

**Activity One:** Read the text and say whether the following sentences are true (T) or false (F).  
Justify your answers in both cases. (2 points)

a) New technologies need types of composites that can be found in nature. (F )

many modern technologies require materials with unusual combinations of properties that cannot be met by natural composites

b) Decreasing the impact strength is the result of the increase in the strength or stiffness. (T)

Increasing the strength or stiffness typically results in a decrease in impact strength.

**Activity Two:** Read the text and answer the following questions (3 points)

1. What are the characteristics of the materials that aircraft engineers are looking for?

Aircraft engineers for example, are increasingly searching for structural materials that have low densities, are strong, stiff and resistant to abrasion and impact as well as corrosion a rather impressive combination of characteristics.

2. What are the natural composites cited in the text?

The natural composites that are cited in the text are bones and wood.

3. What is the problem with strong materials?

The problem with strong materials is that they are frequently relatively dense, i.e. heavy.

**Activity Three:** (3 points)

1- Find in the text words that are closest in meaning to the following ones:

a- supple (§1) = flexible

b- current (adj) (§1) = modern

c- characteristics (§3) = properties

d- rigidity (§2) = stiffness

2- Find in the text the opposites of the following:

a- light (adj) (§3) ≠ heavy

b- ancient (§1) ≠ modern

## **Section Two: Language study**

**Activity One:** Put the verbs in the correct tense (present simple or present progressive).(7 points)

1. A typical staff member **still does** over 25 hours' overtime every week even though they are told not to.
2. According to today's news, the Chinese stockmarket **is crashing**.
3. Only older consumers **usually buy** our products.
4. As we speak, our stock price **is slipping** behind the rest of the market.
5. At this very moment many employees **are thinking** about quitting.
6. Commercial rents **grow** by at least ten percent every single year.
7. Costs **are currently escalating**
8. Costs of supplies **climb** every time that the exchange rate **drops**
9. Hacking attacks **are shooting up** at the moment.
10. In the present market, wages are **soaring** even though economic growth isn't so high.
11. Many employees **leave in** March every year.
12. Our brand image **is getting** worse these days due to some recent scandals.
13. Raw material prices are **rising** at the present time.

**Writing:** (5 points)

- Write a twelve-line paragraph about the classification of one of the following and the properties according to which they are classified. (You may choose another classification i.e. one which is not mentioned)

- Elements

- Materials

- Metals.

- Matter .....