

► **Activity 3:** Match the words in Column A with their meanings / synonyms in Column B:

1. abundance	a) remove or take out
2. crust	b) a block of metal, typically oblong in shape
3. purification	c) rock or soil from which a valuable metal can be obtained
4. prevalent	d) grid
5. extract	e) underline; emphasize
6. underscore	f) having more than enough of sth; plentifulness
7. ore	g) making sth clean; removing the contaminants from sth
8. lattice	h) widespread; dominant
9. ingot	i) a very thin piece of sth
10. wafer	j) the outside part, the outer layer of sth
11. rectify	k) convert alternating current to direct current

► **Activity 4:** Complete the following sentences using the words given below:

insulator / amplify / versatility / doped / substrate / surpassed / impurities

- Pure silicon is used as a semiconductor when _____ with gallium, boron, phosphorus, or arsenic.
- Materials such as polymers and semiconductors have _____ iron and steel as the predominant materials of the last century.
- The rise of silicon can be attributed to a combination of advantageous properties, such as its natural abundance and tremendous _____.
- Silicon is capable of acting as a conductor via doping or an _____ via oxidation.
- This specific method for manufacturing micromechanical components situated on a silicon _____ includes a number of distinct steps.
- What is the separation method applied when we want to remove _____ from a solid?
- These hearing aids can be specially programmed to _____ some frequencies more than others.

► **Activity 5: Silicon or Silicone?** Decide which of the two the following sentences refer to.

- It is a hard, brittle, crystalline, metalloid element. → e.g., silicon
- It is colourless, oil-like or rubber-like. →
- It is characterized by a bluish-grey metallic luster. →
- It is a synthetic polymer. →
- There are fourteen electrons in its atoms. →
- It is used as a semiconducting material in computers, mobile phones and other electronic gadgets in the form of IC chips. →
- It is resistant to temperature changes. →
- It is used as a waterproof sealant, in electrical insulation, in plastic surgery (implants), etc. →



 Game Time!

Working in pairs, make a list of elements that are used in electronics & electrical components. When your list is ready, play a guessing game (see also Unit 4). **Student A** thinks of one of these elements without revealing it. **Student B** tries to guess which it is using the expressions of location on p. 170 and asks questions to which the answer can only be Yes or No. The winner is the student or group that manages to guess correctly with the fewest questions.