

TS Tuition Chem - Atomic Structure and Periodic Table Worksheet

1. Atomic Mass

If we could see a single atom, it would be much easier to measure the exact mass of an element. Since we cannot do this, a method of measurement was devised. Assigning the element carbon an atomic mass of 12 and comparing every other element to carbon did this. For example, the mass of a magnesium atom is approximately twice that of carbon, so it is given the atomic mass of 24.

Use your Periodic Table to complete the exercise below.

- Which element is four times the mass of Carbon? _____
- Name the element with the smallest atomic mass. _____
- Which element is four times the mass of helium? _____
- Name the element with the greatest mass. _____
- Which element is about a third the mass of tin? _____
- Name the element that is twice the mass of oxygen? _____

2. Prefixes

Prefixes often form the part of the name of a chemical substance. Write the number represented by each prefix.

hexa _____	mono _____	deca _____
penta _____	di _____	tri _____
tetra _____	octo _____	hepta _____

3. Chemical symbols

Cross out the incorrect chemical symbols.

Sb	La	K	Nr	Zi	Ps	F	Bc	Co	Hy	Ar
Ts	H	Tu	Ds	Al	Sp	Mg	Ne	Ze	Au	P
Ms	I	B	Cb	Fe	Xe	Ox	Go	Se	Pb	Gl

4. Element names

Rewrite the sentences correcting any errors.

- Mercury is a solid at room temperature.
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- Helium can be found in two places on the Periodic Table.
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3. Zink is a liquid at room temperature.

4. Periods read from top to bottom on the Periodic Table.

5. Carbon is a shiny silver metal.

6. Einstenum is named after Alfred Einstein.

7. The group number tells us how many electron shells an atom has.

8. Most of the elements in the periodic table are non-metals.

9. Electrons are found in the nucleus and have a positive charge.

5. States of matter

Complete the following passage. Use the following words to complete the passage.

liquid solid temperature matter gas ice

Anything that takes up space is called _____. There are three states in all; _____, _____ and _____. For example, water exists in _____ form as rivers, lakes and streams. Water in a solid form is called _____. When water is heated to a vapor, it becomes _____ known as steam. The state in which water is found is determined by the _____ of the environment it is in.

