

WHAT IS COLOUR?

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

Colour is what is seen apart from size, shape and texture.

An object by itself does not have colour --- it has only the ability to reflect or transmit light from the various parts of the spectrum.

This reflected or transmitted light is seen as the colour of the object.

Light is radiant energy that can be detected by the eye.

Radiant energy from a hot body, such as the sun, is transmitted as electromagnetic waves of widely varying length.

Light is only a small fraction of the total radiation from the sun.

Light waves coming from hot bodies, such as the sun, may be sorted out by means of a prism to form a visible colour spectrum.

The hues of the spectrum range from red (long waves) through orange, yellow, green, and blue to violet (short waves).

By recombining these waves, the colour of the source is reproduced.

The energy sources that come from the sun, a torch bulb or a burning match are made up of millions of tiny atoms.

When the atom gives out light, its electrons are usually dropping down from all sorts of different orbits.

The bigger the leap, the more energy is given off.

If there is a little energy, the light is red.

If there is a lot of energy, the light is violet.

In between are all the other colours of the rainbow.

When all the colours are mixed together the result is white light.

Worksheet

1) Does an object really have colour? Offer an explanation.

2) What is light?
