

# BAB 6: ASID DAN ALKALI

## BAHAGIAN A: SOALAN OBJEKTIF

- 1 Maklumat di bawah menunjukkan pH beberapa jenis bahan.

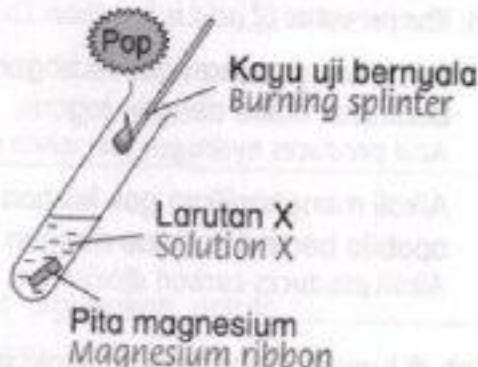
Information below shows the pH of few substances.

| Bahan Substance                  | pH   |
|----------------------------------|------|
| Larutan ammonia Ammonia solution | 11   |
| Peluntur Bleach                  | 12.6 |
| Serbuk penaik Baking powder      | 9    |
| Air laut Sea water               | 8    |

Susunan bahan-bahan di atas mengikut kekuatan kealkaliannya yang manakah **betul?**  
Which sequence of the substances above according to the strength of alkalis is correct?

- A Peluntur, serbuk penaik, air laut, larutan ammonia  
Bleach, baking powder, sea water, ammonia solution
- B Peluntur, larutan ammonia, serbuk penaik, air laut  
Bleach, ammonia solution, baking powder, sea water
- C Air laut, serbuk penaik, larutan ammonia, peluntur  
Sea water, baking powder, ammonia solution, bleach
- D Air laut, larutan ammonia, serbuk penaik, peluntur  
Sea water, ammonia solution, baking powder, bleach

- 2 Rajah menunjukkan keputusan tindak balas antara larutan X dengan pita magnesium. Diagram shows the result of a reaction between solution X and magnesium ribbon.



Apakah bahan yang mungkin bagi larutan X?

What is the possible substance of solution X?

- A Asid hidroklorik Hydrochloric acid
- B Kalsium hidroksida Calcium hydroxide
- C Natrium hidroksida Sodium hydroxide
- D Magnesium hidroksida Magnesium hydroxide

- 3 Antara berikut, yang manakah contoh asid?

- |                        |                        |
|------------------------|------------------------|
| A Cuka Vinegar         | C Ammonia Ammonia      |
| B Air kapur Lime water | D Air sabun Soap water |

- 1 Tandakan (✓) bagi pernyataan yang **betul** dan (✗) bagi pernyataan yang **salah**.  
Tick (✓) for the correct statements and (✗) for the wrong statements.

- (a) Asid mempunyai rasa masam.  
Acid has a sour taste.
- (b) Alkali tiada sebarang rasa.  
Alkali does not have any taste.

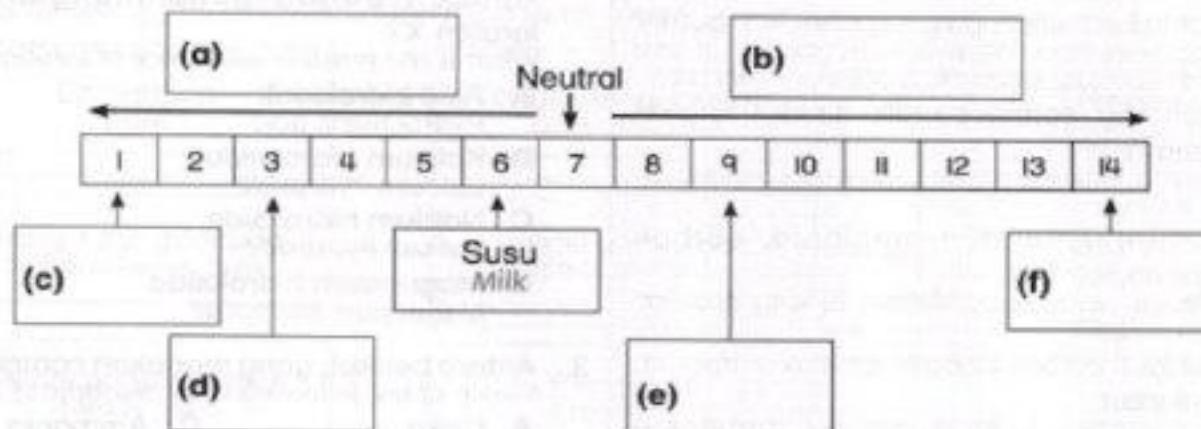
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## BAHAGIAN A: SOALAN SUBJEKTIF

- (c) Asid pekat mengakis.  
The concentrated acid is corrosive.
- (d) Alkali pekat mengakis.  
The concentrated alkali is corrosive.
- (e) Asid tidak bertindak balas terhadap kedua-dua kertas litmus biru dan merah.  
Acid does not react to both the blue and red litmus paper.
- (f) Asid menukar kertas litmus biru kepada merah.  
Acid turns the blue litmus paper to red.
- (g) Nilai pH asid adalah lebih daripada 7.  
The pH value of acid is more than 7.
- (h) Nilai pH alkali adalah kurang daripada 7.  
The pH value of alkali is less than 7.
- (i) Asid menghasilkan gas hidrogen apabila bertindak balas dengan logam.  
Acid produces hydrogen gas when reacts with metal.
- (j) Alkali menghasilkan gas karbon dioksida apabila bertindak balas dengan karbonat.  
Alkali produces carbon dioxide gas when reacts with carbonates.

2 Rajah di bawah menunjukkan skala pH.

Diagram below shows a pH scale.



Lengkapkan rajah skala pH di atas dengan menggunakan perkataan yang diberi di bawah.

Complete the diagram of pH scale above using the words given below.

Semakin beralkali  
More alkaline

Ubat gigi  
Toothpaste

Peluntur  
Bleach

Asid bateri  
Battery acid

Jus oren  
Orange juice

Semakin berasid  
More acidic