If-sentences

From each of the definitions in Exercise A, we can make an *if*-sentence. Look at this example:

definition: An organic material is a material which is based chemically on

carbon.

if-sentence: If a material is organic, it is based chemically on carbon.

Sentences like this consist of two parts joined by if:

PART 1 PART 2

IF a material is organic, / it is based chemically on carbon Now make if-sentences like this for each of the definitions you have written in Exercise A.

Predictions based on the properties of materials

When we know what the properties of a material are we can predict how it will behave under different conditions. To make predictions of this type, we use an *if*-sentence with *will* in part 2. Look at this example:

If a material is flexible, it will bend easily.

Now write similar predictions for materials which have the properties listed in column (a). Match each property in column (a) with an appropriate expression from column (b).

a	b
elasticity plasticity toughness	will not bend easily will resist abrasion, deformation and indentation will resist wear will regain its original dimensions after the forces
corrosion-resistance rigidity	which have caused deformation are removed will tend to fracture under impact loads
wear-resistance brittleness	will bend easily will not return to its original dimensions after the
hardness flexibility softness	forces producing strain are removed will not fracture when indented or scratched will resist fracture when subjected to an impact load will resist corrosion

Noun modification (iv)

Here is another common way of modifying a noun in engineering.

- (a) a bracket with a pin joint
- = (b) a pin-jointed bracket