



## G.D.GOENKAPUBLICSCHOOL

**Subject: Science (6<sup>th</sup>)**

**Aspect: Home Assignment**

**Wednesday 18-August -**

**2021**

**Topic: Light shadow and reflection**

**This material is not to be printed.**

### **LEARNING OBJECTIVE:**

To learn about nature of objects.

### **SKILL FOCUS:**

To understand the nature of objects on the basis of how much light they allow to pass.  
Knowing science vocabulary.

### **Transparent, Translucent, And Opaque Materials :**

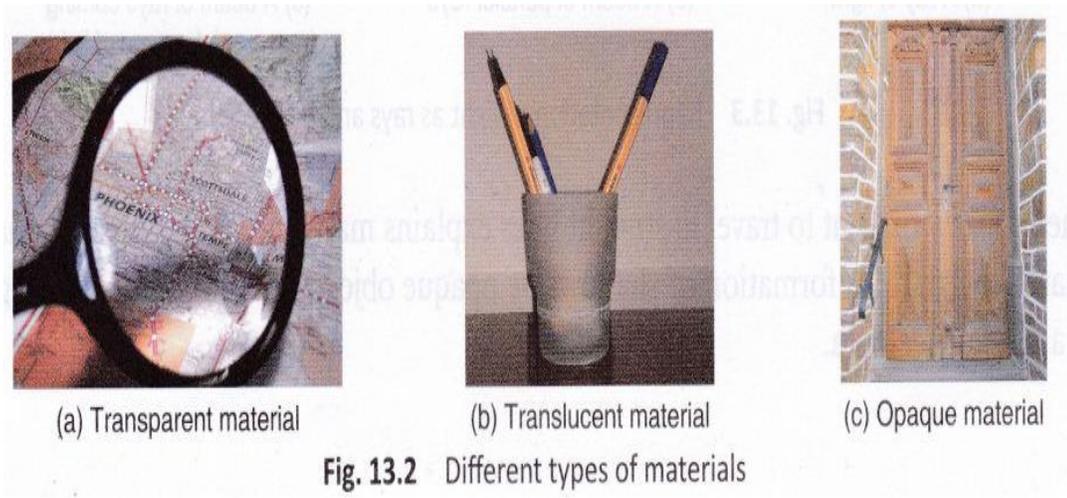
Different types of materials transmit light differently. Based on the way they transmit light, materials can be divided into transparent, translucent, and opaque materials.

Materials that allow light to pass through significant scattering or absorption [Fig. 13.2(a)] are called **transparent materials**. We will be able to see through these materials very clearly. Examples of transparent materials are clear air, clear glass, clean water, some kinds of plastic, and cellophane paper.

Materials that allow light to pass through them, but scatter or diffuse the light as it passes through, i.e., a parallel beam of light comes through in all directions are called **translucent materials** [Fig. 13.2(b)], That is why an object cannot be seen clearly through a translucent material. Examples of translucent materials are butter paper, a frosted glass, paper smeared with oil, and smoked glass.

Materials that completely block light are called **opaque materials** [Fig. 13.2(c)]. We will not be able to see through these materials at all. Examples of an opaque materials are metal, mud,

cement, coal, and wood. A mirror is a very good example of opaque material. An ideal mirror does not let any light pass through it.



### **Transparent/Translucent/Opaque**

#### **Transparent**

If we are able to see clearly through an object, it is said to be transparent like water, glass.

#### **Translucent**

If we are able to see not clearly through an object, it is said to be translucent like butter paper.

#### **opaque**

If we cannot see through an object at all, it is an opaque object like wood