

Art & Science Matters

School Session Overview

October 2025

| Key information | |
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| <p>Length of session: 90mins</p> <p>Key Stage: KS2</p> <p>Location(s) of session: Prince Philip Maritime Collections Centre (PPMCC) learning space and painting conservation studio</p> | |
| Learning objectives | Curriculum links |
| <p>Learners will:</p> <ul style="list-style-type: none"> • Understand properties and changes of materials by exploring the difference between pigments and dyes • Consider properties of solubility and transparency and that some materials will dissolve in liquid • Filter materials and see separation • See that dissolving, mixing and changes of state can be reversible changes | <ul style="list-style-type: none"> • Develop techniques, including their control and use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design • Compare and group together everyday materials on the basis of their properties • Know that some materials will dissolve in liquid to form a solution • Use knowledge to predict how mixtures might be separated • Demonstrate that dissolving, mixing and changes of state are reversible changes |
| Key words | |
| <p>colour, paint, pigment, dye, soluble, transparent, dissolve, separate, filtration, mixing, permanent, reversible, state, conservation</p> | |
| Overview of the session | |
| <p>Enquiry question: How are colours in paintings and textiles made and conserved?</p> <p>In the Learning Space, learners:</p> <ul style="list-style-type: none"> • discuss the purpose of PPMCC and what happens here • look at different textiles in groups and find out how they are conserved. <p>In the painting conservation studio, learners:</p> <ul style="list-style-type: none"> • Talk to a conservator about their job and how they work with objects <p>In the Learning Space, learners:</p> <ul style="list-style-type: none"> • 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 |
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| <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> |
| Links to useful resources | |
| <p>Conservation Royal Museums Greenwich Make a Museum Royal Museums Greenwich Art conservation: how to restore an oil painting</p> | |