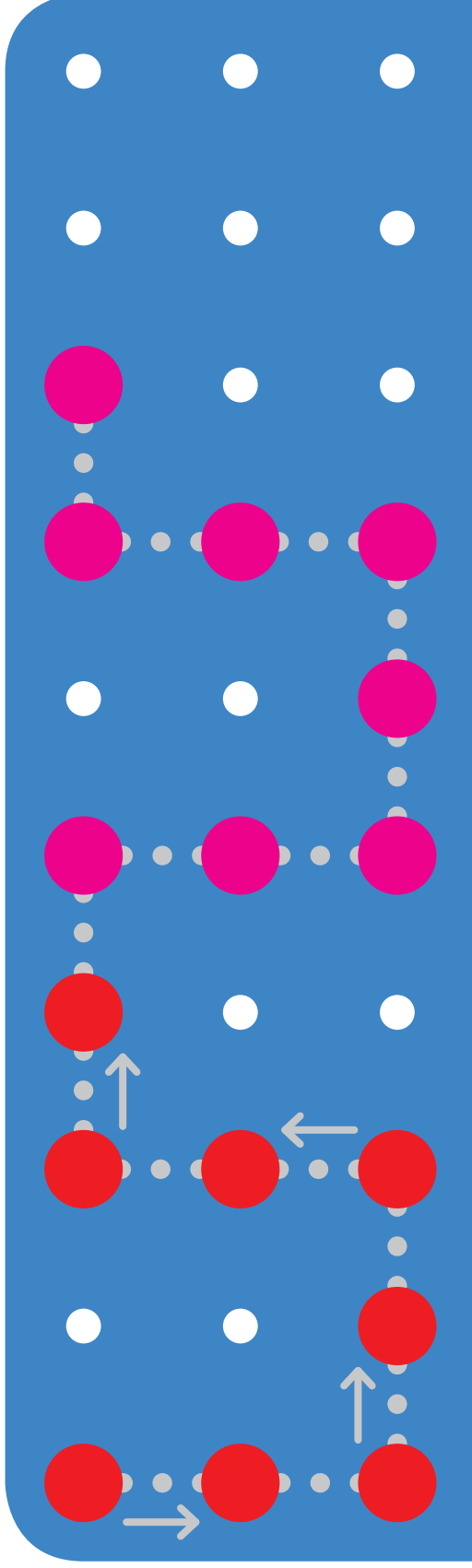


Written by

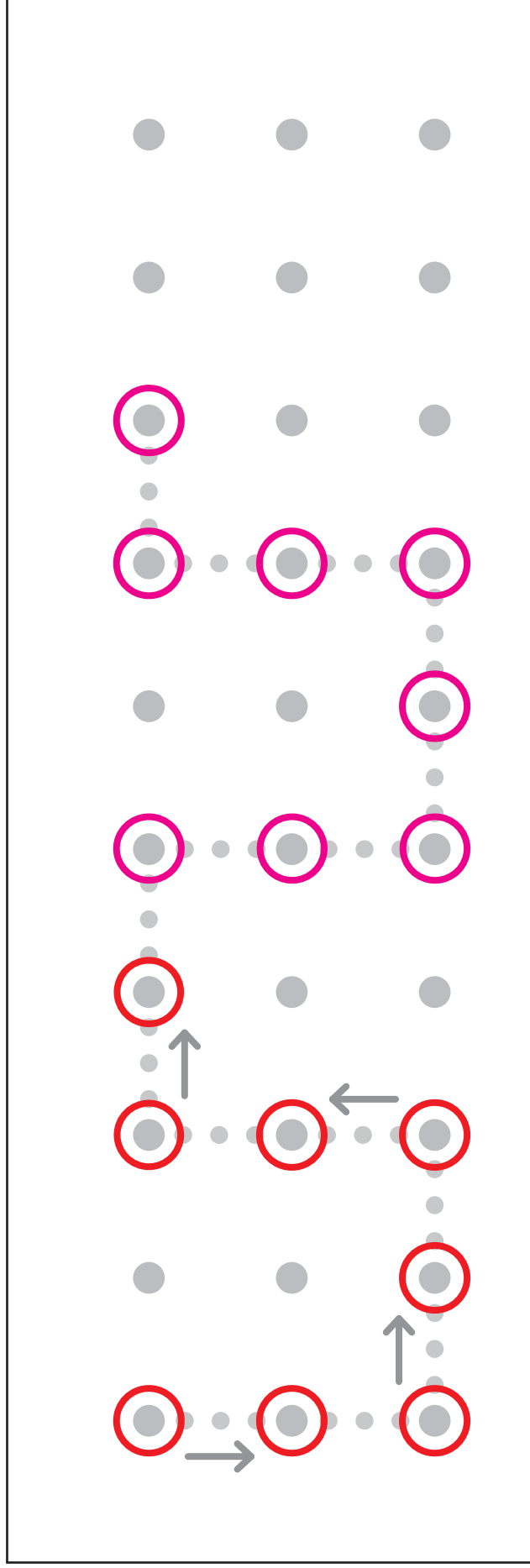
Dr. Angela Webb, Psychologist,
National Handwriting Association (Chair)
U.K.

Pattern Cards

Copy this pattern onto the Peg Board

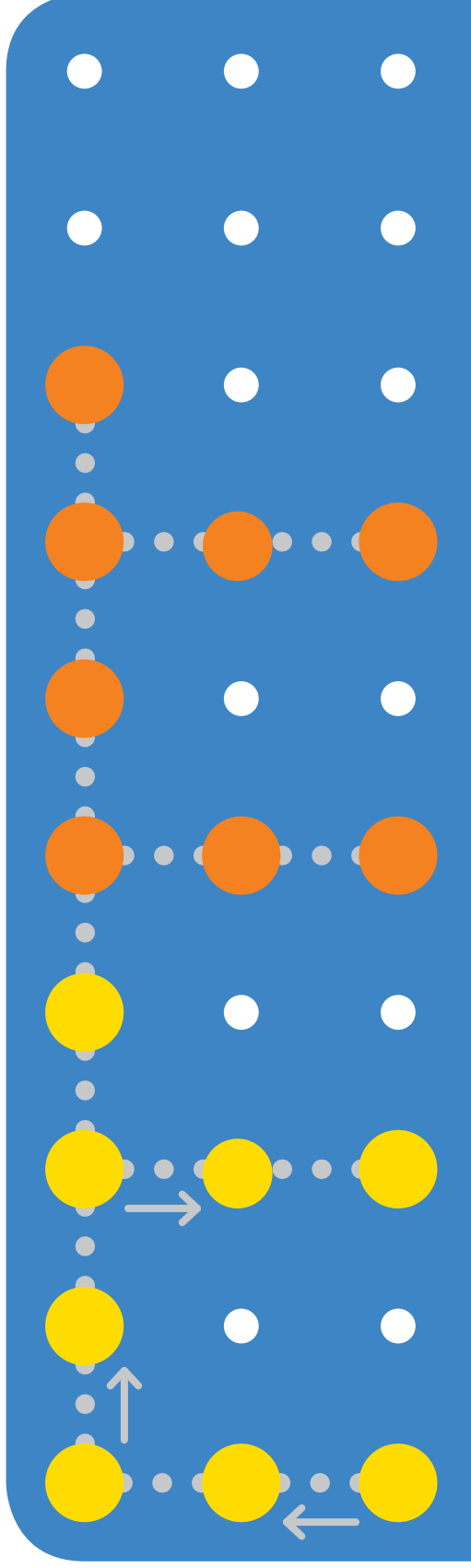


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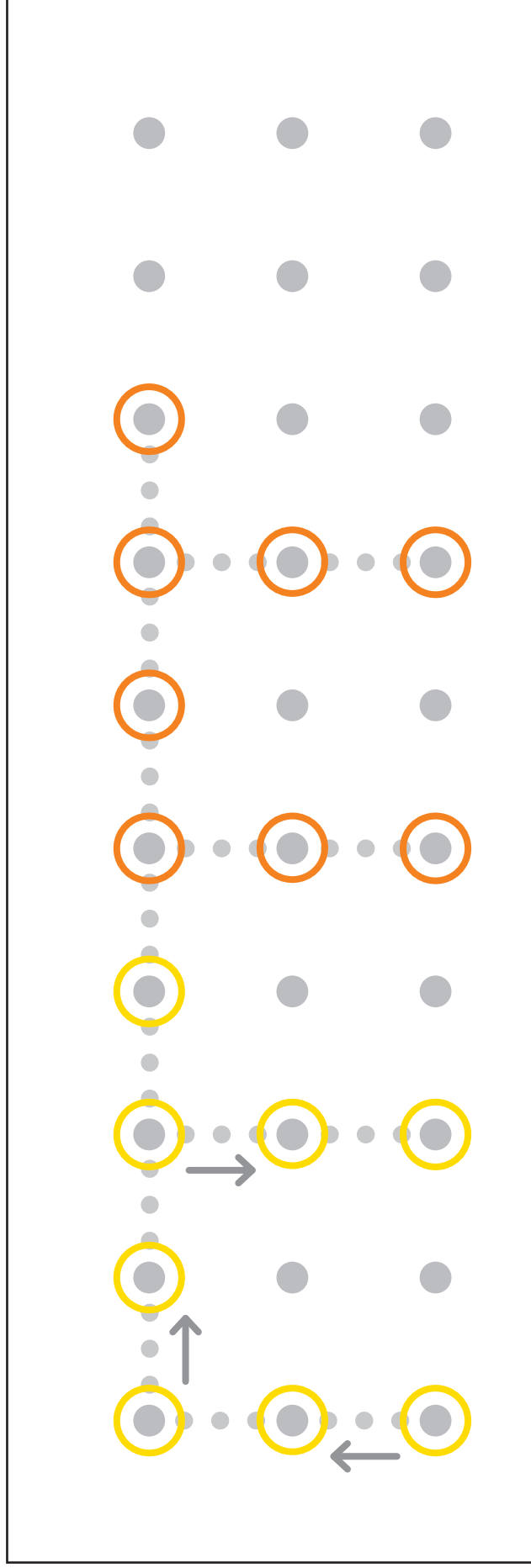


Pattern Cards

Copy this pattern onto the Peg Board

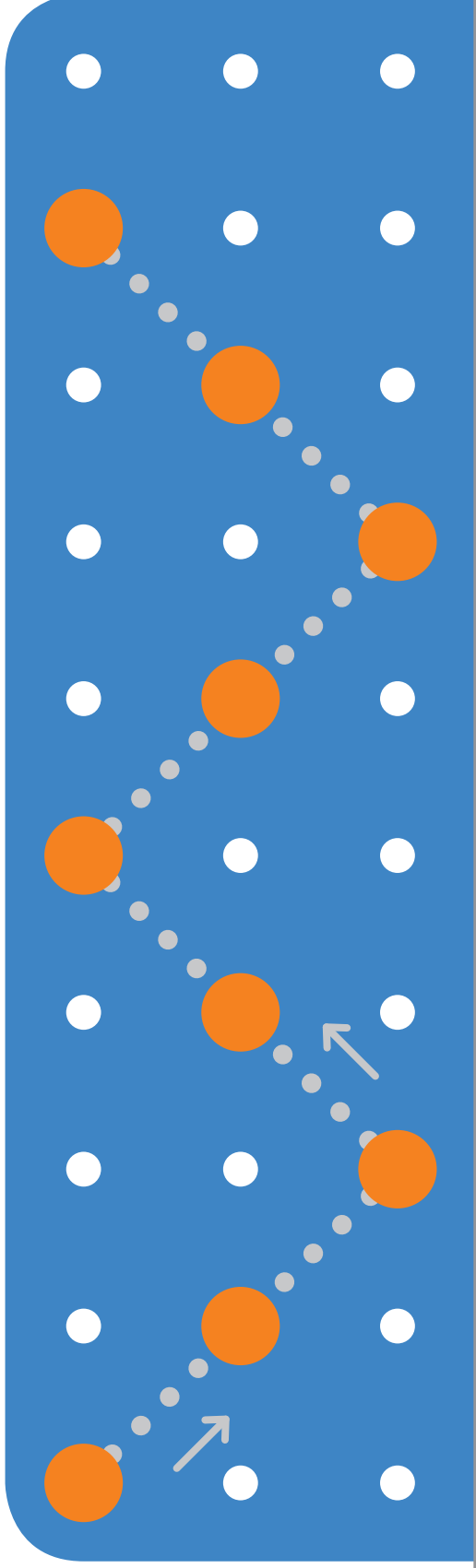


Copy this pattern onto the photocopied 140 dots work card by making a circle around the dots

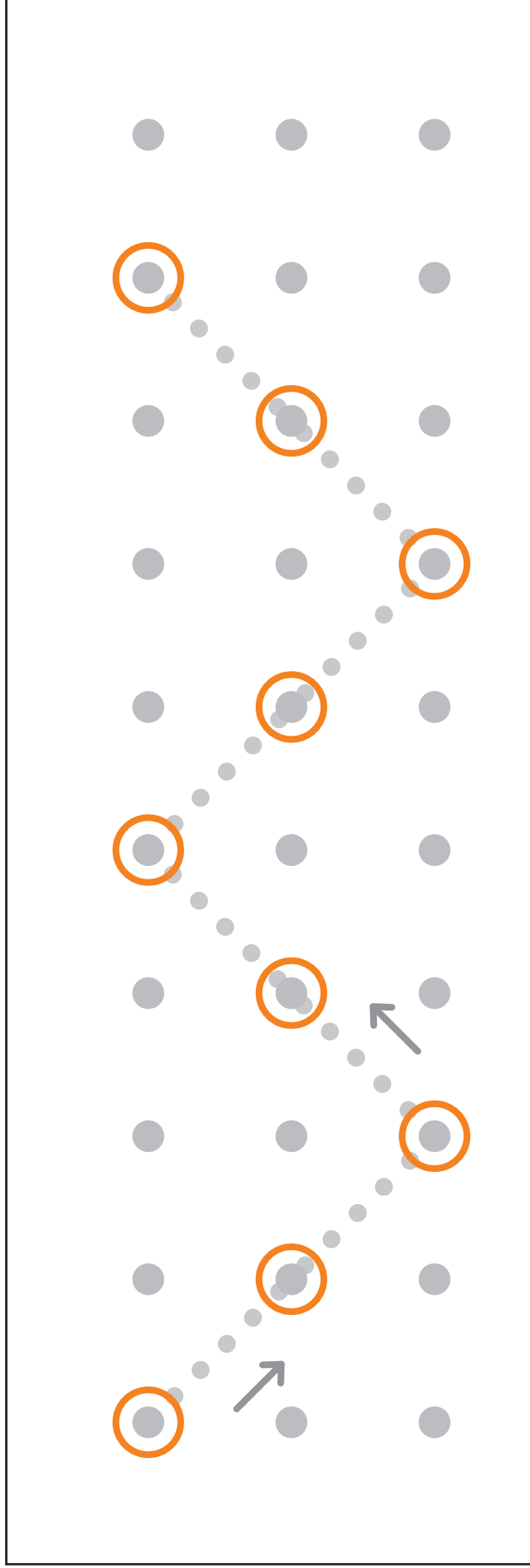


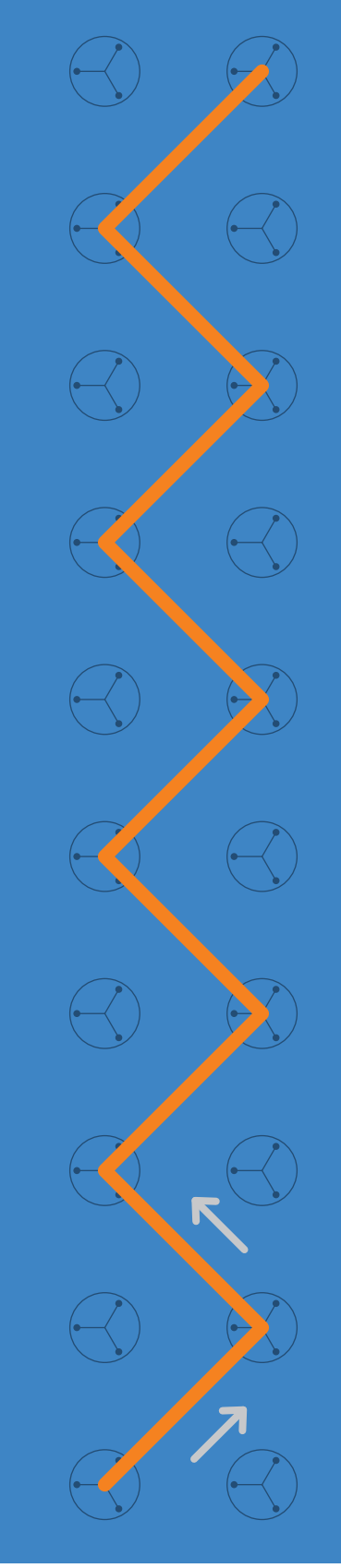
Pattern Cards

Copy this pattern onto the Peg Board

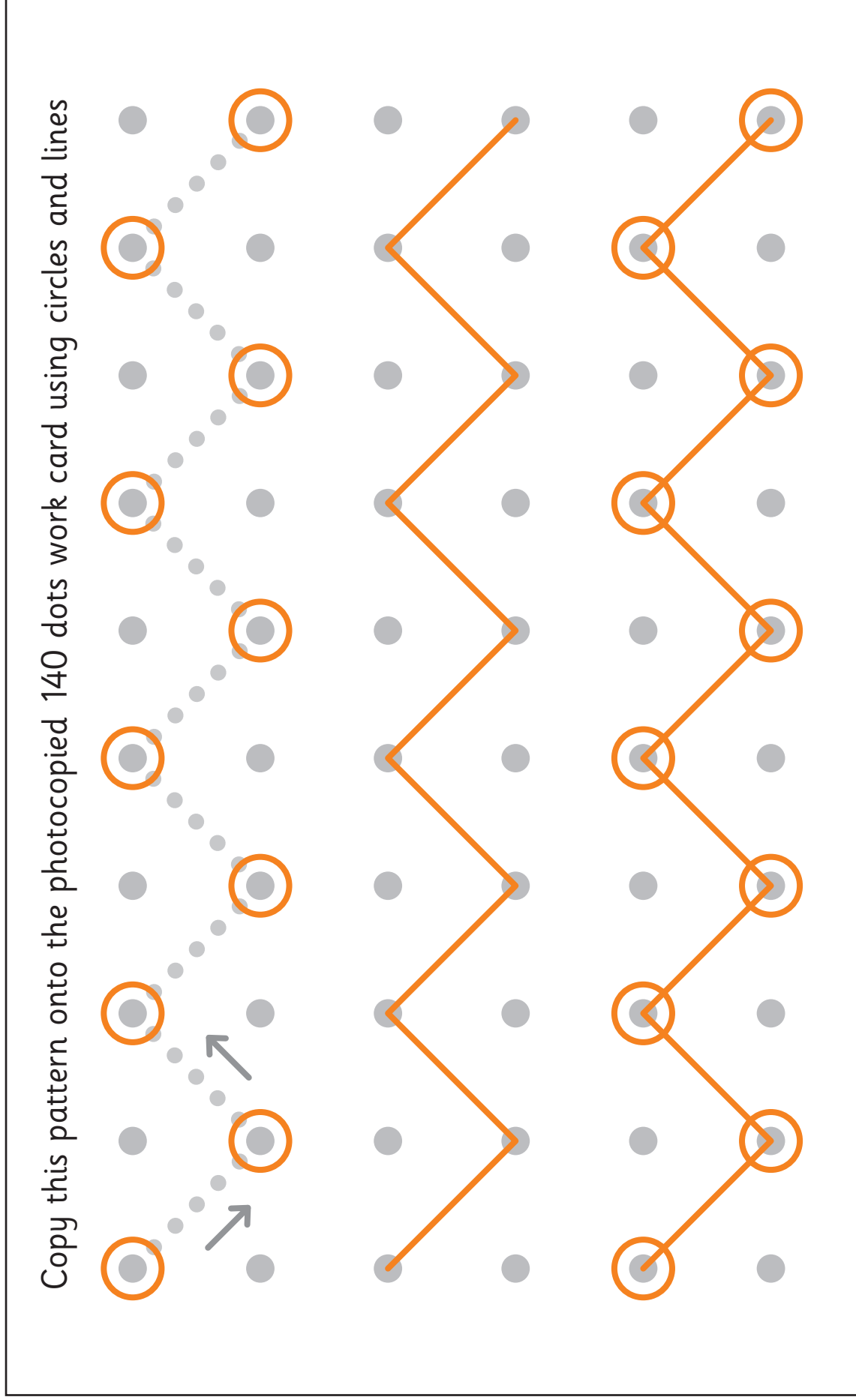


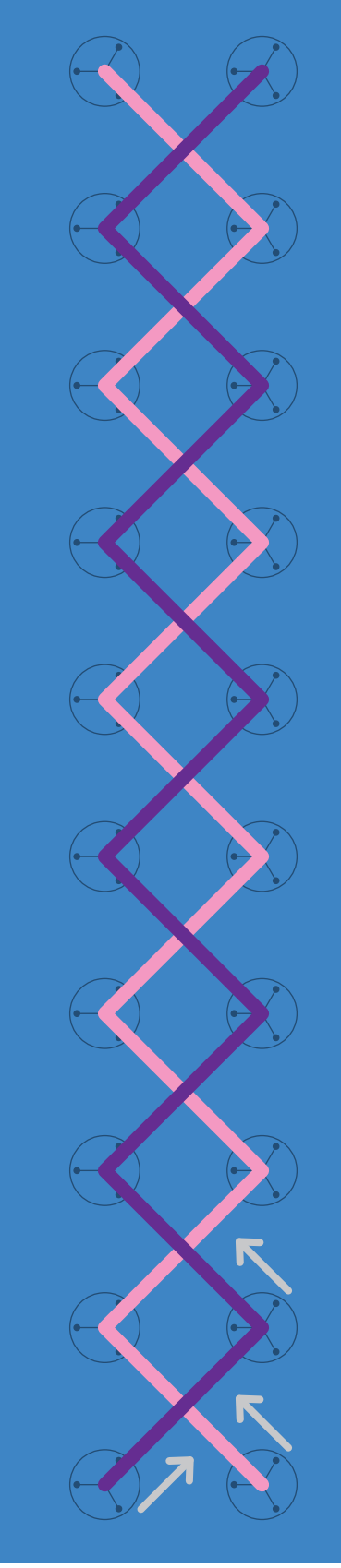
Copy this pattern onto the photocopied 140 dots work card by making a circle around the dots





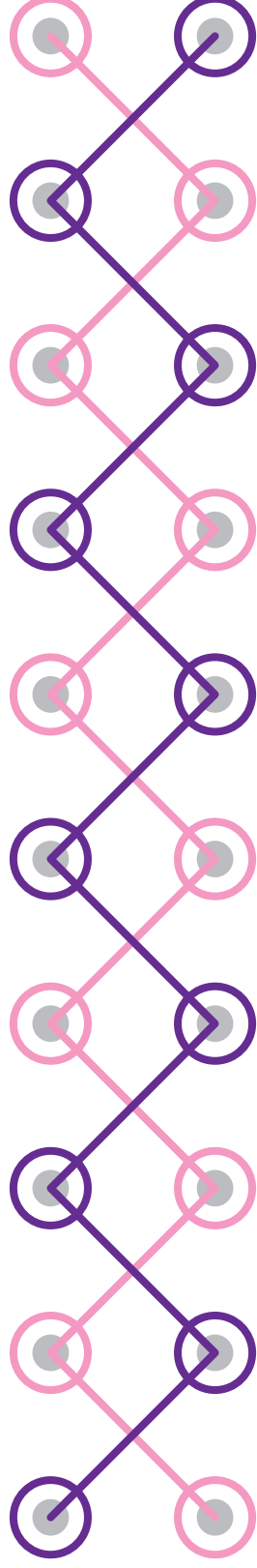
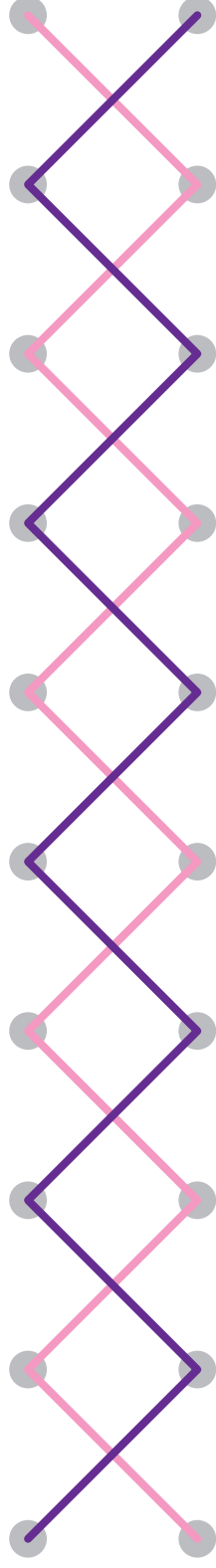
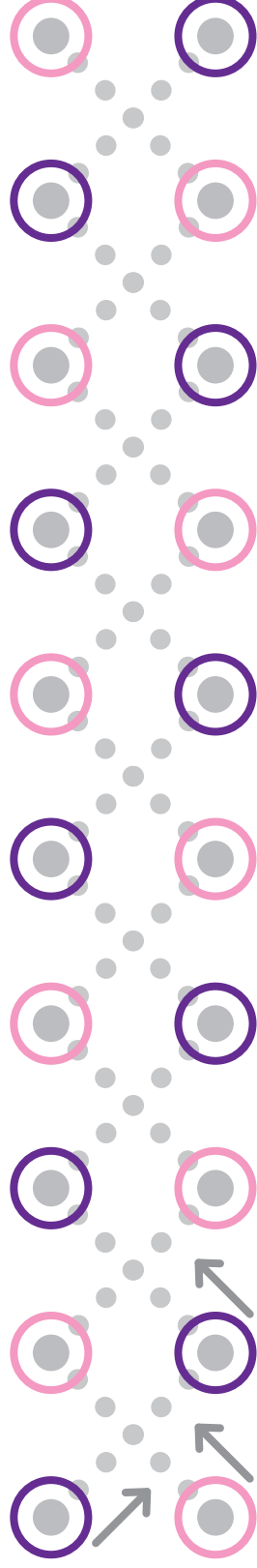
Pattern Cards – Copy this pattern onto the Link & Lace Board



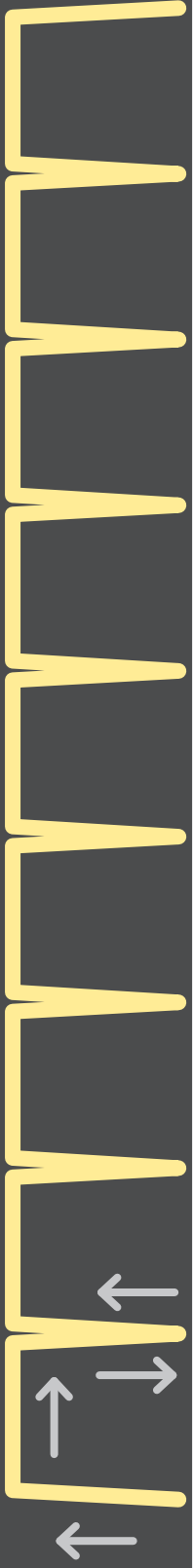
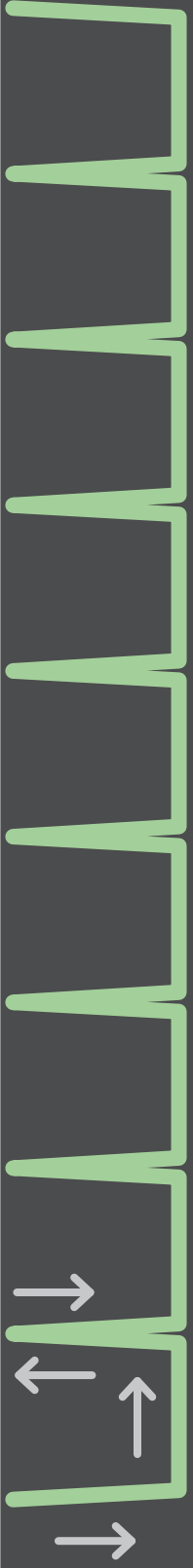
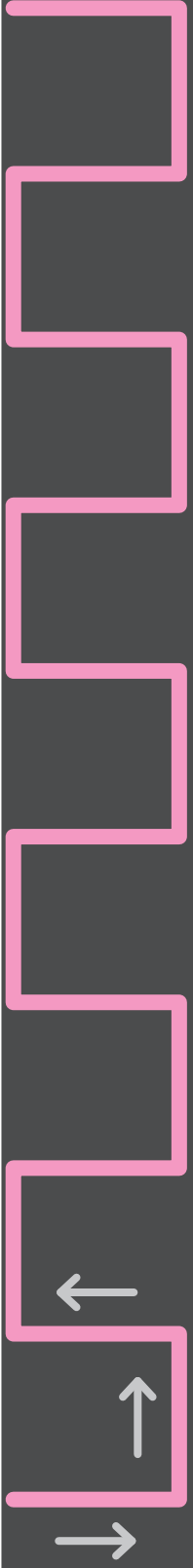


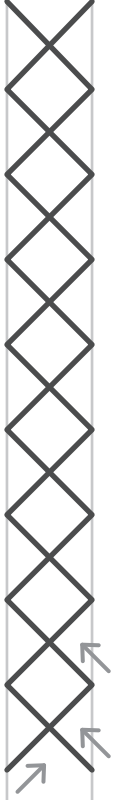
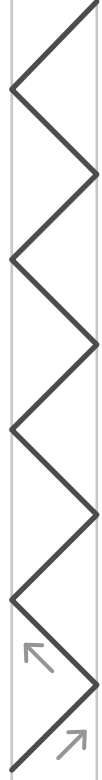
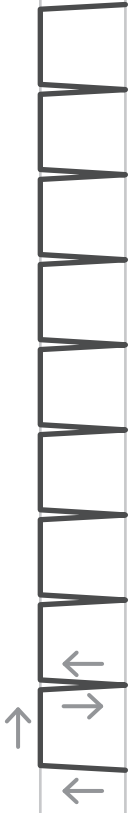
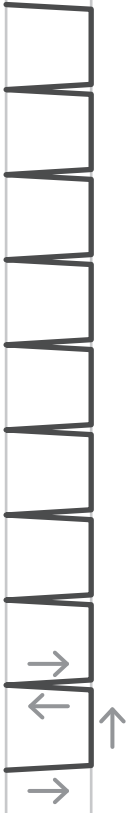
Pattern Cards – Copy this pattern onto the Link & Lace Board

Copy this pattern onto the photocopied 140 dots work card using circles and lines



Pattern Cards - Copy these patterns onto the Chalkboard





abcdefghijklmnopqrstuvwxyz

lmnopqrstuvwxyz

vwxyz

A B C D E F G H I

J K L M N O P Q

R S T U V W X Y Z

0 1 2 3 4 5 6 7 8 9

a b c d e f g h i j k

l m n o p q r s t u

v w x y z

a b c d e f g h i j k

l m n o p q r s t u

v w x y z

a b c d e f g

h i j k l m n

o p q r s t u

v w x y z

