

Clouds & Particles

Basics

3. Sun and clouds

Solution Worksheet 2

1.

The glass slabs cause a darker area on the screen because they absorb some of the light coming from the projector. This prevents the light from hitting the wall.

Some of the light is transmitted through the glass slabs – otherwise the field on the wall would have been completely black.

The glass slabs should feel warm because they have absorbed (light) energy from the projector.

2.

You see the outside environment because it is lit up (although dimly) by remaining sunlight, street lamps, light from the house etc.

Most of the light coming from outside and hitting your window is transmitted in through the window glass and enables you to see what is outside (tiny fractions are absorbed and reflected by the glass).

However, when you sit in a brightly lit room at dusk, the light in the room will be stronger than the light outside. When the light from the room hits the window glass, most of it is transmitted out through the glass. However, a small fraction is also reflected back in, and because the light inside is stronger than outside, you will be able to see this reflected fraction (your own image!) in the window pane at the same time as seeing the environment outside.