

## Activity Title: What about pixels?

**Theme:** Cylinder systems

**Month:** December

**Aim:** To introduce children to the knowledge of pixels; Learning about how to represent a picture using cylinders; increase creativity; Starting to understand how picture can appear on a computer

**Resources/Materials needed:** Play corn or hama beads (if you don't have them pupils can stick cut straws); card board grid; sampling patterns, glue

**Subject** Technology

**Activity**

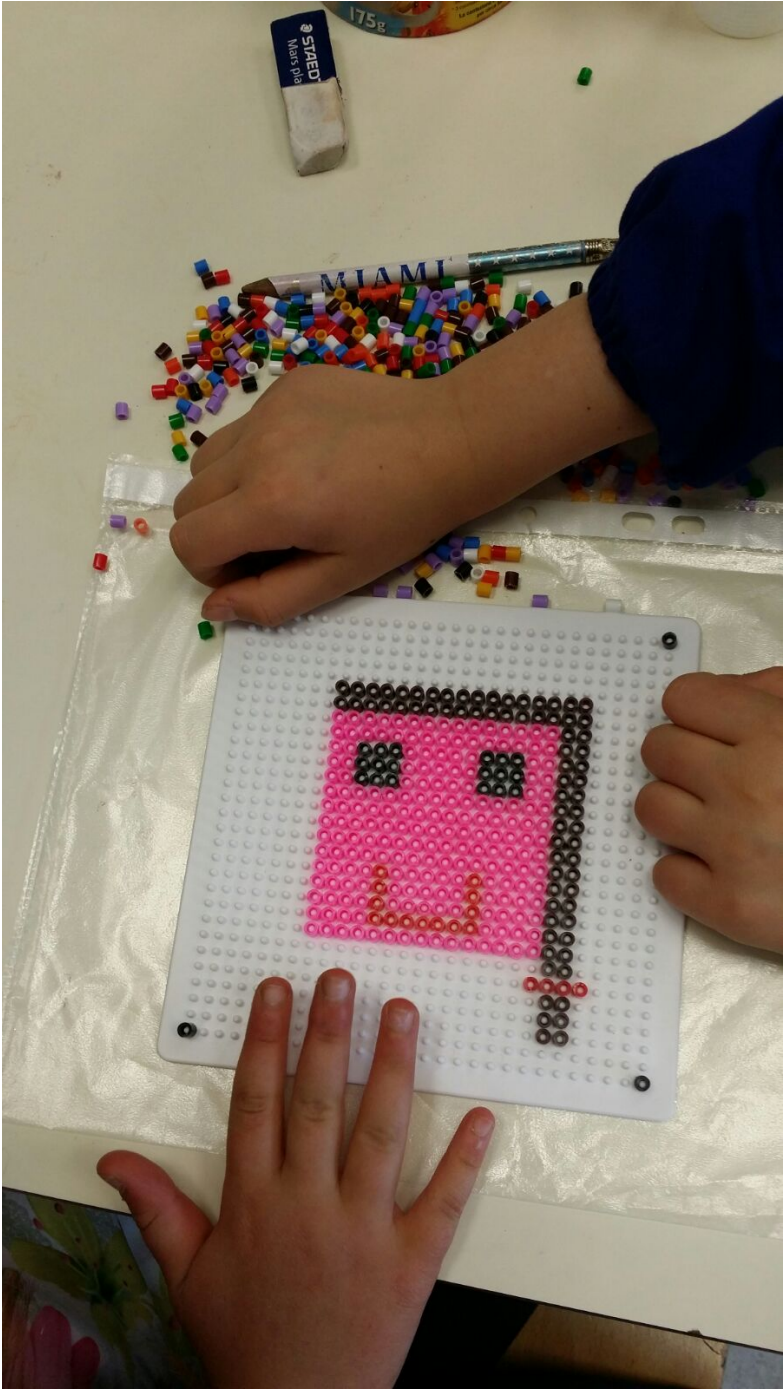
- Step 1. Discover a pixel art's picture, pupils explain and discuss what they see
- Step 2. Present to pupils the cylinders you have chosen and the grid
- Step 3. According to your pupils' age and skills give them sampling patterns or let them free to use the cylinders on the grid
- Step 4. Let pupils stick together the cylinders in order to form the picture
- Step 5. Show their pictures from a distance
- Step 6. Discuss: is it different if we see the picture from a distance vs closely? Why?
- Step 7: Discuss with pupils about picture on computer, show them what happens when you enlarge an image. Compare with their works and discuss

These are the links for a short example of this activity:

<https://www.youtube.com/watch?v=m8c1CAT2zEI>

<https://www.autostraddle.com/nerdcraft-craft-like-a-nerd-with-perler-bead-sprites-176533/>

[https://www.google.com/search?tbm=isch&sxsr=ACYBGNRfuc9I\\_9WBh0IfLTaTxCI7uBSmsA:1568457312644&q=pixel+art+da+stampare&sa=X&ved=0ahUKEwiPsdzjtDkAhXDIIAKHd5bBAEQrNwCCEMoBg&biw=1093&bih=461&dpr=1.25#imgrc=\\_](https://www.google.com/search?tbm=isch&sxsr=ACYBGNRfuc9I_9WBh0IfLTaTxCI7uBSmsA:1568457312644&q=pixel+art+da+stampare&sa=X&ved=0ahUKEwiPsdzjtDkAhXDIIAKHd5bBAEQrNwCCEMoBg&biw=1093&bih=461&dpr=1.25#imgrc=_)





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The crossword puzzle grid is 15x15. The crossword pattern is defined by black squares. The starting numbers for the crossword are: 1 (1,1), 2 (1,2), 3 (1,3), 4 (1,4), 5 (1,5), 6 (1,6), 7 (1,7), 8 (1,8), 9 (1,9), 10 (1,10), 11 (1,11), 12 (1,12), 13 (1,13), 14 (1,14), 15 (1,15).

Below the crossword puzzle is a 15x15 grid for coloring. The grid is 15 columns wide and 15 rows high. The grid is numbered 1 to 15 on the left side.

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