# **Sundials Mathematics and Astronomy**

# **General Description**

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# Short description of the film

Relationship between mathematics and astronomy goes back in time.

An analysis thought superficial, of a few episodes in the history of Mathematics shows how this science is actually fundamental to the progress of the different branches of knowledge.

Greek astronomers, using elementary geometry, were able to determine the dimensions of the radii of the Earth, the Moon and the Sun and the measurement of time also worried the sages of antiquity.

Questions like "What causes the variation in the direction of the object shadows during the day?" and "How can we take advantage of the variation in the direction of the shadows to measure time?" were certainly present in the invention of the sundial.

With the advent of mechanical clocks, the question "What is the relationship between the hours indicated by a sundial and by a mechanical clock at the same location?" rose naturally.

The aim of this film is to explain how these questions have been answered over time.