

Activity Title:

Sample Tray Art

Learning Objective / Activity Outcome:

To use fine motor skills to pipette / pour coloured liquid into a grid of containers to create an image or pattern.

Link to Early Years Framework:

ELG: Creating with Materials

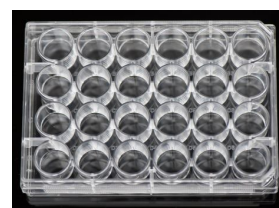
ELG: Being Imaginative and Expressive

Resources:

- Small yogurt pots (fromage frais size)
- Board / tray to attach pots to
- Double-sided sticky tape / sticky tack / adhesive spots
- Food dye or paint to colour the water
- Water
- Pipettes
- Water jugs / measuring jugs.

Preparation:

Before this activity starts, a 'well culture plate' needs to be created. This needs to be a grid of small pots (see real 'well culture plate' picture, right) that the children can pour coloured liquid into. Select a back-board – this could be thick card, foamboards, a plastic tray or chopping board. Use double-sided sticky tape, adhesive spots, sticky tack, or glue to secure the grid of pots onto the tray.



Coloured water can be made using food dye, or by rubbing a damp brush onto water colour paints and cleaning it in water. This produces a strong colour with little paint required. An alternative to coloured water could be coloured sand, coloured beads, coloured building bricks – anything that could be poured, placed, or transferred into the 'culture plate'. Or why not collect real natural samples from an outside area, and place them into the pots to create a picture or pattern? Discuss the natural materials found.



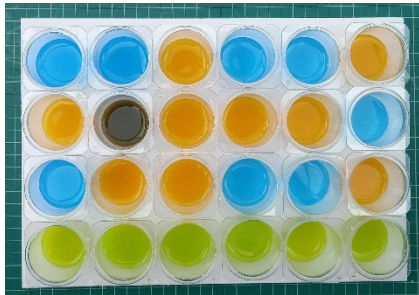
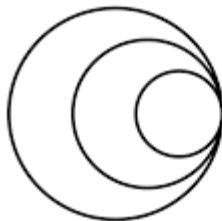
New Learning:

Set up the activity space either outside or on a waterproof surface. Tell children that when scientists and doctors are doing experiments with germs or liquids, they use sample plates like the one you have created. They mix the sample with a special liquid, then place tiny amounts in each well (pot), and that is then placed into a machine that will tell the scientists all about the samples they are investigating. It is one of the many ways scientists learn about the world around them.

Shared Learning:

Carefully pour a small amount of the coloured water (or a suitable alternative) into a pot on the grid. Create a simple pattern or picture for the children to see. Explain the carefully control of the materials so the samples don't go into the wrong pots.

Model making a mistake and correcting it by starting again, or clearing the pot, or by integrating the mistake into the pattern.

		Differentiation:	
		Support:	Extension:
Independent Learning:			
Right: A fish swimming along the sea floor. Children will carefully pour coloured liquids, or place an appropriate alternative, into the pots to create a pattern or picture.			Help children to pour carefully if they require additional fine-motor skill support. Use materials than can be placed rather than poured. Ask children what else could have been used instead of the material chosen.
Plenary:			
Share the images that have been created. Photograph them and share them on social media (parental permissions allowing) alongside media flyer. Discuss how they have been like scientists putting samples into their trays. What samples would the children have like to find out more about? What would they put into a sample tray of their own?			
Careers in the Curriculum:			
Partner Profile:		 wellcome connecting science	
Name:		Wellcome Connecting Science	
Web Address:		www.wellcomeconnectingscience.org	
Partner Summary:			
(What are the primary activities of the partner? What industry sector are they? Where do they operate? What are key products / outcomes?) Wellcome Connecting Science’s mission is to enable everyone to explore genomic science and its impact on research, health, and society. They are based at the Wellcome Genome Campus, Cambridgeshire, UK. Their activities inspire new thinking, spark conversation, support learning, and measure attitudes, drawing on the ground-breaking research taking place on the Wellcome Genome Campus. They form collaborations and work with partners across the globe to ensure their impact and reach is as wide as possible. Wellcome Connecting Science are engaging global public audiences with the breadth of genomic science and its impact on society. They encourage conversations, ask for opinions, and empower researchers to share their experiences.			
Career Roles Available:			
(What are the main types of jobs available within the partner organisation?) Researcher, Scientist, Training director, Engagement director.			
Links To Curriculum:			
(What subjects best reflect Partner activities? Which activities in schools) Understanding the World, Expressive Arts and Design.			