Lead in

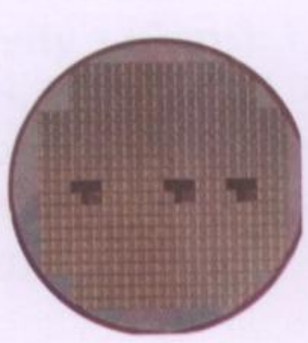
► Look at the title of the Unit. What do you think these two words refer to? ***Hint:*** This Unit is, in many ways, a supplement to the previous Unit, which focused on silicon and silicon chips. Do you remember the most important property of silicon? What kind of material is it? Write the missing letters in the sentence below to get some help:

Silicon is a _ _ _ _c_n_u_t_r.

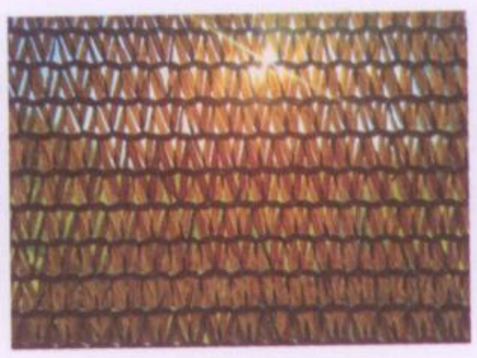
In this Unit, you are going to read about semiconductors and superconductors. Before you get down to reading the texts and doing the activities, let's see what you remember from the previous Unit (or what you can retrieve from your background knowledge).

► **Activity 1: Label each of the images below with one of these terms:**

silicon ingots / computer chip / lattice / silicon wafer

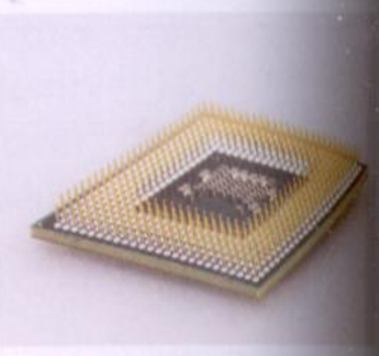


1) _____



2) _____

3) _____



4) _____

► **Activity 2: In the following sentences underline the correct option(s):**

a. *Germanium / Silicon / Titanium* is the most commercially important semiconductor.
b. Semiconductors are used for making *integrated circuits / insulators / computers*.
c. Computer chips are made from *germanium / silicon / titanium*.
d. Silicon is a *metal / nonmetal / metalloid*.
e. The colour of silicon can be *white / bluish / green*.
f. Silicon *always / rarely / never* occurs in its pure state.
g. Germanium is *as expensive as / cheaper than / more expensive* than silicon.
h. Metals are *conductors / insulators / capacitors* of electricity.

HA! HA! HA!

What do you call a guy who works part time on a train?

A semiconductor!

Reading 1

► **The text you are going to read provides an overview of semiconductors. Before you read it, write down at least two things that you expect it to include:** _____

Then, read on and check if your predictions were correct.