

orange or an apple may suit the purpose just as well or better ; put a pin or tack in it on one side, or the broken end of a match and let that be you, and one at the opposite side will be your antipole, and as to why you dont fall off, assimilate your weight and tendency towards the earth to an attraction which it is, the attraction of a magnet being a good simile —and why the fly falls not from the ceiling, and how the boy lifts a stone, his leather sucker as it is called when stuck to the stone and then an attempt made to pull it off, its string at centre, as the fly's leg at the centre of his elastic foot, causing it, when pulled on to rise at centre and thus leave a vacuum against which the pressure of the atmosphere reacts to hold the fly in place, and so solidly the stone that the boy can left it adhering to his disc of leather.

Again, to exemplify day and night, thrust a bodkin through your apple or your orange, or a knitting needle, or a pen handle, allowing it to protrude a little at the ends ; and on your table have a lamp or light of some kind, and let a corner of the ceiling be the pole of the heavens or the pole star ; and hold your tiny sphere in a way that its axis (the pen handle) point towards the star, and incline it in a way that the light do strike it at the equator or thereabouts, or half way between the poles ; and then revolve it in your fingers, and you thus show the lighted and unlighted or the lit and unlit sides of your tiny earth, and the succession of day and night in any latitude or at any distance from the equator—days and nights equal when the sun is directly over the equator or its rays to earth at right angles to the axis. And now move around the light or sun as the earth does in its annual revolution about the sun, and so you get the seasons and in one position the day longer than the night, and in the other the night longer than the day.

And for the phases of the moon, let another pupil armed with another and smaller orange or apple, stand opposite to you or between you and the sun, and hold his ball in a line