

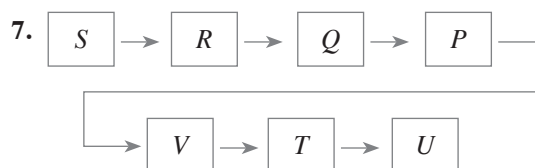


Jawapan Praktis Pengukuhan

Bab 1

1. (a) Biologi, fizik, kimia
Biology, physics, chemistry
(b) (i) kimia
chemistry
(ii) fizik
physics
(iii) kimia
chemistry
2. Tabung uji, Kelalang kon, Balang gas, Kaki retort, Corong turas
Test tube, Conical flask, Gas jar, Retort stand, Filter funnel
3. Beracun, Mudah meletup, Mengakis, Merengsa
Poisonous, Explosive, Corrosive, Irritant
4. (a) Ampere
(b) saat / *second*
(c) meter / *metre*
(d) Kelvin
(e) kilogram
5. (a) 10^{-6}
(b) 10^6
(c) 10^3
(d) 10^{-2}
(e) 10^{-3}
(f) 10^{-1}
(g) 10^9
(h) 10^{-9}

6. Ketumpatan / *Density* = $\frac{\text{Jisim / Mass}}{\text{Isi padu / Volume}}$

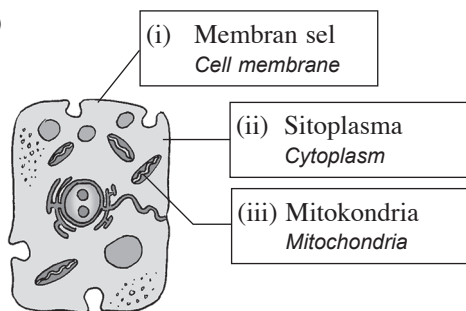




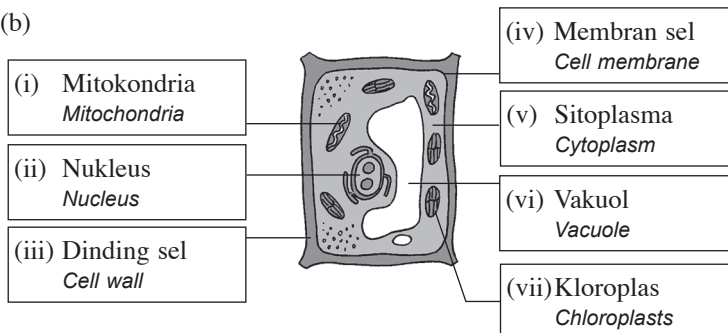
Jawapan Praktis Pengukuhan

Bab 2

1. (a)



(b)



2. (a) Mengawal semua aktiviti sel

Control all activities of the cell

(b) Memberikan sokongan dan bentuk sel yang tetap

Gives support and fixed shape to the cell

(c) Menyerap tenaga cahaya daripada cahaya matahari bagi menjalankan proses fotosintesis

Absorbs light energy from the sunlight to carry out the process of photosynthesis

(d) Mengawal pergerakan bahan ke dalam dan ke luar sel

Controls the movement of substances in and out of the cell

(e) Tempat di mana tindak balas kimia sel berlaku

The place where chemical reactions of the cell take place

(f) Menghasilkan tenaga untuk tindak balas

Produces energy for reactions

3. (a) Benar / True

(b) Palsu / False

4. Unicellular organism <i>Organisma unisel</i>	<i>P, S</i>
Multicellular organism <i>Organisma multisel</i>	<i>Q, R</i>

5. Sel otot, Sel pembiakan, Sel darah merah, Sel saraf

Muscle cell, Reproductive cell, Red blood cell, Nerve cell



7. (a) Sistem rangka

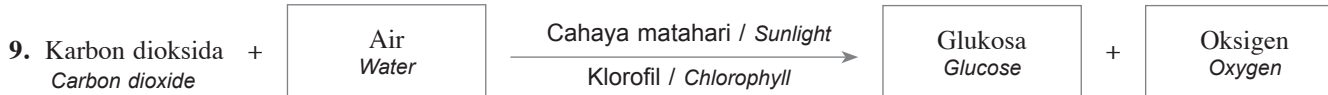
Skeletal system

(b) pergerakan

movement

(c) sel-sel pembiakan

reproductive cells





1. Homeostasis
Homeostasis
2. (a) menambahkan, Lebih banyak
increase, More
(b) mengurangkan, sedikit
reduces, Less
3. (a) mengembang
dilate
(b) Lebih, condong, berkurangan
increases, flat, reduces
4. (a) mengecut
reduces
(b) mengecut, mengendur
contract, relax
(c) berdiri tegak
stand erect
5. Transpirasi
Transpiration



1. (a) Palsu
False
- (b) Palsu
False

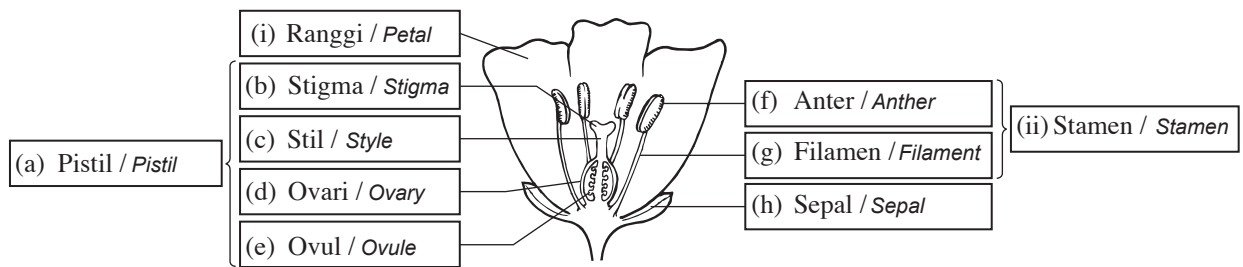
2.	Pembiakan seks <i>Sexual reproduction</i>	Pembiakan aseks <i>Asexual reproduction</i>
	• Manusia <i>Human</i> • Katak <i>Frog</i> • Beruang kutub <i>Polar bear</i> • Ikan <i>Fish</i>	• Yis <i>Yeast</i> • Ameba <i>Amoeba</i> • Paramecium <i>Paramecium</i> • Bakteria <i>Bacteria</i>

3. (a) Ameba, paramecium
Amoeba, paramecium
 - (b) Hidra, yis
Hydra, yeast
 - (c) Cacing pipih, tapak sulaiman
Flatworm, starfish
 - (d) Alga, kulat, paku pakis
Algae, fungus, fern
 - (e) Ubi kentang, halia, kunyit
Potato, ginger, turmeric
4. (a) Menghantar sperma dari testis ke uretra
Transports sperms from the testis to urethra
 - (b) Menghasilkan sperma
Produces sperms
 - (c) Melindungi testis
Protects the testis
 - (d) Menghasilkan nutrien untuk sperma
Produces nutrients for the sperms
 - (e) Menghasilkan cecair yang mengaktifkan sperma
Produces fluid that activates the sperms
 - (f) Menyalurkan sperma dan air kencing keluar daripada badan
Channels sperms and urine out of the body
 - (g) Menyalurkan sperma ke dalam faraj perempuan
Channels sperms into the vagina of the female
5. (a) Menghasilkan ovum
Produces ova
 - (b) Merembeskan mukus yang membolehkan sperma berenang dengan mudah
Secretes mucus to enable sperms to swim easily
 - (c) Menerima sperma dari zakar
Receives sperms from the penis
 - (d) Tempat penempelan ovum tersenyawa dan perkembangan embrio
The place where implantation of fertilised ovum and development of the embryo to occur
 - (e) Menyalurkan ovum dari ovari ke uterus dan tempat berlakunya persenyawaan
Channels ovum from ovary to uterus and is a place where fertilisation occur
6. darah, serviks, faraj
blood, cervix, vagina



8. (a) Kondom
Condom
(b) IUCD
IUCD
(c) Ligasi
Ligation
(d) Vasektomi
Vasectomy
(e) Diafragma
Diaphragm

9.



10. (a) Anter
Anther
(b) Butir debunga
Pollen grain
(c) Filamen
Filament
(d) Ovari
Ovary
(e) Sepal
Sepal
(f) Rangi
Petal
(g) Stigma
Stigma
(h) Stil
Style

11. stigma, tiub debunga, gamet jantan, ovul, betina
stigma, pollen tube, male gamete, ovule, female



1. (a) Benar
True
(b) Palsu
False
(c) Benar
True

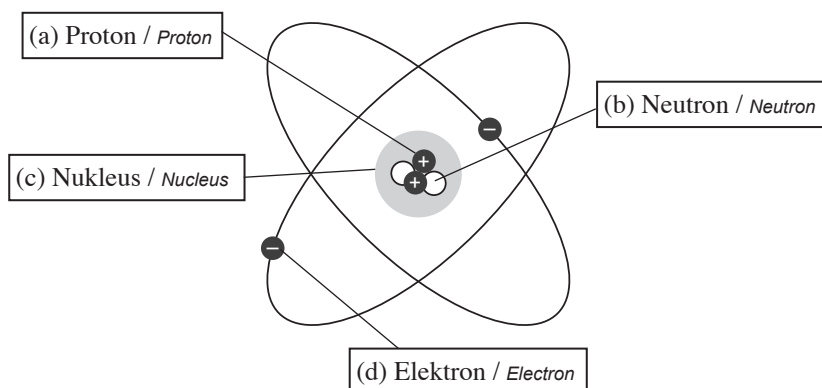
2. (a)	Tersusun sangat rapat <i>Arranged very closely</i>	Jauh dan tidak teratur <i>Far and not in order</i>	Sangat jauh <i>Very far apart</i>
(b)	Sangat kecil <i>Very small</i>	Sederhana <i>Moderate</i>	Besar <i>Large</i>
(c)	Bergetar pada kedudukan yang tetap <i>Vibrate at fixed positions</i>	Saling menggelongsor <i>Glides on each other</i>	Bergerak rawak <i>Move randomly</i>
(d)	Terikat dengan kuat <i>Bound strongly</i>	Sederhana <i>Moderate</i>	Sangat lemah <i>Very weak</i>
(e)	Sangat lemah <i>Very weak</i>	Sederhana <i>Moderate</i>	Sangat tinggi <i>Very high</i>

3. R : Peleburan
Melting
S : Pendidihan
Boiling
T : Pembekuan
Freezing
U : Kondensasi
Condensation

4. (a) Peleburan
Melting
(b) Penyejatan
Evaporation



1.



2. (a) Campuran

Mixture

(b) Molekul

Molecule

(c) Atom

Atom

(d) Unsur

Element

(e) Sebatian

Campuran

3. (a) Berkilau

Shiny

(b) Mulur

Ductile

(c) Mudah ditempa

Malleable

(d) Konduktor elektrik

Electrical conductor

(e) Konduktor haba

Heat conductor

4. (a) Berkala, logam / *Periodic, metals*

(b) kiri / *left*

(c) fizikal / *physical*

(d) Merkuri / *Mercury*

5. *P* : Unsur logam / *Metallic element*

Q : Unsur separuh logam / *Semi-metallic element*

R : Unsur bukan logam / *Non-metallic element*

6. (a) Penurasan / *Filtration*

(b) Penghabluran / *Crystallisation*

(c) Penapisan / *Sieving*

(d) Tarikan magnet / *Magnetic attraction*

7. (a) Benar / *True*

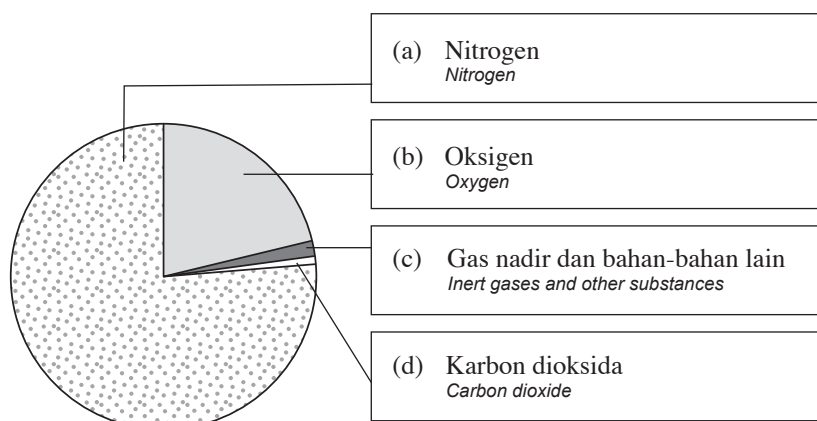
(b) Palsu / *False*

(c) Palsu / *False*

(d) Palsu / *False*



1.



2. (a) penyulingan berperingkat
fractional distillation

(b) gas nadir
inert gas

3. (a) Oksigen
Oxygen

(b) Karbon dioksida
Carbon dioxide

(c) Nitrogen
Nitrogen

(d) Helium
Helium

(e) Neon
Neon

(f) Argon
Argon

4. (a) Fotosintesis
Photosynthesis

(b) Pembakaran
Combustion

(c) Respirasi
Respiration

5. (a) Kayu, kertas, kain
Wood, paper, cloth

(b) Minyak, cat, varnish
Oil, paint, varnish

(c) Butana, asetilena
Butane, acetylene

(d) Kalium, natrium, kalsium, magnesium
Potassium, sodium, calcium, magnesium

6. (a) ✓

(b) ✓

(d) ✓

(e) ✓



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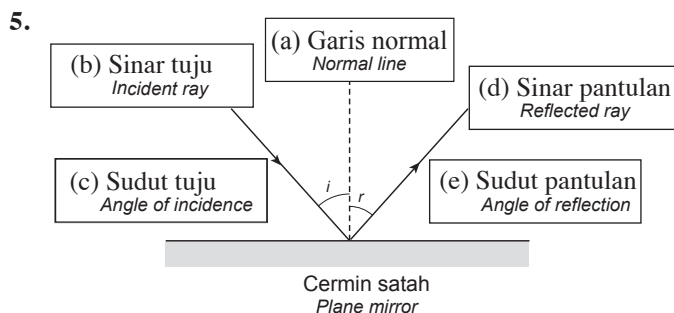
Bab 8

1. terbentuk, tidak terbentuk
forms, cannot be formed

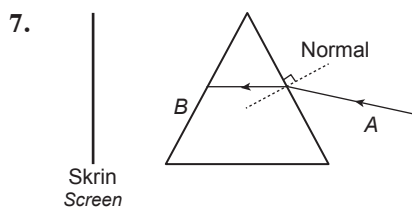
2. (a) Tegak dan sama size
Upright and same size
(b) Tegak dan mengecil
Upright and diminished
(c) Songsang, membesar
Inverted, enlarged

3. (a)	Cermin cembung <i>Convex mirror</i>	Memerhati setiap sudut dalam pasaraya <i>To monitor every corner of supermarket</i>
(b)	Cermin cekung <i>Concave mirror</i>	Melihat gigi pesakit dengan lebih dekat <i>To see patient's teeth closer.</i>

4. (a) garis lurus
straight lines
(b) bunyi, kilat
sound, lightning
(c) Bayang-bayang
Shadow



6. B ☒



8. (a) ✓
(b) ✗

9. Warna primer <i>Primary colour</i>	<i>P, Q, R</i>
Warna sekunder <i>Secondary colour</i>	<i>S, T, U</i>



Jawapan Praktis Pengukuhan

Bab 9

1. (a) (i) Geosfera
Geosphere
(ii) Hidrosfera
Hydrosphere
(iii) Atmosfera
Atmosphere
(iv) Biosfera
Biosphere
(b) sinar ultra ungu
ultraviolet rays
2. (a) Zon permukaan
Surface zone
(b) Zon tengah malam
Midnight zone
(c) Zon gelap
Dark zone
3. lautan, sungai, salji, awan, air bawah tanah
oceans, rivers, snow, cloud, ground water
4. (a) Batuan igneus
Igneous rocks
(b) Batuan enapan
Sedimentary rocks
(c) Batuan metamorfik
Metamorphic rocks
5. (a) S
(b) S
(c) D
(d) S
(e) D
(f) D
(g) S
6. 3 , 2 , 4 , 1
7. (a) Skala masa geologi
Geological time scale
(b) meteorit
meteorite
(c) paleontologi
paleontology