UKS2 – Lesson Plan 1 – **Science**

How can we turn scientific observations into creative works of art?

Aim:	Key Words:	Preparation:
Children will learn how microscopic organisms and structures can inspire art, exploring both the science of what they are and the artistic techniques to represent them creatively.	• Microscopic, organism, magnification, symmetry, texture, pattern, colour palette, detail, scientific illustration, accuracy, abstract.	• Images and short video clips of microscopic life (e.g., pollen grains, bacteria, plankton, crystals, insect wings) – these could be from a microscope or online resources • Magnifying glasses or, if available, a digital microscope • Sketchbooks and pencils • Art materials (watercolours, acrylics, fine liners, coloured pencils) • Examples of microscopic-inspired artwork by professional artists

Prior Learning: Children may have studied microorganisms in science and experimented with observational drawing in art. They might also know about symmetry and repeating patterns from maths.

WC / PT	<u>Warm-up:</u> Show a set of close-up microscopic images. Ask children: • What do you think this could be? • What shapes, patterns, and textures can you see? Reveal each one, explaining what it is and its role in science. Discuss how these natural structures can be visually stunning and unique.	0-5 mins
WC	<u>Main Teach:</u> Explain that scientists often use *scientific illustrations* to accurately record what they see. Artists can use these same observations as inspiration for creative designs. Model drawing one microscopic subject (e.g., a pollen grain) twice: once in a scientifically accurate style and once as an abstract pattern piece. Talk about line quality, symmetry, and colour choice. Discuss the link between observation, accuracy, and creativity.	5-10 mins

I / S	<u>Activity:</u> Children select one microscopic image as their focus. They will: 1. Create an accurate pencil sketch, paying close attention to details. 2. Develop a second version as an expressive artwork using colours, textures, and patterns inspired by the original image. Encourage children to experiment with blending colours, layering paints, or using mixed media. Teacher prompts: "Which features are you keeping true to science? Which are you adapting for artistic effect?"	10-30 mins
I	<u>Extension Challenge:</u> 1. Create a repeating pattern based on your microscopic image and imagine it as a design for fabric, wallpaper, or digital art. 2. Label your accurate drawing with scientific terms, linking art and science skills.	30-35 mins
WC	<u>Plenary:</u> Hold a "science-art gallery" where children display both their accurate and abstract pieces. In pairs, discuss: • Which features stayed the same in both artworks? • How does science help artists see the world differently? Finish with a short reflection: "Microscopic worlds are hidden from our eyes – but art can reveal them."	35-40 mins

WC – Whole Class PT – Partner Talk I – Independent S - Support

Challenge A	**Science Link:** Research another microorganism or microscopic structure and create a fact file including where it's found, its function, and any interesting adaptations.
Challenge B	**Geography Link:** Investigate how microscopic plankton affect ocean ecosystems and create an illustrated diagram showing their role in the food chain.