

8.1

AKTIVITI
PERBINCANGAN

Bahan atom, bahan molekul dan bahan ion

Atomic substances, molecular substances and ionic substances

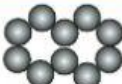
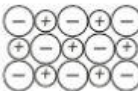


Buku Teks m/s 168 – 169

Hebat Sains Modul 29 2004 BHG. C, S2(a)

- 1 Nyatakan jenis bahan berdasarkan rajah dan maksudnya. Kemudian, kelaskan bahan-bahan daripada maklumat yang diberi./State the types of substances based on the diagrams and the meanings. Then, classify the substances from the given information. **TP1**

Kuprum <i>Copper</i>	Kuprum(II) sulfat <i>Copper(II) sulphate</i>	Oksigen <i>Oxygen</i>	Zink <i>Zinc</i>	Magnesium oksida <i>Magnesium oxide</i>	Bromin <i>Bromine</i>
Naftalena <i>Naphthalene</i>	Karbon dioksida <i>Carbon dioxide</i>	Aluminium <i>Aluminium</i>	Air <i>Water</i>	Natrium klorida <i>Sodium chloride</i>	Besi <i>Iron</i>

Bahan/Substances	Maksud/Meanings	Contoh/Examples
(a) 	Bahan yang terdiri daripada zarah atom sahaja <i>Substance made up of atomic particles only</i>	
(b) 	Bahan yang terdiri daripada zarah molekul sahaja <i>Substance made up of molecular particles only</i>	
(c) 	Bahan yang terdiri daripada zarah ion sahaja <i>Substance made up of ionic particles only</i>	

- 2 Bandingkan ciri-ciri bahan atom, bahan molekul dan bahan ion. **TP2**
Compare the physical properties of atomic substances, molecular substances and ionic substances.

Gas/Gas	Tinggi/High	Pepejal/Solid	Boleh/Can	Lemah/Weak
Kuat/Strong	Leburan/Molten	Rendah/Low	Tidak boleh/Cannot	Cecair/Liquid

Ciri-ciri Properties	Bahan atom Atomic substances	Bahan molekul Molecular substances	Bahan ion Ionic substances
(a) Keadaan fizikal pada suhu bilik <i>Physical state at room temperature</i>			 Praktis Kendiri
(b) Daya tarikan antara zarah <i>Forces of attraction between the particles</i>			
(c) Takat lebur dan takat didih/ <i>Melting and boiling points</i>			
(d) Kekonduksian elektrik <i>Electrical conductivity</i>	_____ mengkonduksikan elektrik _____ conduct electricity	_____ mengkonduksikan elektrik _____ conduct electricity	Dalam keadaan _____ atau larutan akueus <i>In _____ state or aqueous solution</i>

Nyatakan jenis bahan bagi unsur dalam pelbagai bentuk di bawah. **TP1**

Buku Teks m/s 170

State the type of substance for elements in various forms below.

Bahan atom
Atomic substance

Bahan molekul
Molecular substance

Bahan ion
Ionic substance

1 Pelbagai bentuk unsur ferum (besi)/Various forms of iron elements

(a)



Tukul besi/Hammer

(b)



Karat/Rust

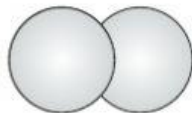
(c)



Makanan seperti bayam
Food like spinach

2 Pelbagai bentuk unsur hidrogen/Various forms of hydrogen elements

(a)



Gas hidrogen/Hydrogen gas

(b)



Air/Water

(c)



Jus lemon/Lemon juice

3 Pelbagai bentuk unsur oksigen/Various forms of oxygen elements

(a)



Air/Water

(b)



Karat/Rust

(c)



Oksigen dalam tangki
oksigen
Oxygen in oxygen tanks