

SCIENTIFIC ATTITUDES¹

Things that children do that are indicators of....

curiosity	<i>respect for evidence</i>	flexibility	sensitivity
Give some attention to new things.	Attempt to justify conclusions in terms of evidence even if the interpretation is influenced by preconceived ideas.	Readily admit to a change in their ideas.	Take part, with supervision, in caring for living things.
Explore things and ask questions about them in response to invitations to do so.	Realise when the evidence does not fit a conclusion based on expectations.	Modify ideas to incorporate new evidence or arguments.	Look after living things responsibly with minimal supervision.
Examine things carefully and ask questions about 'how' and 'why' as well as 'what'.	Check parts of the evidence which do not fit an overall pattern or conclusions.	Show willingness to consider alternative ideas, which may fit the evidence better, or as well as, their own ideas.	On visits outside school recognise and observe a code of behaviour which protects the environment from litter, damage and disturbance.
Explore and investigate things around them to answer their own questions.	Accept only interpretations or conclusions for which there is supporting evidence.	Relinquish or change ideas after considering evidence.	Minimise the impact of investigation in the environment, e.g. by replacing disturbed stones, returning animals caught for study in the classroom.
Spontaneously seek information from books or other sources to satisfy their own curiosity.	Recognise that no conclusion is so firm that it cannot be challenged by further evidence.	Spontaneously seek other ideas that may fit the evidence rather than accepting the first that seems to fit.	Take responsibility for ensuring that living things are cared for in the classroom and for protecting the environment outside from damage and pollution caused by their own action.
			Help to ensure that the actions of others as well as their own do not neglect living things or damage the non-living environment.

¹ Harlen, W. (1996). Teaching, learning and assessing science 5-12. (4th ed). London: Sage Publications. (pp. 108-109)