



Plan for Focused Assessment of Science

Topic: Properties and changing materials	Year 5 Age 9-10		Title: Dissolving
Working Scientifically Plan: Plan scientific enquiry to answer question and recognise and control variables where necessary		Conceptual Knowledge Context Know that some materials will dissolve in a liquid to form a solution.	
 Assessment Focus Can children plan a fair which solids dissolve in 	test to inve	stigate factors af	fecting the speed at

Activity

Ask children to think of everyday example of dissolving solids in water (e.g. sugar in tea, salt in cooking water). Ask them to suggest ways of making the sugar dissolve faster (e.g. stirring, temperature of the water, size of sugar grains, volume of water). Ask them to choose a factor to investigate and to plan a fair test. Carry out tests and discuss outcomes.

Adapting the activity

Support: Within a scaffold, make some suggestions about what could be kept the same/measured. Teacher support to plan a fair test but children explain how the planned test had been made fair.

Extension: identify what to change, measure and keep the same using a planning board provided. Plan a fair test independently, identifying and controlling relevant variables.

Other ideas: Consider continuous variables, e.g. temperature – how to decide on intervals / range.

Key Questions

- What is your question?
- How will you investigate this?
- How will you keep your test fair?
- What will you change?
- What will you measure?
- What will you keep the same?
- Can you explain why you have made these decisions?

Assessment Indicators

Not yet met: Can say what is being changed. May need support to explain what must be kept the same.

Meeting: Can plan a fair test identifying one thing to change, one thing to measure/observe and important factors to keep the same.

Exceeding: Identifies a range of factors to keep the same. Plans an appropriate range of intervals for chosen variable, e.g. 50 ml, 100 ml, 150 ml.

