

JAWAPAN

Bab 9 Bumi Earth

9.1 Sistem dan Struktur Bumi The System and Structure of the Earth

1. (a) Biosfera / Biosphere
(b) Geosfera / Geosphere
(c) Atmosfera / Atmosphere
(d) Hidrosfera / Hydrosphere
2. (a) Benar / True
(b) Palsu / False
(c) Benar / True
(d) Palsu / False
(e) Benar / True
3. lautan dan tasik, wap air, transpirasi, titisan air, awan, kondensasi, hujan, air bawah tanah
oceans and lakes, water vapour, transpiration, water droplets, clouds, condensation, rain, groundwater
4. (a) (i) Kerak / Crust
(ii) Mantel / Mantle
(iii) Teras luar / Outer core
(iv) Teras dalam / Inner core
(b) panas, sejuk, air, oksigen
hot, cold, water, oxygen

9.2 Bahan Bumi Composition of the Earth

1. (a) (i) Batu igneus / Igneous rock
(ii) Batu metamorfik / Metamorphic rock
(b) (i) Sedimen / Sedimentary
(ii) Igneus / Igneous
(iii) Metamorfik / Metamorphic
(c) Proses X: penyejukan, magma
Process X: cooling, magma
Proses Y: peleburan
Process Y: Melting

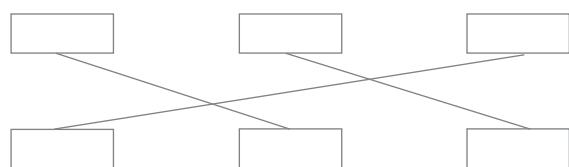
9.3 Proses Utama Bumi Main Processes of the Earth

1. (a) luar / outside
(b) dalam / inside
2. (a) Hakisan / Erosion
(b) Luluhawa / Weathering
(c) Angkutan dan pengenapan / Transport and sedimentation
(d) Susutan jisim dan susutan darat / Mass and land depletion
3.

--	--	--

--	--	--

--	--	--



9.4 Fenomena Geobencana Geohazard Phenomena

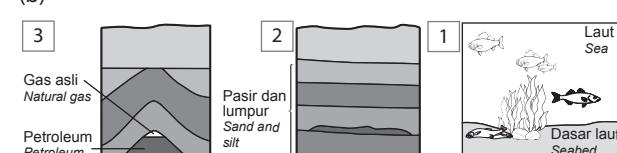
1. Tanah jerlus, Gempa bumi, Lubang benam, Tsunami, Pemanasan global, Hujan asid, Tanah runtuh
Quicksand, Earthquake, Sinkhole, Tsunami, Global warming, Acid rain, Landslide
2. (a) keglongsoran tanah, tarikan graviti
land meltdown, gravitational pull
(b) (i) Aktiviti pembangunan yang dijalankan di lereng bukit
Developmental activities carried out on hillslopes
(ii) Penebangan pokok secara berleluasa
Deforestation
(iii) Gempa bumi / Earthquakes
(c) Peranti pengesan pergerakan tanah
Ground motion detection device

9.5 Usia Bumi Age of Earth

1. mentarikhkan / date
2. masa, peristiwa
time, events
3. (a) sisa atau surihan, terpelihara, sedimen
remain or trace, preserved, sedimentary
(b) Kaedah pentarikhan radiometrik
Method of radiometric dating
(c) (i) penunjuk usia / an indicator of age
(ii) rekod kemandirian spesies / a record of species survival
(d) bukti, perkembangan / evidence, development

9.6 Sumber Bumi dan Geologi Gunaan Earth's Resources and Applied Geology

1. (a) Air permukaan / Surface water
(b) Akuifer / Aquifer
(c) mata air / spring
(d) larut resap / leaching
2. Mineral logam: Bijih timah, Kuprum
Metallic minerals: Tin ore, Copper
Mineral bukan logam: Petroleum, Batu kapur
Non-metallic minerals: Petroleum, Limestone
3. (a) paya, lumpur / enapan, Tekanan, haba, arang batu
swamps, dirt / sediment, pressure, heat, coal
(b)



4. Proses hidroterma / Hydrothermal process

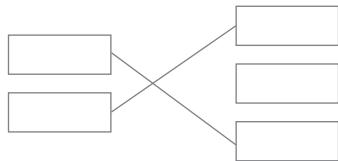
Power PT3

Bahagian A

1. B 2. C 3. D 4. A 5. D
6. C

Bahagian B

1. (a)



- (b) (i) troposfera / troposphere
 (ii) mesosfera / mesosphere

Bahagian C

2. (a) Air permukaan ialah air yang berada di permukaan Bumi.
Surface water is the water found on the surface of Earth.
- (b) (i) Kolam air panas terbentuk apabila air di permukaan Bumi menyerap masuk ke bawah tanah lalu dipanaskan oleh batuan panas dan mengalir semula ke permukaan.
A hot spring is formed when the water on the Earth's surface is absorbed into the underground and then heated by hot rocks and flows back to the surface.
- (ii) 1. Penjanaan tenaga elektrik
Generating electricity
 2. Perlombongan logam berharga seperti emas
Mining precious metals such as gold
- (c) Aktiviti pertanian / pembangunan tanah / penteranagan
Agricultural activity / land development / farming

- (d) Air akuifer lebih berkualiti kerana air akuifer telah dituras secara semula jadi oleh lapisan batuan yang pelbagai saiz dan kaya dengan mineral.

Aquifer water is of better quality because the water has been naturally filtered by different sizes of rocks and is rich in minerals.

PRAKTIS TIMSS / PISA

1. B

2. B

3. Kebaikan: Menyuburkan tanah.

Advantage: Makes land fertile.

Keburukan: Merosakkan harta benda.

Disadvantage: Destroys property.

Power KBAT

1. (a) M, L, K, J

(b) Lapisan batu yang paling bawah / dalam merupakan lapisan tertua manakala lapisan yang terkini berada di bahagian atas. Oleh itu, fosil J adalah fosil yang paling tua.

The deepest layer of rock is the oldest layer while the most recent layer is on the top. Thus, fossil J is the oldest fossil.

2. Kaedah ini dapat mencegah hakisan tanah yang boleh menyebabkan tanah runtuh dengan memperlambangkan kelajuan aliran air.

This method can prevent soil erosion that can cause landslides by slowing down the speed of the water flow.