

a resource kit for teachers and students of Indonesian

Ayo ke Kebun Raya!



Teacher Notes

The Indonesian kit, *Ayo ke Kebun Raya*, has been developed jointly by the Languages Strategy Team, Learning and Teaching Division, Department of Education & Training and the Education Service of the Royal Botanic Gardens, Melbourne. *Ayo ke Kebun Raya* will enable teachers and students of Indonesian to make their class visit to the Royal Botanic Gardens a combined environmental, cultural and linguistic experience. The kit comprises:

- language worksheets suitable for students of Indonesian in the early, middle and later years of schooling, including VCE. The worksheets centre around four themes: biodiversity, building materials, the Wallace line and designing a tour of the Gardens
- teacher notes explaining how to prepare an Indonesian language-oriented visit to the Gardens, including suggested pre and post visit classroom activities for all levels
- a list of useful vocabulary in Indonesian and English.

The Royal Botanic Gardens, Melbourne has a wide variety of tropical plants from around the world, many of which grow in Indonesia. The Hothouse, the Fern Gully and the Bamboo Gardens feature plants from both the Indo-Malayan and the Austro-Malayan divisions of the Archipelago. The tropical plant collection provides teachers and students with a stimulating setting for practising the Indonesian language and fostering understanding of the Indonesian people and the diverse and fragile environment in which they live.

PREPARING FOR THE VISIT

- Contact Education Services at the Gardens several weeks in advance to book your class visit, including a lesson in English conducted by an Education Officer, to familiarise students with the Gardens and the tropical plants. An Education Officer may also focus on plants not included in the kit.
- Inform students of the rules of security and courtesy when visiting the Gardens.

PRIOR TO THE VISIT

You will be guided by the age and level of your students as to which activities to focus on and how much detail to provide. Consider asking the classroom/Science teacher to explain plant types and to help identify conservation issues faced by the Gardens. For older students, the Studies of Society and the Environment (SOSE) or Science teacher could provide background information on plant classification, endangered plant species, conservation and environmental issues affecting plants and natural habitats. Consider enlisting the help of the Art teacher to guide students in designing collages, posters or drawings and then display students' work.

Teachers of all levels of schooling are encouraged to carefully plan their visit to the Gardens and to ensure that students are given adequate linguistic preparation to make meaning of the activities they will be expected to complete.

Identify unfamiliar or difficult vocabulary and linguistic structures and give preparatory lessons. If certain activities appear too difficult, simplify, adapt or even disregard them. Decide if your students will work individually or in groups and photocopy the worksheets as necessary.

DURING THE VISIT

At the Gardens, students will participate in an activity-based program that includes:

- a guided tour to identify tropical plants found in Indonesia
- games that develop understanding of the earth's biodiversity
- activities that explore the relationship between people and nature
- recording relevant information in their garden diary.

THE WORKSHEETS

The worksheets and instructions are written in Indonesian. Depending on the age of your students and the length of time they have been learning Indonesian, the instructions could appear difficult. Be assured, however, that they have been simplified as much as possible. Avoid directly translating the worksheets. Students learn much incidental language as they are guided by their teacher to work out the instructions for themselves.

The worksheets are presented in order of difficulty, from simple to more complex. It is essential that students be well prepared for their visit to the Gardens if they are to benefit fully from the linguistic, scientific, artistic and cultural intent of the kit.

To assist teachers select worksheets appropriate to their students' age and linguistic skills each worksheet is denoted with one or more of the following symbols:

Early Years (e) Middle Years (m) Later Years (l)

The activities provide the opportunity for students to focus on the four strands of *Listening, Speaking, Reading* and *Writing*, depending on the worksheets selected.

Students will also have the opportunity to:

- explore the relationships between plants and people in Indonesia through the information and activities presented by the Education Officer during the visit
- identify similarities and differences between the biodiversity of plants in Indonesia and Australia
- use Indonesian in an authentic language context in relation to the Indonesian environment and their own world and local environment.

THE GARDEN DIARY

It is suggested that students create their own garden diary at the beginning of their unit of work on the Gardens. They can design a suitable front and back cover with an Indonesian title and use the diary to collect and record all work relating to the Gardens. Students can, for example, copy, write, draw, clip or paste photographs and worksheets in the diary. The garden diary can be used for assessment purposes or to simply record their work.

Early Years (P - Year 4)

e

These activities complement the *Early Years Literacy Program* and reinforce the key understandings that:

- the development of early literacy is the foundation of all learning
- literacy can be developed in more than one language at the same time
- literacy development in one language can reinforce literacy development in a second or subsequent language
- learning and conceptual understandings gained in one language are readily transferable to another language.

Teachers should consult with their students' classroom, Science and/or SOSE teachers when planning the Gardens visit, in order to adopt complementary literacy teaching approaches and strategies that will support literacy development in English and Indonesian and for some students, in their third language. An Indonesian-focussed visit to the Gardens offers a unique stimulus for language learning, by providing a natural setting and purpose, which can be further developed in the SOSE, Science and The Arts learning areas.

Middle Years (Years 5 – 9)

m

A visit to the Gardens and the proposed activities complement the *Middle Years Strategy* by providing a stimulating learning context that extends beyond the classroom and the school and are designed to engage students' interest through active involvement. The activities proposed for the middle years assume that students will be at least familiar with basic vocabulary associated with:

numbers
colours
directions

houses
building materials
parts of the house

plants
food chain
biodiversity

Later Years (Years 10 - 12)

l

Teachers of Indonesian in the later years of schooling are encouraged to develop a unit of study on contemporary environmental or conservation issues which includes a visit to the Gardens. The kit provides senior students of Indonesian with a unique opportunity to engage with environmental and conservation issues which affect areas of Indonesia and Australia. It may be particularly relevant to students of Indonesian who are also studying Biology, Geography and other Science subjects.

AYO KE KEBUN RAYA

The Indonesian kit *Ayo ke Kebun Raya* is best used in conjunction with a visit to the Royal Botanic Gardens, Melbourne to further promote students appreciation of the need to preserve natural habitats and develop an understanding of the threats and consequences of loss of biodiversity. The session engages students in hands-on sensory experiences linked to Indonesian culture and provides opportunities for an integrated approach to learning.

VICTORIAN ESSENTIAL LEARNING STANDARDS

The use of this kit provides opportunities to identify learning that students need to focus on and opportunities for students to demonstrate achievements against the standards in LOTE, Interpersonal development, Personal Learning, Communication, Design, Creativity and Technology, Information and Communication Technology and Thinking Processes. In addition, some key elements of standards in The Humanities (Geography and History) and Science are also addressed in this kit.

The following table is an example of how this kit might be used to address some Level 4 Standards:

Strand	Domain	Dimension	Key elements of standards addressed by the kit
			Students:
Physical, Personal and Social Learning	Interpersonal development	Working in teams	... work effectively in different teams and take on variety of roles accept responsibility for their role and tasks ...
	Personal Learning	The individual learner Managing personal learning	... demonstrate the ability to learn independently and with peersdevelop and implement plans to complete tasks within a set timeframe ...
Discipline-based Learning	Humanities - Geography	Geographic knowledge and understanding	... use maps to identify and describe the human and physical characteristics of local and global environments...
	Humanities - History	Historical knowledge and understanding	... demonstrate an understanding of key aspect of an Asian country within the Australian region describe customs and religious traditions ...
	LOTE Pathway 1 Level 4	Communicating in a language other than English	... participate in oral interactions to convey and receive information organise and apply grammatical information and knowledge of words ...

		Intercultural knowledge and language awareness	... read a wide range of short and/or modified texts for meaning and for use as models in their own writing demonstrate an understanding of cultural differences in writing conventions ...
	Science	Science knowledge and understanding	... explain relationships that exist between systems in the environment ...
Interdisciplinary Learning	Communication	Presenting	... use a range of presentation formats to summarise ideas and organise information logically and clearly to meet the needs of audience and purpose ...
	Design, Creativity and Technology	Producing	... work safely with a variety of materials and components, paying attention to quality and function ...
	Information and Communication Technology (ICT)	ICT for creating	... independently use a range of skills, procedures and functions to process different data types and produce suitably formatted products to suit different purposes and audiences ...
	Thinking	Reasoning, processing and inquiry	... use information they collect to develop concepts, solve problems or inform decision making ...

Further information on the Standards is available at <http://vels.vcaa.vic.edu.au>

Teaching and learning activities

These activities could be implemented by LOTE and generalist teachers in primary schools, or LOTE, Science and Humanities teachers in secondary schools as a teaching team. Students will have the opportunity to use Indonesian in an authentic language context in relation to the Indonesian environment and their own local environment and to develop an understanding of the similarities and differences between biodiversity of plants in Indonesia and Australia.

Assessment

Assessment Advice has been provided to support assessing student achievement against the Standards that identifies three purposes:

- Assessment of learning
- Assessment for learning
- Assessment as learning

Further information on these can be found at:

<http://www.sofweb.vic.edu.au/blueprint/fs1/assessment/assess.asp>

The following table shows examples of assessment criteria which are drawn from relevant standards and associated tasks or activities. Teachers could choose to use some or all of these or use other activities in the kit to assess relevant standards.

Standards	Assessment criteria	Examples	Evidence
<u>Interpersonal development</u> <u>Working in teams</u>	Ability to contribute to the achievement of group goals.	Students participate in a bamboo construction experience at the Gardens.	Teacher observations and records on student participation in teams.
Personal Learning <u>Managing personal learning</u>	Ability to set goals and focus on task achievement.	Many activities in the kit can be used to monitor and record the learning progress of individual student.	Journal entries describing how students complete short-term and long-term tasks.
Humanities - Geography <u>Geographic knowledge and understanding</u>	Ability to read and interpret maps.	Complete the following set of tasks in <i>The Wallace line</i> : <ul style="list-style-type: none"> • assemble a 'jigsaw' map • name the islands, oceans and seas on the map of Indonesia • describe the climate, flora and fauna of the Indonesian Archipelago. 	Use a map to introduce environmental issues.
LOTE <u>Communicating in a language other than English</u> <u>Intercultural knowledge and language awareness</u>	Ability to: apply grammatical information and knowledge of words in communication apply relevant conversational rules and expectations.	Teachers can select any of the activities in the four topics of <i>Biodiversity</i> , <i>Building materials</i> , <i>The Wallace line</i> and <i>Designing a tour of the Gardens</i> as assessment tasks. For examples: <ul style="list-style-type: none"> • illustrate the life cycle of plants • write a short paragraph about the importance of biodiversity • describe the relationship between people and nature • perform a role-play (Worksheet 23). 	Teacher observations and records on students' use of the target language in both verbal and written communication.
	Ability to read a wide range of short or modified texts for meaning.	Read texts aloud or silently to prepare and store new words in a data bank.	Teacher records on student's pronunciation, intonation, phrasing and expression, when

			reading aloud. Students' ability to comprehend and extract relevant information, when reading silently.
<u>Science Knowledge and understanding</u>	Ability to research scientific information.	Choose one of the following topics and conduct a scientific research: <ul style="list-style-type: none"> the relationships between plants and other living things rare and endangered species like the <i>Titan Arum</i> which grow in the rainforests of Western Sumatra in Indonesia. 	Fact sheet
<u>Communication Presenting</u>	Ability to organise ideas and information logically.	Make a short oral presentation in the target language about what they learned, liked/disliked about their visit to the Gardens.	Effective oral presentation
<u>Design, Creativity and Technology Producing</u>	Ability to use information and communication technology tools and techniques to research, develop and communicate ideas.	Construct a model of a traditional Indonesian house. Design and produce a poster or brochure promoting the Royal Botanic Gardens.	Model of a house Poster/brochure
<u>Information and Communication Technology (ICT) ICT for creating</u>	Ability to use ICT to produce information products.	Use their digital images to prepare a PowerPoint presentation of the Gardens visit.	Power point presentation.
<u>Thinking Reasoning, processing and inquiry</u>	Ability to use thinking strategies for gathering and processing information.	Process the information gathered during their visit to the Gardens through activities such as reviewing the pre visit list and predictions, and devising their own true or false activity.	Teacher observations and records on development of thinking skills.

Biodiversity

Aims

- To motivate and engage students to explore the biodiversity of the Austro-Malayan division of Indonesia's archipelago
- To foster an appreciation of biodiversity by exploring topics such as plant survival, food chains and the web of life.

Language Focus

- Vocabulary related to biodiversity, for example, *keanekaragaman hayati, beraneka ragam, bermacam-macam, berbagai, tergantung pada, ketergantungan*
- Vocabulary related to survival needs of all species, for example, *air, sinar matahari, udara, oksigen, nutrisi, perlindungan.*

Pre visit activities

- Students are introduced to or revise vocabulary relating to basic plants and plant categories through check lists, crosswords or games such as *kancil*, word races and memory games
- Students develop an understanding of biodiversity through activities such as listing things they think they will see at the Gardens and predicting the connections between the plants and animals that live in the Gardens (Worksheets 1 - 6). Predictions and lists can be reviewed after the visit to the Gardens
- Students develop an understanding of ecosystem diversity by studying the interaction between plant and animal species and between the species and their physical environment. Worksheets 7 and 8 provide prerequisite information that will be reinforced and extended during the visit to the Gardens.

Activities at the Gardens

- Visit the Fern Gully. Observe and record in the garden diary information about the flora and fauna in the Fern Gully as explained by an Education Officer
- Play the *Jaringan kehidupan* game as instructed by an Education Officer
- Visit the Hothouse, observe the flora and fauna and record in the garden diary observations and information provided by an Education Officer.

Post visit activities

- Students process the information gathered during their visit to the Gardens through activities such as reviewing the pre visit list and predictions, and devising their own true or false activity
- Students draw conclusions about the biodiversity of the Austro-Malayan division of Indonesia's archipelago as found in the Gardens, through activities such as completing food chains (Worksheets 9, 10 and 11) and creative writing using the scenario provided in Worksheet 12.

Kegiatan 1

Apakah ada ... di pohon di Kebun Raya?

	Ya	Tidak
rubah	√	
possum		
ikan		
burung		
rumpun		
buah		
biji		

Kegiatan 2

Gambarlah binatang atau tanaman yang ada di pohon.



Kegiatan 1

Apakah ada ... di tanah di Kebun Raya?

	Ya	Tidak
burung		√
rumput		
serangga		
possum		
siput		
cacing		
rubah		

Kegiatan 2

Gambarlah binatang atau tanaman yang ada di tanah.



Kegiatan 1

Apakah ada ... di danau di Kebun Raya?

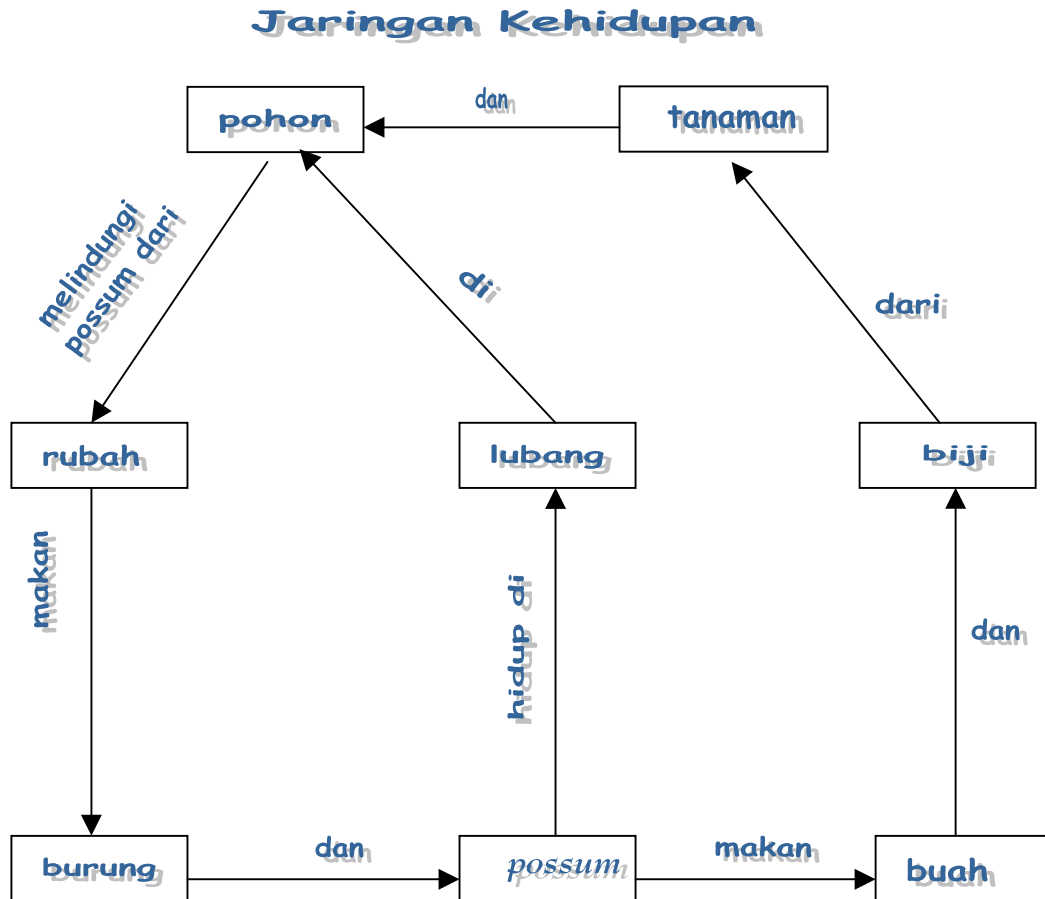
	Ya	Tidak
ikan	√	
rumput		
angsa		
bebek		
burung		
belut		
rubah		

Kegiatan 2

Gambarlah binatang atau tanaman yang ada di danau.



Gambarlah binatang dan tanaman yang ada di jaringan kehidupan di bawah di samping setiap kata.



Tulislah kalimat tentang jaringan kehidupan itu.

Contoh: Possum hidup di lubang di pohon.

1. _____
2. _____
3. _____
4. _____
5. _____

Kata-kata tentang rubah dan possum

Ada dua kotak yang kosong. Isilah kotak itu dengan kata-kata kamu sendiri kalau mau.

rubah	buah	pohon	tinggal
<i>possum</i>	biji	tua	
burung	lubang	malam	

Kata-kata tentang tumbuhan dan binatang di tanah

Ada dua kotak yang kosong. Isilah kotak itu dengan kata-kata kamu sendiri kalau mau.

tanaman	makanan	kotoran binatang	daun
serangga	tanah	cacing	
manusia	siput	kompos	

Kata-kata tentang tumbuhan dan binatang di danau

Ada dua kotak yang kosong. Isilah kotak itu dengan kata-kata kamu sendiri kalau mau.

ikan	angsa	bersih	oksigen
bebek	belut	tanah	
katak	tanaman air	lumpur	

Gambarlah peta konsep seperti di Worksheet 4 tentang kehidupan di pohon, tanah dan/atau danau di buku harian Kebun kamu.



Tanaman-tanaman ini ada di Kebun Raya. Buatlah garis yang menghubungkan tanaman dengan informasi yang benar.

Pohon pisang

bisa digunakan untuk membuat angklung

buahnya bisa dimakan

tumbuh di Indonesia

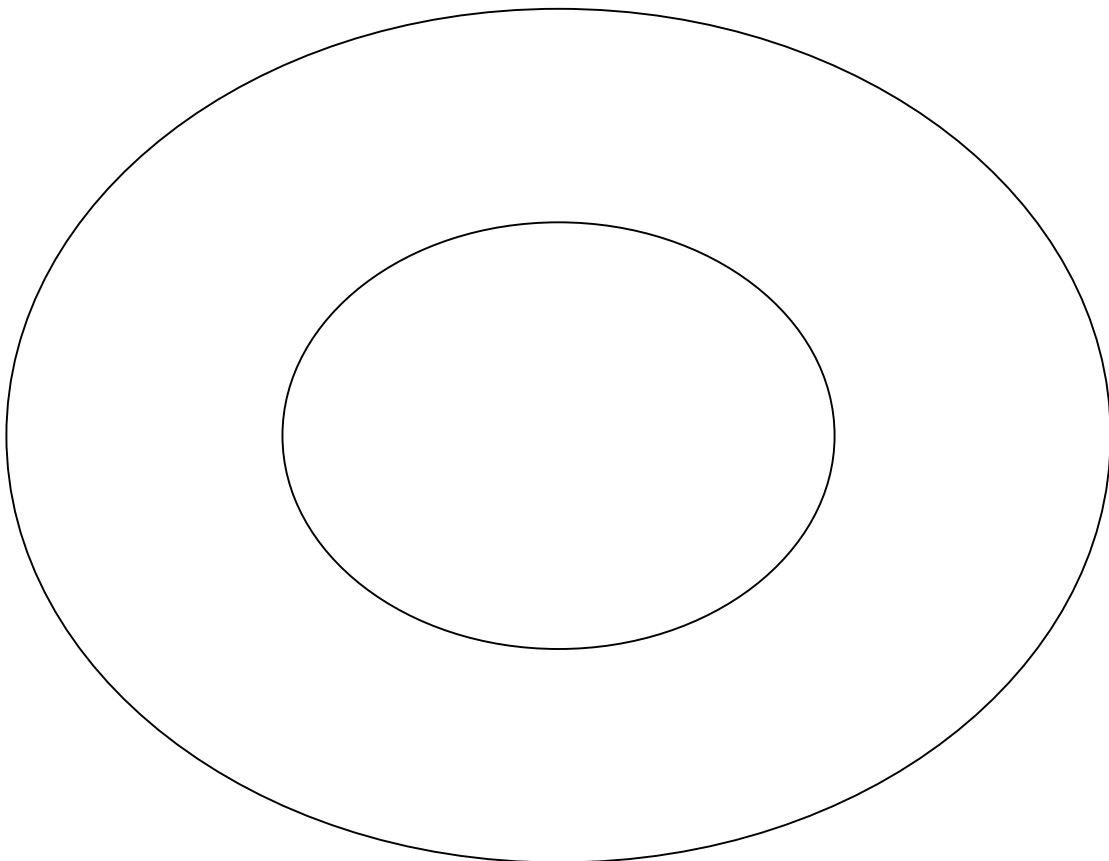
daunnya digunakan untuk membungkus makanan di Indonesia

Bambu

daunnya kecil

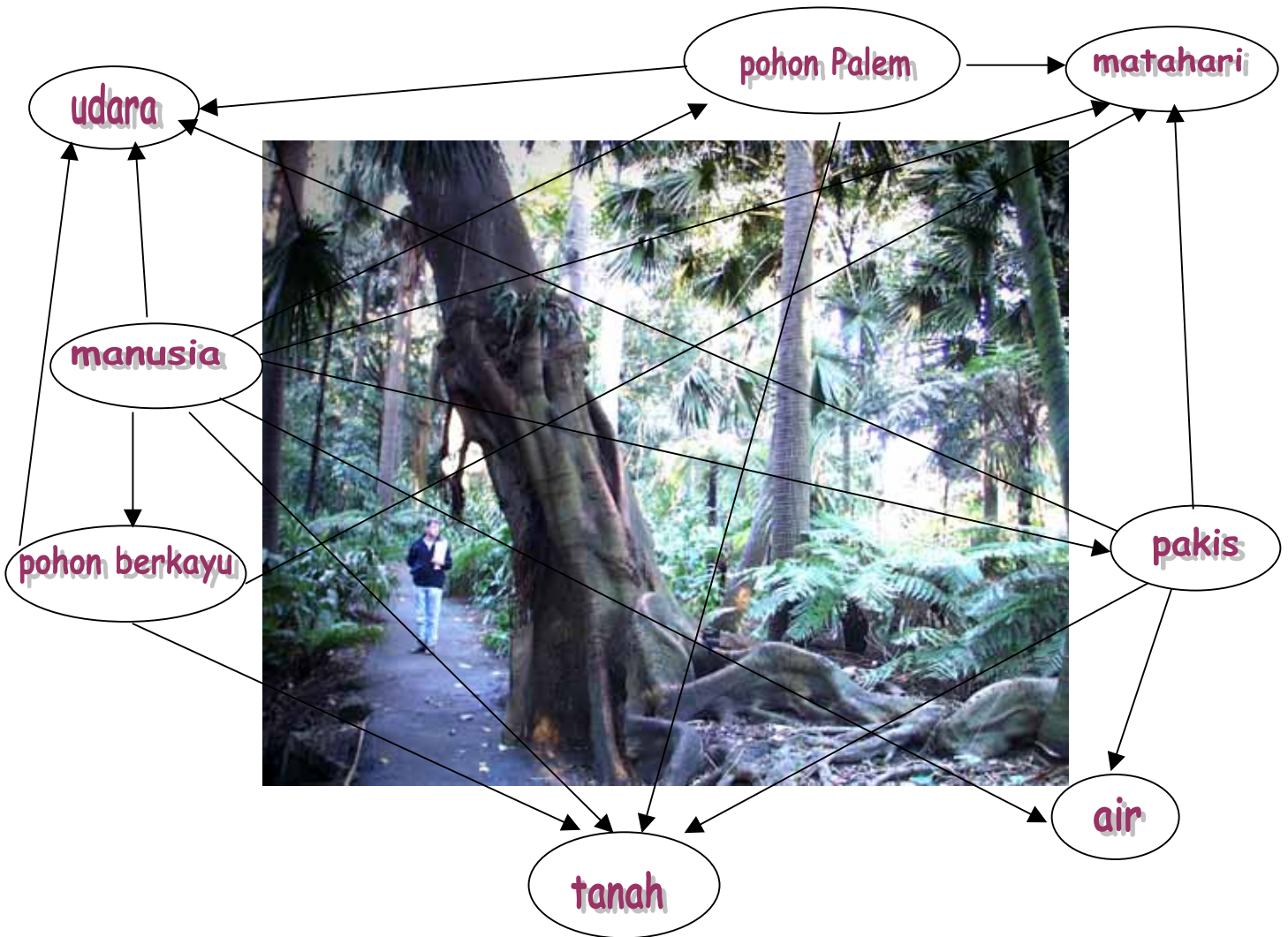
daunnya besar

Lengkapilah Roda informasi tanaman.



-
1. *Tulislah nama satu tanaman di garis.*
 2. *Gambarlah tanaman itu di tengah roda.*
 3. *Di sekeliling gambar tulislah semua informasi tentang tanaman itu.*

Lihatlah gambar di bawah.



Tuliskan beberapa kalimat tentang gambar di atas.

Contoh: Manusia perlu matahari.

1. _____
2. _____
3. _____
4. _____
5. _____

Bacalah bacaan di bawah.

Keanekaragaman Hayati

Keanekaragaman hayati sangat penting bagi kehidupan di bumi. Hubungan antara beranekaragam kehidupan di bumi disebut jaringan kehidupan. Jaringan kehidupan menjelaskan hubungan antara manusia, binatang, tumbuh-tumbuhan dan lingkungan alam.

Perubahan lingkungan alam dan hilangnya spesies tumbuhan dan binatang tertentu mengancam jaringan kehidupan. Misalnya, kalau banyak hutan tropis di Indonesia yang hilang, ini akan mengancam kehidupan binatang liar seperti harimau dan orangutan.

Jaringan kehidupan tergantung pada kehidupan tumbuh-tumbuhan dan binatang. Untuk hidup tumbuh-tumbuhan memerlukan air, gas seperti oksigen dan karbondioksida, sinar matahari, nutrisi, perlindungan dan reproduksi. Kalau tumbuh-tumbuhan tidak bisa hidup, binatang dan manusia akan terancam.

Tumbuh-tumbuhan mempunyai beberapa fungsi penting yaitu sebagai penghasil oksigen, sebagai sumber makanan bagi manusia dan binatang dan sebagai habitat bagi binatang. Beberapa jenis binatang juga menjadi sumber makanan bagi tumbuh-tumbuhan.

Kosa Kata

<i>keanekaragaman hayati</i>	biodiversity	<i>sumber makanan</i>	source of food
<i>bumi</i>	earth	<i>binatang liar</i>	wild animal
<i>jaringan kehidupan</i>	web of life	<i>tergantung</i>	depend on
<i>manusia</i>	people	<i>sinar matahari</i>	sunlight
<i>lingkungan alam</i>	natural environment	<i>perlindungan</i>	protection
<i>mengancam</i>	to threaten	<i>penghasil</i>	producer

Gunakanlah informasi di atas untuk menjelaskan jaringan kehidupan yang ada di gambar.



Kegiatan 1

Cocokkanlah gambar dengan kata yang benar.



pohon



jamur

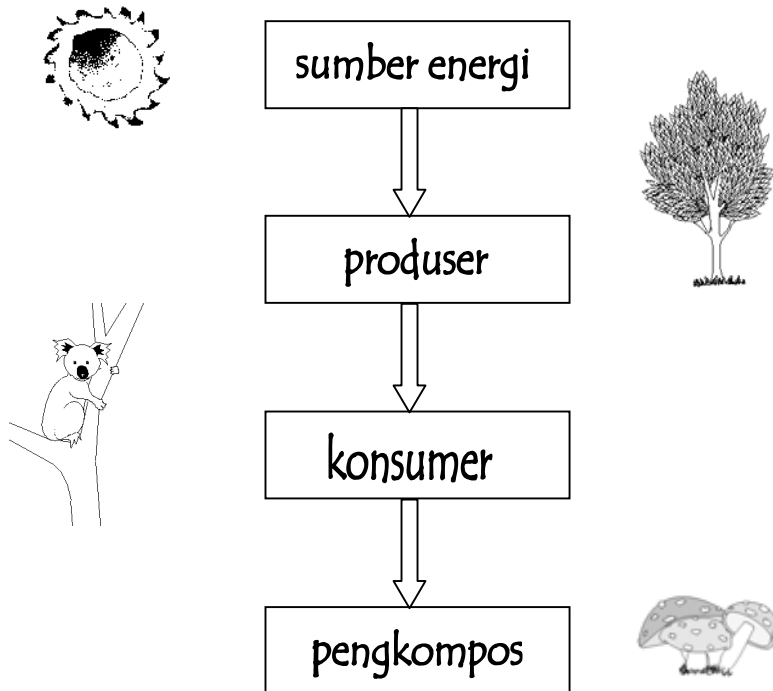


matahari



koala

Lihatlah gambar Rantai Makanan di bawah



Kegiatan 2

Buatlah garis untuk setiap kata di sebelah kanan dengan kata di sebelah kiri.

matahari

koala

jamur

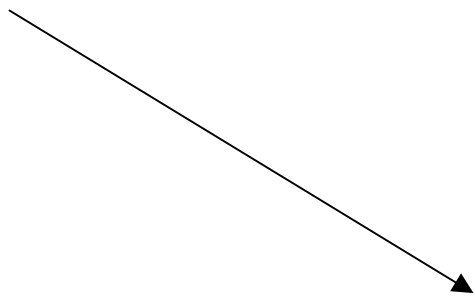
pohon

produser

konsumer

pengkompos

sumber energi



Bacalah informasi tentang Rantai Makanan di bawah.

Rantai Makanan

Setiap anggota ekosistem mempunyai peranan yang penting dan kalau anggota itu lebih unggul dari anggota ekosistem lain akan menjadi masalah. Jadi siapa saja anggota ekosistem kita?

Matahari. Matahari adalah sumber energi yang diperlukan untuk semua kehidupan.

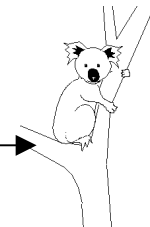
Pengkompos. Pengkompos adalah benda hidup yang hidupnya tergantung pada binatang dan tumbuh-tumbuhan yang sudah mati dan mengubahnya menjadi mineral dan gas lagi. Contoh pengkompos adalah jamur dan bakteri.

pengkompos



Konsumer. Siapa konsumer? Manusia, binatang dan tanaman yang tergantung pada produser. Contohnya binatang yang makan tumbuh-tumbuhan yang dinamakan herbivora. Binatang yang makan binatang lain dinamakan carnivora. Carnivora juga konsumer. Omnivor adalah binatang dan manusia yang makan binatang dan tumbuh-tumbuhan. Omnivora juga konsumer.

konsumer
(herbivora)



Pemroduksi. Pemroduksi tergantung pada pengkompos karena pengkompos mendaur ulang nutrisi yang diperlukan oleh pemroduksi. Jadi siapa pemroduksi? Tumbuh-tumbuhan hijau.

produser

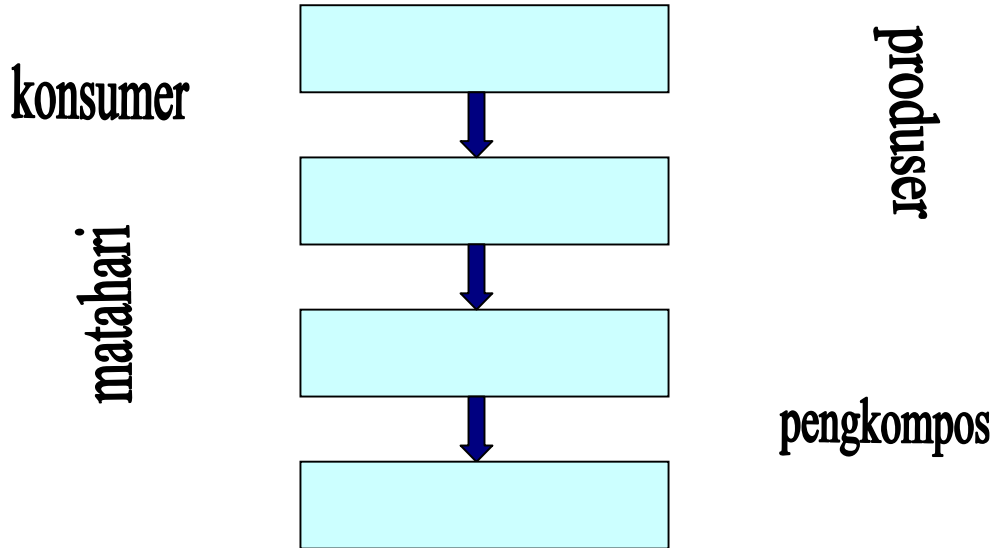


Kosa Kata

rantai makanan	food chain	mengubah	to change
peranan	role	tergantung pada	depend on
unggul	dominant	konsumer	consumer
anggota	member	produser	producer
ekosistem	ecosystem	mendaur ulang	to recycle
kehidupan	living creatures	nutrisi	nutrient
pengkompos	decomposer	tumbuhan hijau	green plants

Kegiatan 1

Masukkan setiap kata ke kotak yang benar.

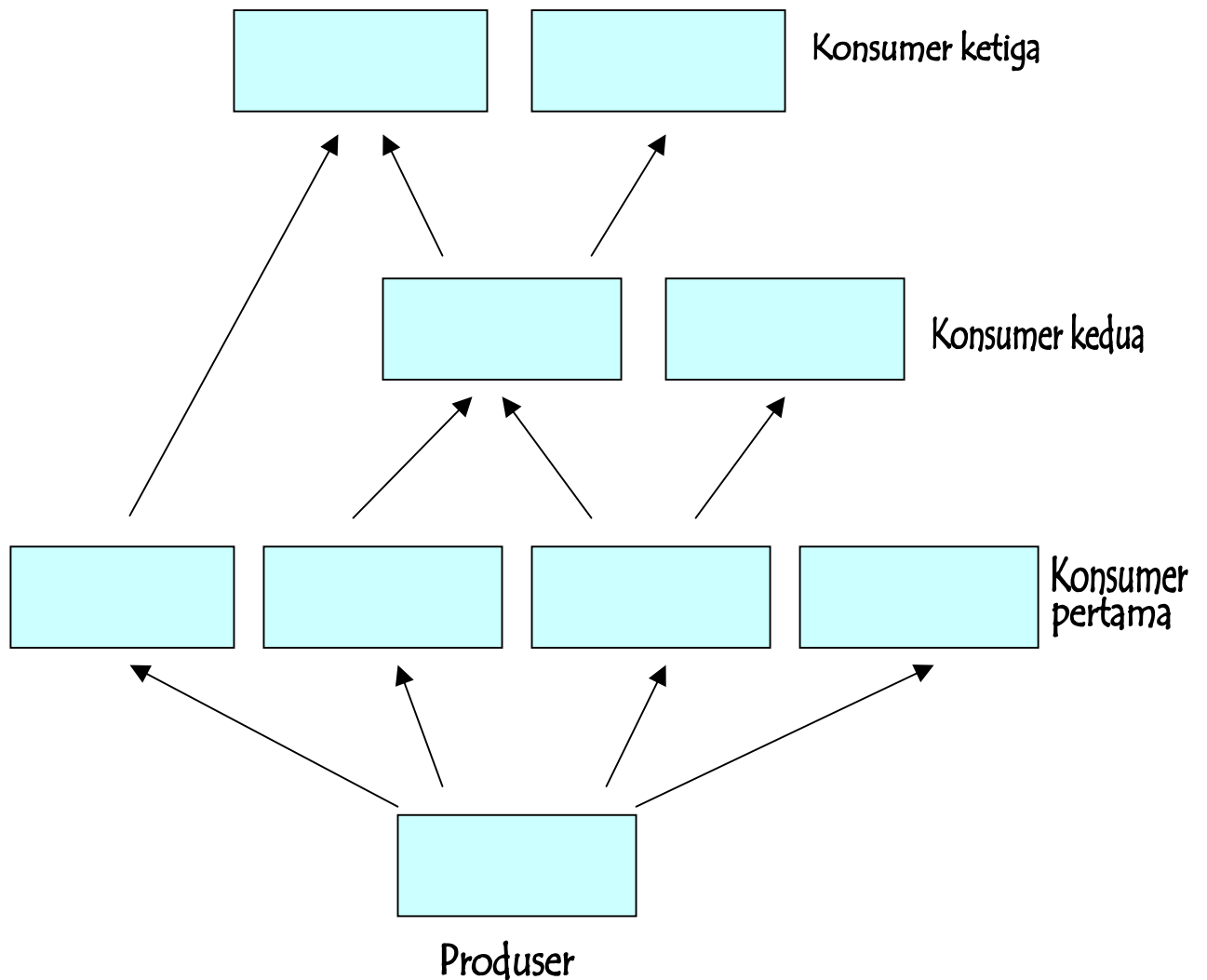


Kegiatan 2

Lihatlah foto kolam bakung yang terdapat di Rumah Kaca di Kebun Raya. Gunakan informasi yang kamu catat di buku harian kebun untuk membuat Rantai Makanan kehidupan di kolam bakung itu.



Gunakan informasi dari Kebun Raya yang ada di buku harian kamu untuk melengkapi Rantai Makanan di bawah. Isilah setiap kotak dengan nama binatang atau tanaman.



Jawablah pertanyaan-pertanyaan berikut.

1. Siapa produser di Rantai Makanan itu?
2. Siapa saja yang menjadi konsumer pertama?
3. Siapa saja yang menjadi konsumer kedua?
4. Siapa saja yang menjadi konsumer ketiga?

Building materials

Aims

- To foster an appreciation of the cultural diversity of Indonesia through a study of traditional architecture
- To motivate and engage students to explore the relationship between people and nature by studying the materials used in traditional housing
- To challenge students to experience hands on construction.

Language Focus

- Vocabulary related to building materials, for example, *kayu, bambu, serat kelapa, alang-alang*
- Appropriate verbs, for example, *membuat, membangun*
- Passive structures, for example, *terbuat dari, dibangun di*
- Adjectives to describe building materials, for example, *besar, kecil, panjang, pendek, keras, kuat.*

Pre visit activities

- Students develop an understanding of plant materials used in Indonesian traditional houses through activities such as looking at photos of traditional houses and identifying construction materials (Worksheets 13 and 14), labelling houses and house plans, writing simple sentences about houses (Worksheets 15 and 16) and completing a reading comprehension activity (Worksheets 17 and 18)
- Students develop an understanding of the relationship between people and nature, through completing a reading comprehension activity (Worksheet 19), identifying traditional houses (Worksheets 20 and 21) and performing a role-play (Worksheets 22 and 23).

Activities at the Gardens

- Students sketch and label the Bamboo Garden in their garden diary. Teachers guides students to write an acrostic poem describing the atmosphere, for example:
*Segar sekali udara di sini
Elok pemandangannya
Pagi ini memang istimewa
Indah, elok, segar dan sepi*
- In small groups, students build a structure using materials provided by an Education Officer
- Using wood or bamboo provided by an Education Officer, students make the instruments used in the Indonesian game *Gatrik* and then use the instruments to play *Gatrik*.

Post visit activities

- In pairs, students research Indonesian traditional architecture and make an oral presentation or poster display on one house style they have investigated
- Students complete Worksheet 24 on how to build a house. Students then construct their own model Indonesian village.

Lihatlah foto-foto rumah adat Indonesia berikut. Diskusikanlah bahan-bahan yang digunakan untuk membangun rumah itu.

Rumah Adat Jawa



Rumah Adat Aceh



Lihatlah foto-foto rumah adat Indonesia berikut. Diskusikanlah bahan-bahan yang digunakan untuk membangun rumah itu.

Rumah Adat Nias Selatan



Rumah Adat Bali



Pelajarilah kalimat-kalimat berikut.

Rumah ini besar
 kecil

Rumah ini terdapat di Jawa
 kota kecil
 desa

Rumah ini terbuat dari
bambu
kayu

Dindingnya terbuat dari
kayu
gebeg

Atapnya terbuat dari
genteng
alang alang



Rumah Adat Jawa

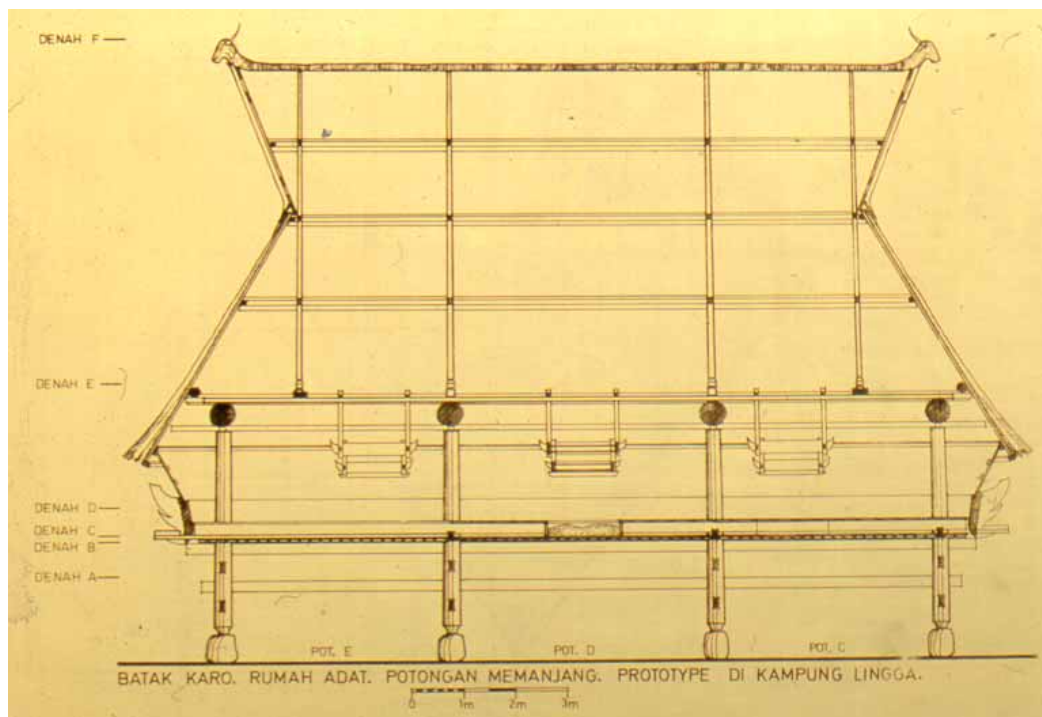
Rumah ini dibangun di atas tiang
 dihiasi dengan baik
 diukir dengan baik

Di rumah ini ada kamar duduk
 kamar tidur
 kamar makan
 serambi
 dapur
 kamar kecil

Gunakanlah kalimat-kalimat di Worksheet 15 sebagai contoh untuk menulis kalimat-kalimat tentang rumah adat di foto-foto berikut.



Pendopo, Keraton Solo



Denah Rumah Adat Batak, Sumatra

Bacalah cerita tentang tanduk kerbau dan rumah adat Minangkabau berikut.

Tanduk Kerbau dan Rumah Adat Minangkabau



Bentuk atapnya seperti tanduk kerbau

Mengapa atap rumah adat Minangkabau di Padang, Sumatra Barat seperti tanduk kerbau?

Pada jaman dulu di Padang ada perang antara orang Jawa dan orang Sumatra Barat. Orang Sumatra mau mengalahkan orang Jawa. Tetapi karena mereka mau menghindari pertumpahan darah, mereka tidak berperang tapi mengadakan perkelahian kerbau.

Orang Jawa memilih kerbau jantan besar dan orang Minangkabau memilih anak kerbau betina yang masih menyusu induknya. Orang Jawa percaya mereka pasti akan menang.

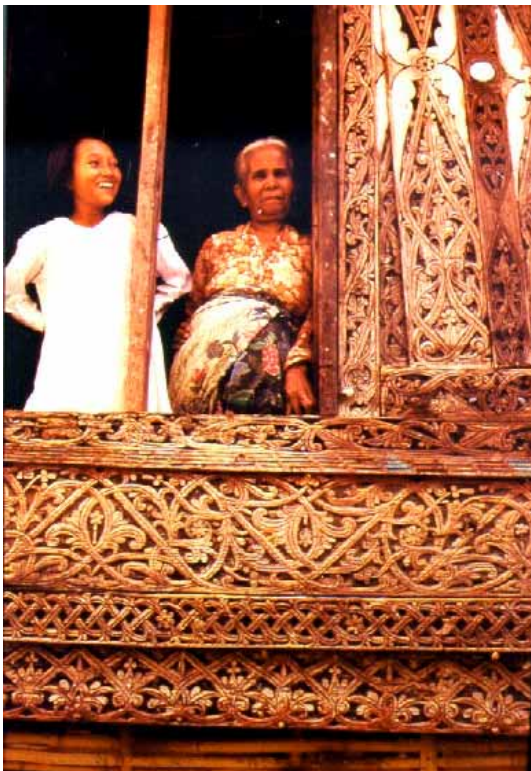
Sehari sebelum perkelahian itu, anak kerbau betina harus dipisahkan dari ibunya. Kerbau itu menjadi marah sekali karena dia lapar. Pada waktu perkelahian mulai anak kerbau yang marah itu mulai menyerang kerbau jantan besar dengan tanduknya. Anak kerbau itu terus menyerang untuk mendapat susu. Kerbau besar sangat terkejut dan tidak bisa melawan anak kerbau yang marah sekali itu. Anak kerbau menang dalam perkelahian itu.

Menurut orang Minangkabau, perkelahian itu menunjukkan bahwa orang Minangkabau mengalahkan orang Jawa bukan karena mereka lebih kuat tetapi karena mereka lebih pandai.

Sejak itu orang Minangkabau selalu membangun atap rumah mereka dengan bentuk tanduk kerbau.

Gunakanlah informasi dari cerita tentang rumah adat Minangkabau dan foto-foto di bawah untuk menjelaskan hubungan antara sistim matrilineal orang Minangkabau dan bentuk atap rumah adat mereka.

Wanita-wanita Minangkabau



Kegiatan 1

Bacalah informasi tentang permainan dari bambu di bawah.

Bambu dan permainan anak-anak

Permainan anak-anak tradisional di Indonesia banyak menggunakan anggota badan. Permainan tradisional biasanya dilakukan dalam kelompok. Anak-anak biasanya bermain permainan tradisional di halaman. Alat-alat yang digunakan dalam permainan tradisional ada yang terbuat dari bambu. Contohnya *Gatrik* dan *Gangsing*.

Permainan *Gatrik* berasal dari Jawa Barat. Anak laki-laki dan anak perempuan bermain permainan ini di halaman rumah atau di lapangan olahraga. Di sekolah anak-anak juga sering bermain permainan ini pada waktu istirahat. Untuk bermain *Gatrik* kamu perlu lubang atau dua bata dan dua bambu (40 Cm x 2 Cm).

Selain untuk membuat alat permainan anak-anak, bambu juga digunakan untuk membuat bermacam-macam alat musik tradisional seperti *Angklung*, *Suling* dan *Gambang*. *Angklung* berasal dari Jawa Barat. *Angklung* dimainkan dalam kelompok dengan cara menggoyangkan *angklung* tersebut. *Angklung* juga sering dimainkan dengan alat musik lain seperti *gambang* yang terlihat di foto di bawah.



Kosa Kata			
permainan	game	halaman rumah	back yard
halaman	yard	lapangan olahraga	sports ground
terbuat dari	made of	waktu istirahat	recess time
alat-alat	equipment	lubang	hole
digunakan	to be used	bata	brick

Kegiatan 2

Tuliskan catatan pendek tentang permainan dari bambu dengan menggunakan pokok-pokok berikut

- Permainan tradisional
- Gatrik
- Angklung

Bacalah tulisan di bawah.

Bentuk Rumah Adat di Indonesia

Seperti di banyak negeri di dunia, di Indonesia ada bermacam-macam bentuk rumah adat. Kebanyakan rumah adat terdapat di desa-desa kecil, tidak di kota besar.

Rumah adat di Indonesia biasanya dibangun dari bahan-bahan alam seperti bambu, rotan, kayu jati, alang-alang dan serat kelapa. Hanya sedikit rumah adat dibangun dari batu.

Di Bali kebanyakan orang tinggal di desa. Rumah adat Bali terdiri dari beberapa bangunan kecil yang namanya bale. Di satu halaman biasanya ada pura keluarga, bale untuk tidur dengan serambi yang terbuka, bale untuk menyimpan padi, dapur dan kamar mandi. Dinding rumah adat Bali dibuat dari batu dan atapnya dibuat dari alang-alang atau genteng.

Di Jawa ada beberapa jenis rumah adat. Di Jawa tengah penduduk-penduduk desa kecil tinggal di rumah adat yang kecil. Biasanya hanya ada satu atau dua kamar. Dindingnya dibuat dari *gebeg* (bambu yang dianyam) dan atapnya biasanya dari genteng. Ada serambi di depan rumah.

Rumah adat orang Minangkabau di Sumatra Barat namanya "rumah gadang". Rumah gadang biasanya besar sekali. Satu keluarga besar dapat tinggal bersama. Dinding rumah gadang itu diukir dengan baik dan atapnya berbentuk tanduk kerbau.

Di Sumatra Utara, dekat Danau Toba, orang Batak tinggal di rumah adat yang besar dan kuat. Rumah adat itu dibangun di atas tiang yang panjang. Rumah adat itu segi empat dan dibuat dari kayu yang diukir dengan indah. Atapnya dibuat dari ijuk (serat kelapa).

Kosa Kata

kebanyakan
bahan-bahan alam

most of
natural
materials

serambi
genteng
penduduk

veranda
roof tiles
residents

kayu jati
alang-alang
serat kelapa
terdiri dari

teak
coarse grass
coconut fibre
consist of

diukir
berbentuk
tanduk kerbau
tiang

carved
in the shape of
buffalo horns
pillars

pura
bale

temple
building

segi empat

square

Ini rumah adat apa?

Worksheet 21

m

l

Guntinglah foto-foto rumah adat di bawah kemudian tempelkanlah di atas peta Indonesia di tempat yang benar.



Rumah Adat Jawa

Rumah Adat Minangkabau



Rumah Adat Batak

Rumah Adat Bali

Bacalah informasi tentang Rumah Adat Toraja lalu lakukan role-play dengan situasi yang tersedia di halaman berikut.

Tongkonan adalah nama rumah adat Toraja. Atap rumah adat Toraja berbentuk perahu. *Tongkonan* selalu dibangun menghadap ke utara karena orang Toraja percaya bahwa di utara ada Dewa Pencipta. Sedangkan di selatan ada nenek moyang mereka.

Kosa Kata

<i>perahu</i>	boat
<i>menghadap</i>	to face
<i>percaya</i>	to believe
<i>arah</i>	direction
<i>moyang</i>	ancestor
<i>dihiasi</i>	decorated with
<i>menghiasi</i>	to decorate
<i>melambangkan</i>	to symbolise
<i>melindungi</i>	to protect
<i>tumpukan paku</i>	piles of nails



Dinding *Tongkonan* dihiasi dengan pola dan motif tertentu tergantung status sosial keluarga yang memiliki rumah itu. Ada dinding rumah yang dihiasi dengan motif kepala kerbau dan ada dinding rumah yang dihiasi dengan kepala kerbau. Kepala kerbau sangat penting untuk orang Toraja karena kepala kerbau melambangkan keluarga aristokrasi yang melindungi rakyat.

Tongkonan dibangun di atas tumpukan kayu yang dipasang dengan paku kayu bukan paku besi.

Gunakan informasi tentang Rumah Adat Toraja di Worksheet 22 untuk melakukan role-play dengan situasi berikut.

Kamu seorang arsitek terkenal. Pak Harta, seorang bangsawan Toraja memilih kamu sebagai arsitek untuk membangun rumah adat Toraja dengan bagian dalam yang moderen dan bergaya barat. Untuk melakukan pekerjaan ini tentu saja kamu harus melakukan penelitian tentang ciri-ciri penting rumah adat Toraja termasuk:

- pondasi
- atap
- arah
- hiasan dinding luar

Buatlah rancangan untuk rumah itu lalu diskusikanlah dengan Pak Harta.



Urutkanlah kartu-kartu cara membangun rumah berikut. Ingat! Urutan yang benar sangat penting. Lalu tulislah instruksi membangun rumah.

Bagaimana membangun rumah?



membangun atap

membangun dinding



membangun tiang-tiang

membangun lantai

The Wallace Line

Aims

- To develop students' understanding of the Wallace line and how it defines Indonesian flora and fauna
- To enable students to identify similarities and differences between Indonesian and Australian flora.

Language Focus

- Geographic vocabulary, for example, *pulau, laut, samudera*
- Adjectives to describe Indonesian plants, for example, *indah, berwarna-warni, beraneka ragam*
- Vocabulary related to directions, for example, *timur, tenggara, selatan, barat daya, barat, barat laut, utara, timur laut.*

Pre visit activities

- Students become familiar with the geography of Indonesia by completing activities such as assembling a 'jigsaw' map (Worksheet 25), naming the islands, oceans and seas (Worksheet 26) and describing the climate, flora and fauna of the archipelago (Worksheet 27)
- Students develop an understanding of the Wallace line, through activities such as correctly locating images of plant species on the map (Worksheet 28), completing a concept map (Worksheets 29 and 30) and reading a comprehension activity (Worksheet 31).

Activities at the Gardens

- Students visit the Glasshouse, the Fern Gully and the Bamboo Garden, identify plants from both the Indo-Malayan and the Austro-Malayan divisions of the Archipelago and write the names of the plants on the correct side of the Wallace line (Worksheet 32). Students then sketch and describe the plants in their garden diary
- Students visit a number of different locations in the Gardens. At each location, students sketch the scene in the diary and write a brief description under the following headings: *lokasi, tanaman, binatang* and *situasi lingkungan*.

Post visit activities

- In groups, students make a short oral presentation in Indonesian about what they learned, liked/disliked about their visit to the Gardens
- Students use their diary notes to produce a newspaper article in Indonesian, complete with illustrations and maps, describing the discoveries of Alfred Wallace.

Tugas Guru

Gunakanlah peta di bawah untuk difotokopi sebesar kertas A3. Potonglah satu peta untuk setiap kelompok.



Tugas Siswa

1. Lihatlah peta Indonesia di atas.
2. Lakukan teka-teki menyusun potongan-potongan gambar.
3. 'Ada berapa pulau utama di Indonesia?' Hitunglah pulau-pulau itu.
4. Tulislah nama pulau-pulau utama di Indonesia.

Tugas Guru

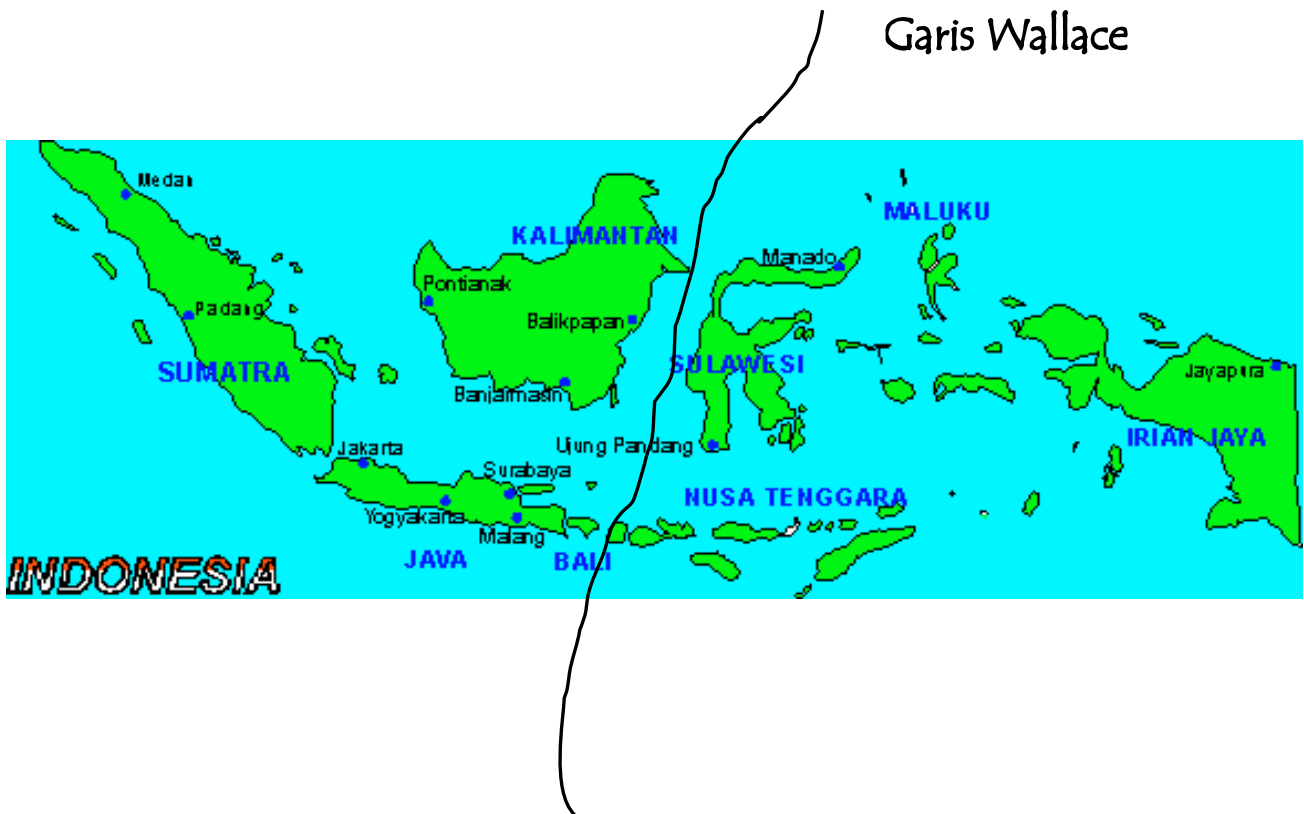
Gunakanlah peta di Worksheet 25. Hapuslah semua nama yang ada di peta itu lalu gunakanlah peta itu untuk difotokopi sebesar kertas A3.

Tugas Siswa

1. *Lihatlah peta Indonesia di Worksheet 25. Perhatikan nama dan letak setiap pulau. Perhatikan juga nama-nama laut dan samudera di sekitar Indonesia.*
2. *Lihatlah peta Indonesia tanpa nama-nama pulau, laut dan samudera. Dalam kelompok kecil, lengkapilah peta itu dengan menggunakan nama-nama di dalam kotak*
3. *Tulislah nama-nama pulau, laut dan samudera di tempat yang benar.*

Pulau Sumatra	Pulau Jawa	Pulau Bali	Pulau Lombok
Pulau Kalimantan	Pulau Sulawesi	Kepulauan Maluku	Pulau Irian Jaya
Pulau Timor	Laut Jawa	Laut Bali	Laut Flores
Laut Timor	Laut Arafura	Samudera India	Samudera Pasifik

Letakkan setiap gambar di bagian yang benar yaitu di sebelah barat atau timur garis Wallace.



Garis Wallace



Bacalah bacaan berikut lalu lengkapilah peta konsep di Worksheet 30.

Tanah Air

Indonesia adalah negeri yang besar dan luas. Negeri itu terdiri dari tanah (pulau-pulau) dan air (lautan). Oleh karena itu Indonesia sering dikenal dengan nama "Tanah Air".

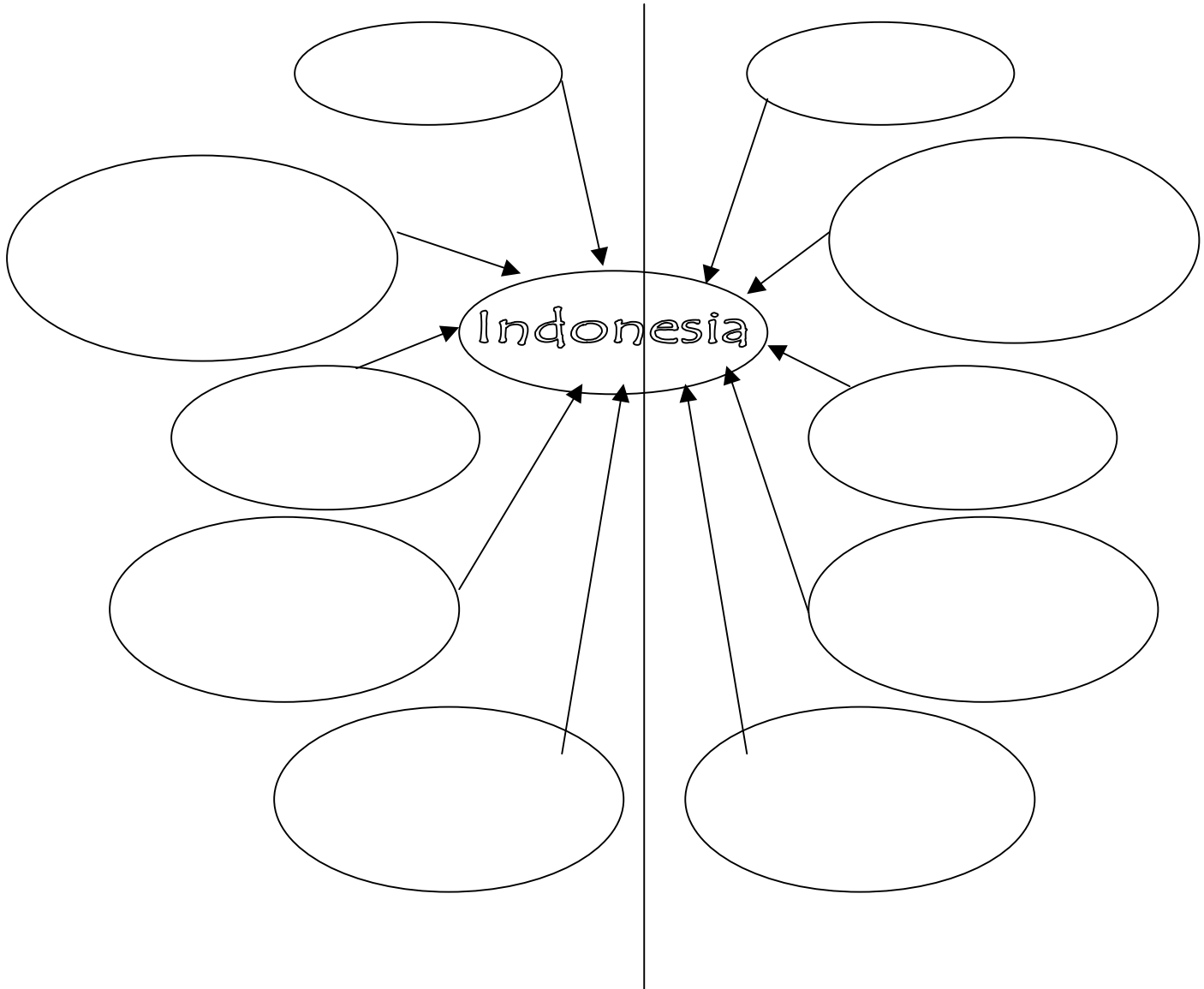
Tanah Air terdiri dari beberapa pulau besar - yaitu Sumatra, Jawa, Bali, Kalimantan, Sulawesi dan Irian Jaya, serta ribuan pulau kecil. Tanah Air mulai dari Asia di sebelah barat sampai ke Australia di sebelah timur.

Flora dan fauna Indonesia sangat unik. Di Indonesia bagian barat sampai ke Pulau Kalimantan, binatang-binatang dan tumbuh-tumbuhan seperti yang terdapat di Asia. Contohnya harimau, gajah dan badak yang terdapat di Pulau Sumatra.

Di Indonesia, bagian timur dari Pulau Lombok, Pulau Sulawesi sampai Irian Jaya dan Pulau Timur, binatang-binatang, tumbuh-tumbuhan dan cuaca seperti di Australia. Oleh karena itu ada binatang Indonesia yang juga terdapat di Australia seperti kanguru pohon, *possum* dan *echidna* yang terdapat di Irian Jaya.



Lengkapilah peta konsep dengan memasukkan kata-kata di bawah di tempat yang tepat.



Bagian Barat	Bagian Timur
Tumbuh-tumbuhan sama dengan di Asia	Tumbuh-tumbuhan sama dengan di Australia
Binatang sama dengan di Asia	Binatang sama dengan di Australia
Harimau, gajah dan badak	Kanguru pohon, <i>possum</i> , <i>echidna</i>
Pulau Kalimantan	Pulau Sulawesi

Bacalah biografi Alfred Wallace kemudian jawablah pertanyaan di bawah.

Alfred Russell Wallace



Alfred Wallace lahir di Usk, Inggris, pada tahun 1823.

Keluarganya besar dan tidak kaya. Tetapi semua orang di keluarganya suka sekali membaca buku.

Dia suka sekali alam dan dengan seorang temannya, dia ke Amerika Selatan untuk belajar tentang tumbuh-tumbuhan dan binatang di sana.

Dia pergi ke sana pada tahun 1848. Dia membuat koleksi serangga yang besar.

Sesudah itu dia kembali ke Inggris. Pada tahun 1854 dia pergi ke "Indonesia" dan dia tinggal disana selama delapan tahun.

Dia tidak tinggal di Jawa tetapi pergi ke pulau-pulau kecil yang jauh dari Jawa.

Di membuat koleksi lagi – dia sudah mempunyai 125.660 koleksi dan dia mendapat lebih dari 1000 jenis baru.

Dari perjalanannya dan dari contoh binatang, serangga dan tumbuh-tumbuhan yang berbeda-beda, Wallace mengira ada perbedaan besar antara Indonesia bagian barat dan bagian timur. Ke arah barat dari Bali binatang-binatang dan tumbuh-tumbuhan seperti di Asia dan ke arah timur dari Lombok, binatang-binatang dan tumbuh-tumbuhan seperti di Australia.

Jawablah pertanyaan-pertanyaan di bawah.

1. Siapakah Alfred Wallace?
2. Dia dari mana?
3. Apakah dia masih hidup sekarang?
4. Apa pekerjaannya?
5. Mengapa dia terkenal?

Gunakanlah peta di bawah untuk melakukan kegiatan di Kebun Raya.

Garis Wallace



Designing a tour of the Gardens

Aim

- To engage students through activities which provide the opportunity to integrate Indonesian language skills with environmental, cultural and artistic knowledge and skills.

Language Focus

- Vocabulary related to plants and plant species, for example, *pohon, semak-semak, rumah kaca, hutan pakis, hutan bambu, kebun rempah-rempah, tanaman berguna, tanaman obat-obatan, tanaman hias*
- Adjectives to describe Indonesian plants, for example, *indah, berwarna-warni, beraneka ragam*
- Vocabulary for directions, for example, *timur, tenggara, selatan, barat daya, barat, barat laut, utara, timur laut.*

Pre visit activities

- Students become familiar with the names of plants, adjectives to describe plants and linguistic structures to describe plant origins (Worksheet 33)
- Students read a journal entry written by an Indonesian student about his visit to the Royal Botanic Gardens, Melbourne and note the information recorded (Worksheet 34)
- Students consult the Botanic Gardens website and/or brochures available from Tourism Victoria. They observe and list conventions of layout and presentation in a brochure and how information is presented on a web page. In particular they note the type of information provided
- Students plan the making of a video documentary of the visit to the Gardens (Worksheets 35 and 36).

Activities at the Gardens

- Students participate in a tour of the Gardens and observe significant Indonesian plants. They record important information in their garden diary and either sketch or take digital images of the plants during the tour. A number of different tours are available: edible plants, ornamental plants, medicinal plants and Fern Gully
- In groups, students make a video recording with commentary in Indonesian of their particular tour.

Post visit activities

- Students edit their video or use their digital images to prepare a PowerPoint presentation of the Gardens visit
- Students design and produce a poster or brochure promoting the Botanic Gardens to Indonesian-speaking visitors
- Students produce a booklet entitled '*Tanaman Obat-obatan Indonesia di Kebun Raya Melbourne*'
- Students write an email letter to a friend in Indonesia about their visit to the Gardens.

Hutan Pakis

m

l

Gunakan kata-kata di kotak untuk melengkapi gambar dan kalimat di bawah.

pakis	pohon	membangun rumah	membuat perabotan	rotan sega
di hutan pakis	membuat atap rumah	membuat tikar	akar	daun

Di mana banyak terdapat pakis di Kebun Raya?

Daun pandanus digunakan untuk apa di Indonesia?

Kayu pohon yang tinggi digunakan untuk apa di Indonesia?



_____ adalah sejenis rotan yang terdapat di hutan pakis dan banyak digunakan untuk _____.

Catatan Jurnal

Bacalah catatan jurnal di bawah.

Kamis 17 Februari

Kunjunganku ke Kebun Raya Melbourne sangat menyenangkan. Aku juga dapat informasi tentang sejarah kebun itu. Atas instruksi Charles La Trobe, yang waktu itu adalah penguasa pelabuhan Port Phillip, Kebun Raya Melbourne dibangun pada tahun 1846 untuk menjadi salah satu kebun raya yang paling hebat di dunia. Direktur pertamanya, Dr. Ferdinand Mueller mulai usahanya memperindah kebun ini dengan mengumpulkan tanaman dari seluruh dunia. Direktur berikutnya, William Guilfoyle, membuat kebun raya ini menjadi taman raksasa yang populer untuk tempat piknik.

Aku berkeliling di kebun ini selama 3 jam untuk melihat semua tanaman yang ada di kebun. Tapi tentu saja selama tiga jam aku tidak selalu berjalan karena banyak tempat yang indah untuk duduk sambil menikmati keindahan kebun.

Kebun Raya Melbourne buka cukup pagi yaitu jam 7.30. Jadi lebih baik mulai berjalan di kebun di pagi hari sebelum terlalu panas. Selama tiga minggu di Melbourne aku pergi ke kebun raya dua kali karena memang aku suka sekali dengan keindahan kebun itu dan juga karena gratis.

Selain bermacam-macam tanaman juga banyak binatang di kebun itu karena ada danau di tengah kebun. Di danau banyak ikan, belut, bebek dan angsa. Selain itu juga banyak burung dan kelelawar. Bahkan terlalu banyak kelelawar di sana jadi agak bau.

Kebun Raya Melbourne baik sekali untuk turis asing juga karena mereka bisa ke sana naik kendaraan umum yang dinamakan trem. Aku suka naik trem juga.

Di Kebun Raya Melbourne juga ada tanaman yang banyak terdapat di Indonesia seperti pohon bambu, pohon pisang, hutan pakis dan tanaman hias yang ditanam di rumah kaca. Tanaman yang hanya bisa tumbuh di iklim tropis ditanam di rumah kaca. Selain tanaman hias juga ada tanaman yang bisa dimakan seperti kopi, coklat dan merica.

Wah, memang Kebun Raya Melbourne indah, bersih dan semua pohon tumbuh dengan subur.

Catatlah pokok-pokok informasi dari jurnal di atas dan gunakan informasi itu untuk membantu kamu membuat tur kebun raya.

Tanaman di Kebun Raya

Buatlah tur ke Kebun Raya. Ada dua pilihan yaitu: tanaman yang bisa dimakan dan tanaman hias. Gunakan daftar kata-kata di bawah untuk membantu kamu membuat rencana tur itu.

Tanaman yang bisa dimakan



Buah	Bumbu-Bumbu
pisang	daun pandan
coklat	daun salam
kopi	daun kemangi
	bawang putih
	cabe
	merica

Tanaman hias



tanaman asli Indonesia	tanaman yang dikawinkan	tumbuh di rumah kaca	bunga sepatu
untuk menghiasi taman kota, taman kantor dan rumah pribadi	sebagai sesaji terutama di Bali	kemboja	tumbuh di hutan

Tanaman obat-obatan dan hutan pakis

Buatlah tur ke Kebun Raya. Ada dua pilihan yaitu: tanaman obat-obatan dan hutan pakis. Gunakan daftar kata-kata di bawah untuk membantu kamu membuat rencana tur itu.

Tanaman obat-obatan


Bawang Putih	Jahe	Jeruk Nipis
sakit kepala	sakit kepala	jerawat
migrain	batuk	suara serak
asma, batuk	masuk angin	batuk
flu	rematik	bau badan
luka terkena benda tajam yang berkarat	gatal karena digigit serangga	sakit kepala, pusing tiba-tiba
bisul yang baru tumbuh	bengkak-bengkak	menambah nafsu makan
hipertensi	digigit ular	flu, demam
bronkhitis	mual, mabuk di perjalanan	mencegah rambut rontok

Hutan Pakis


Agathis Robusta	Rotan Sega	Kalong
pohon ini tinggal sedikit di Indonesia	tingginya bisa mencapai 100 meter	bau
damarnya digunakan untuk pernis	digunakan untuk membuat perabotan	makan buah dan bunga
kayunya digunakan untuk membangun rumah adat Dayak	Indonesia sebagai pengeksport rotan saga	tidur di siang hari

Kosa kata

Plants

alang-alang	coarse grass
bambu	bamboo
biji	seed
buah	fruit
jamur	fungus
pakis	fern
pohon	tree
rumput	grass
tanaman	plant
tumbuhan	plant

Geographic terms

garis Wallace	Wallace line
kepulauan	archipelago
laut	sea
pulau	island
samudera	ocean

Food chain

konsumer	consumer
matahari	the sun
produser	producer
pengkompos	decomposer
rantai makanan	food chain

Plant's survival

air	water
sinar matahari	sunlight
oksigen	oxygen
tanah	soil
udara	air
nutrisi	nutrition

Parts of plants

akar	roots
bunga	flower
biji	seeds
daun	leaves
batang	branch
lubang	hole (eg. in a tree)
serat kelapa	coconut fibre

Plant groups

tanaman air	water plants
tanaman berguna	useful plants
tanaman hias	ornamental plants
tanaman obat-obatan	medicinal plants

Animals

angsa	goose
bebek	duck
belut	eel
burung	bird
cacing	worm
kelelawar	bat
<i>possum</i>	possum
rubah	fox
serangga	insect
siput	snail

Directions

barat	west
barat daya	south west
barat laut	north west
tenggara	south east
timur	east
timur laut	north east
selatan	south
utara	north

Sections in the gardens

danau	lake
rumah kaca	hot house
hutan pakis	fern gully
kebun bambu	bamboo garden
kebun rempah-rempah	herb garden
semak-semak	bushes

Adjectives

beraneka ragam	varied
berbagai	various
bermacam-macam	of a different kind
berwarna-warni	colourful
besar	big
kecil	small
keras	hard
kuat	strong
panjang	long
pendek	short

Verbs

membangun	to build
membuat	to make
terbuat dari	made of
dibuat dari	built of
tergantung pada	depend on

Published by the Royal Botanic Gardens, Melbourne in collaboration with the Languages Strategy Team, Learning and Teaching Division, Department of Education & Training.

Developed by:

Kristien Sarwo Rini, Languages Strategy Team, Learning and Teaching Division,
Department of Education & Training

Peter Kelly, Royal Botanic Gardens Education Service

Diane Pollard, Eltham High School

Kim Seuren, Pakenham Hills Primary School

Roxy McGuire, Languages Strategy Team, Learning and Teaching Division, Department
of Education & Training

Thérèse Mercader, Languages Strategy Team, Learning and Teaching Division,
Department of Education & Training

Dr Rebecca Fanany, Faculty of Arts, Deakin University

This kit is copyright. Apart from any fair dealing for the purposes of private study, research, criticism, or review, as permitted under the Copyright Act, no part may be reproduced by any process without written permission. Enquiries should be made to the publisher. The activity sheets may be reproduced for teaching purposes. Permission to reproduce them for other purposes may be obtained from the Department of Education & Training.

Copyright 2003

