Placement Chemistry

	Short Answer
	Answer the following questions about the periodic table of elements. Write your answers in the space provided.
1) Baland	be the following chemical equation: $H_2 + Q_2 \rightarrow H_2 C$
2) Explai	n what happens during a chemical reaction in terms of bonds.
3) How n	nany electrons does a carbon atom have in its outermost shell?
4) What i	s the Law of Conservation of Mass?
5) Identi	fy whether the following compound is ionic or covalent: CO ₂
(Carbon	dioxide).

True or False

Read each statement carefully.
Write "True" if the statement is correct or "False" if it is incorrect.

- 1) In an exothermic reaction, heat is absorbed by the system.
- 2) In the periodic table, elements in the same group have similar chemical properties.
- 3) The atomic number of an element represents the number of protons in its nucleus.
- 4) A catalyst slows down the rate of a chemical reaction.
- 5) Acids have a pH less than 7, and bases have a pH greater than 7.