

# Science at Waldorf Academy

**One of the myths about Waldorf education is that science teaching in Waldorf schools is not scientific nor in consonance with current scientific knowledge or theories.**

Much of the mythology in question comes from the different way science is introduced and developed in Waldorf education compared to how it is done for the most part in public education.

In public education, science subjects normally are introduced and developed by first presenting the theory and formulas, then performing an experiment which demonstrates the theory, and then having the students work out the results using the formulas.

In Waldorf education, the science subjects do not start with nor are built from theories and formulas. Rather they start with the phenomena and develop in an experiential way, by first presenting the phenomenon, having the students make detailed observations, then guiding the students to derive the concepts that arise from the phenomena, and finally deriving the scientific formulas and laws behind the phenomena.

This methodology reflects the way basic science actually has been developed by scientists and trains the pupils stepwise in basic scientific thinking and reflection on the basis of personal experience and observation of the phenomena of nature and the history of science.

In kindergarten the experience of nature through the seasons is brought to the children through nature walks, stories, songs, nature tables, crafts and seasonal activities. In the grades, there are nature study projects woven into the main lesson blocks, nature hikes and field trips and nature study periods. Starting in grade 3-5 there are specific main lesson blocks studying farming, zoology and botany.

In grade 5, scientific ideas may be taught historically through the study of the Greeks, for example, Aristotle, Archimedes and Pythagoras. In grades 6-8 the science curriculum becomes more focused with blocks on physics (optics, acoustics, mechanics, magnetism and electricity), biology, chemistry (inorganic and organic), meteorology, nutrition and anatomy.

