

## Art & Science Matters

School Session Overview

October 2025

### Key information

**Length of session:** 90mins

**Key Stage:** KS2

**Location(s) of session:** Prince Philip Maritime Collections Centre (PPMCC) learning space and painting conservation studio

Learning objectives	Curriculum links
<p>Learners will:</p> <ul style="list-style-type: none"> <li>Understand properties and changes of materials by exploring the difference between pigments and dyes</li> <li>Consider properties of solubility and transparency and that some materials will dissolve in liquid</li> <li>Filter materials and see separation</li> <li>See that dissolving, mixing and changes of state can be reversible changes</li> </ul>	<ul style="list-style-type: none"> <li>Develop techniques, including their control and use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design</li> <li>Compare and group together everyday materials on the basis of their properties</li> <li>Know that some materials will dissolve in liquid to form a solution</li> <li>Use knowledge to predict how mixtures might be separated</li> <li>Demonstrate that dissolving, mixing and changes of state are reversible changes</li> </ul>

### Key words

colour, paint, pigment, dye, soluble, transparent, dissolve, separate, filtration, mixing, permanent, reversible, state, conservation

### Overview of the session

**Enquiry question: How are colours in paintings and textiles made and conserved?**

In the Learning Space, learners:

- discuss the purpose of PPMCC and what happens here
- look at different textiles in groups and find out how they are conserved.

In the painting conservation studio, learners:

- Talk to a conservator about their job and how they work with objects

In the Learning Space, learners:

- take part in a mixing experiment with paint and dye
- make predictions, follow methods and discuss their results / findings

Suggested pre visit knowledge/ activities	Suggested post visit activities
<p>This session works best for learners if they have already used vocabulary such as soluble, insoluble, dissolve, solution, translucent and opaque.</p> <p>Give small samples of sugar, salt, flour, sand and oil. Ask Learners to predict which will dissolve in water.</p>	<p>We encourage schools to experiment with dissolving salt and/or sugar in water, then leaving the solution to evaporate in order to recover the solute. This simple investigation supports learners' understanding of reversible changes and solutions.</p>
<b>Links to useful resources</b>	
<a href="#">Conservation   Royal Museums Greenwich</a> <a href="#">Make a Museum   Royal Museums Greenwich</a> <a href="#">Art conservation: how to restore an oil painting</a>	