I Fill in the gaps in the text with a suitable word:

PROPERTIES, PROCESSING, GROWTH, RESISTANCE, APPLICATION, ARRANGED, ACHIEVEMENTS, MACHINE, STRENGTH

What is Materials Engineering?

New materials have been among the greatest 1_____ of every age and they have been central to the 2 _____, prosperity, security, and quality of life of humans since the beginning of history. It is always new materials that open the door to new technologies, whether they are in civil, chemical, construction, nuclear, aeronautical, agricultural, mechanical, biomedical or electrical engineering.

Materials scientists and engineers continue to be at the forefront of all of these and many other areas of science, too. Materials science and engineering influences our lives each time we buy or use a new device, 3_____, or structure. The definition of the academic field of Materials Science & Engineering stems from a realization concerning the every 4_____ of materials: it is the properties of the material that give it value. A material may be chosen for its 5_____, its electrical properties, 6_____ to heat or corrosion, or a host of other reasons; but they all relate to properties.

Experience shows that all of the useful 7_____ of a material are intimately related to its structure, at all levels, including which atoms are present, how the atoms are joined, and how groups of atoms are 8_____ throughout the material. Most importantly, we learn how this structure, and the resulting properties, are controlled by the processing of the material.

Finally materials must perform their tasks in an economical and societally responsible manner. Understanding the relationships between properties, structure, 9 _____ and performance makes the Materials Engineer the master of the engineering universe.

https://engineering.purdue.edu/MSE/AboutUs/WhatsMaterials/index.html

II Answer the questions:

1 How does Materials Engineering influence our lives?

2 What gives value to the material?

3 What makes the Materials Engineer the master of the engineering universe?