

Answer all the questions below:



Click mouse to reveal answer

1) Unscramble the following words:

codsmpnou

ieproertps

oditlnstila

ritivyeact

2) Make three sentences using the following nine words or phrases:

atoms and elements  
metal properties  
crude oil

compounds  
rock ores  
hydrocarbons

formula  
extraction  
fuels

3) Match the word or phrase with the right meaning:

Element



Two or more different elements joined together by a bond

Compound



Separating chemicals based on their different boiling points

Fractional distillation



A substance containing only one type of atoms

### Answers:

1) Unscramble the following words:

compounds

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distillation

reactivity

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Element

A substance containing only one type of atoms

Compound

Two or more different elements joined together by a bond

Fractional distillation

Separating chemicals based on their different boiling points

## complete the sentence

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Place the right word or words to complete the sentence:



Click mouse to reveal answer

separates

element

bottle

mineral

mixture

acid

different

marble

gases

- a) The smallest part of an \_\_\_\_\_ is called the atom.
- b) Compounds are two or more \_\_\_\_\_ elements joined together in a chemical bond.
- c) Limestone is rich in the \_\_\_\_\_ calcium carbonate with the formula  $\text{CaCO}_3$ .
- d) Quarrying for limestone, \_\_\_\_\_ or chalk has a huge impact on the local environment.
- e) Crude oil is a \_\_\_\_\_ of hydrocarbons called the alkanes.
- f) A plastic product e.g. \_\_\_\_\_ with the word PETT on it can be recycled into other products.
- g) Fractional distillation \_\_\_\_\_ out different alkanes based on their boiling points.
- h) Fuels like petrol produce two main polluting \_\_\_\_\_, sulphur dioxide and  $\text{CO}_2$ .
- i) Global warming and \_\_\_\_\_ rain are caused by the products of fossil fuel combustion.

## complete the sentence

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- The smallest part of an element is called the atom.
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- Quarrying for limestone, marble or chalk has a huge impact on the local environment.
- Crude oil is a mixture of hydrocarbons called the alkanes.
- A plastic product e.g. bottle with the word PETT on it can be recycled into other products.
- Fractional distillation separates out different alkanes based on their boiling points.
- Fuels like petrol produce two main polluting gases, sulphur dioxide and  $\text{CO}_2$ .
- Global warming and acid rain are caused by the products of fossil fuel combustion.



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1: Which of the following is not a pure element ?

---

A Copper

---

B Oxygen

---

C Neon

---

D Steel

---

---

2: Which two properties of metals make them particularly useful in modern life ?

---

A Conductive of heat and electricity

---

B Sonorous and malleable

---

C Shiny and hard

---

D High melting points and hard

---

---

3: The nucleus of any atom contains ?

---

A Electrons only

---

B Protons only

---

C Neutrons only

---

D Neutrons and protons

---

---

4: What are the correct symbols for aluminium, iron and gold ?

---

A Na Al Cu

---

B Al Fe Au

---

C Ti Al K

---

D Li Na K

---

## multiple choice

---

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5: Which of the following equations is not balanced correctly ?



6: What is the chemical name for limestone, marble or chalk ?

A Carbon dioxide

B Calcium carbonated

C Calcium carbonate

D Calcium oxide

7: In countries with acid rain, limestone is added to lakes. This reaction is called ?

A Condensation

B Hydrogenation

C Polymerisation

D Neutralisation

8: The correct formulae for haematite and bauxite are ?

A  $Fe_2O_3$       $Al_2O_3$

B  $FeO$       $AlO_3$

C  $2FeO$       $AlCl_3$

D  $Fe_3O_4$       $Al_2O_6$

5: Which of the following equations is not balanced correctly ?

A

B

C  $\text{CH}_4 + \text{O}_2 \longrightarrow \text{CO}_2 + \text{H}_2\text{O}$

D

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## multiple choice

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9: If the formula for pentane is  $C_5H_{12}$ , the formula for nonane would be ?

A  $CH_4$

B  $C_2H_6$

C  $C_9H_{20}$

D  $C_{12}H_{26}$

10: The main cause of acid rain is from which of the following gases ?

A Sulphur dioxide

B Carbon monoxide

C Oxygen

D Neon

11: Limestone is an important material for the manufacture of ?

A Bricks

B Cement

C Copper

D Plastics

12: What is the only product produced when hydrogen is burnt in a car engine ?

A Carbon dioxide

B Carbon monoxide

C Water

D Hydrogen peroxide

## multiple choice

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# Chemistry 1A (CHY 1A)

## true or false

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Decide whether the following statements are true or false:



[Click mouse to reveal answer](#)

Statements:	True	False
1: The smallest part of an element is called the atom ?	True	False
2: Compounds are two or more different elements joined together in a chemical bond ?	True	False
3: Metals are poor conductors of electricity and heat ?	True	False
4: Iron, Gold and Lithium are all good examples of transitional metals ?	True	False
5: Atoms are made from protons, neutrons and electrons, which orbit in shells ?	True	False
6: Limestone is rich in the mineral calcium carbonate ?	True	False
7: Quarrying for limestone, marble or chalk has little impact on the local environment ?	True	False
8: Cement and concrete both require limestone for their manufacture ?	True	False
9: Iron is extracted from iron ore using electrolysis ?	True	False
10: An alloy is two or more metals combined together ?	True	False

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2: Fractional distillation separates out different alkanes based on their boiling points ?	True	False
3: Fuels like petrol and diesel produce two main polluting gases, nitrogen and sulphur dioxide ?	True	False
4: Cracking larger alkanes is done at low temperatures in an oxygen rich environment ?	True	False
5: Ethene, an alkene is the starting material used to make nylon ?	True	False
6: Polymers like PVC and polythene are useful because of their different properties ?	True	False
7: A plastic product with the word PETT on it cannot be recycled into other products ?	True	False
8: Ethanol produced from the fermentation of cane sugar is used by one in four cars in Brazil ?	True	False
9: Global warming and acid rain are caused by the products of fossil fuel combustion ?	True	False
10: A thermo-chromic plastic changes colour at different pHs ?	True	False

# Chemistry 1A (CHY 1A)

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