

What time is it_ Explain

Observation of painting let us to understand which part of the day is represented. How people are dressed, the plants present, the knowledge of the place, they are indication for example of paint season.

To understand time (what time is it? we need a geolocation of the place. We look for the north and we can do this if we know that is the painted place. Having established the north, we look at how the light is painted in the painting and we can understand which side it comes from (where in this case the painter assumes that the Sun is located). We look again at people and the shadows they produce and the light is clearly on the left. Let's look at the shadows and their length.

Your student should remember that light propagates in a straight line and therefore we consider the right triangle (build it on the painting) whose hypotenuse touches the top of the head of one of the figures and has a vertex at the tip of the shadow. The angle at the base (explain well) is the height of the Sun at the horizon, remembering that the Sun takes 24 hours to reappear in the same point and that this apparent movement describes an angle of 360 degrees with a simple proportion we get the hour where the photograph was taken.

Ask your students: is it summer time? If we don't have a clock can we really use the sun to set a time?

Note: In Italy it was established in 1916 so the time presumably the painting represents is the true solar time. It should be 4pm or 5pm.

Activities to do with students and suggestions

Work on shadows and light: what they are, how it produces a shadow, how many shadows we can have, a shadow is always black?

If you have time you can build a sundial using basic concepts of geometry.

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