Date / Time	Description of what the students did, problems encountered and solved	Crystal characteristics	Signed
20/5/2024 12:50-1:30pm	PLANNING DAY independent variable: Introducing impurities to crystal mixture to see results of experiment.	None	
27/5/2024 12:55pm	SEED CRYSTAL GROWING We filled a 250 milliliter beaker with 200 milliliters of distilled water and added precisely 30.22 grams of alum powder. We heated the mixture to 55 degrees celsius. We mixed the solution to dissolve the powder and placed filter paper over to stop the mixture evaporating too quickly.	Transparent fluid	
29/5/2024 12:58pm	Small crystals formed at the bottom of the beaker. A crystal started floating at the surface of the mixture, large and ideal for a seed crystal.	Cube shaped crystal. Shiny with small rounded corners	
3/6/2024 12:50-1:30pm	HYPOTHESIS: If impurities are introduced it will alter the growth and clarity of the crystal. Main crystal has started growing, we will monitor them closely over the next few weeks. Our impurities consist of using tap water and salt water to grow the crystals.		

17/6/2024 12:50-1:30pm	The salt water crystal has fallen from the string, It started growing after it fell and is around the size of a golf ball. The saltwater crystal is also very cloudy. A small crystal has formed on the bottom of the tap water crystal but it is stuck there so we decided to leave it so we do not damage the crystal.	Cloudy and uneven	
24/7/2024 12:50-1:30pm	FINALISING CRYSTALS Choosing a crystal to submit. Tap water crystal is ideal candidate for judging as it has very good clarity and shape.	clear, even edges	
	MATERIALS ☐ 250 millilitre beaker ☐ Bunsen burner ☐ Tweezers ☐ Alum powder ☐ Distilled water ☐ Salt water ☐ Tap water ☐ Scales ☐ Fishing line ☐ Popsicle ☐ Filter paper ☐ Funnels ☐ Incubator (25 degrees celsius) ☐ Mixing rods ☐ Measuring cups ☐ Tripods ☐ Gauze mat ☐ Heat proof mat		