

WHAT MAKES A SHADOW?

WITH THE NAME OF ALLAH, MOST GRACIOUS, MOST MERCIFUL.

In the sunshine your shadow travels with you everywhere you go. Sometimes it bends in strange and funny places, but it is always with you.

On a cloudy day, or in a dark room, you have no shadow at all.

What is your shadow and where does it go?

We have shadows because light moves in a certain way. It travels outward from where it came in straight lines called light rays. As long as nothing is in its way light rays move in one direction. However, when light rays hit something --- a tree, a house, etc. --- they are stopped. On the other side of the light-stopping object there is a dark space.

This dark space is actually a shadow!

Things in a dark room have no shadows because there are no light rays travelling through the room.

On a cloudy day things have no shadows because the clouds break up the light rays and scatter the rest in all directions.

When light rays scatter and bounce instead of all moving in one direction, no shadows are formed.

Who is responsible for making shadows?

In Sura al-Furqan (ch. 25): verse 45 & 46 we find the answer:-

“Have you not turned your vision to you Rabb? -- How He does prolong the shadow! If He willed, He could make it stationary! Then do we make the sun its guide; then we draw it in towards ourselves, --- a contraction by easy stages.”

At sunrise and sunset a small object casts a long shadow. At mid-day a big object has a small shadow.

Worksheet

1) Why does an object not have a shadow on a cloudy day?
