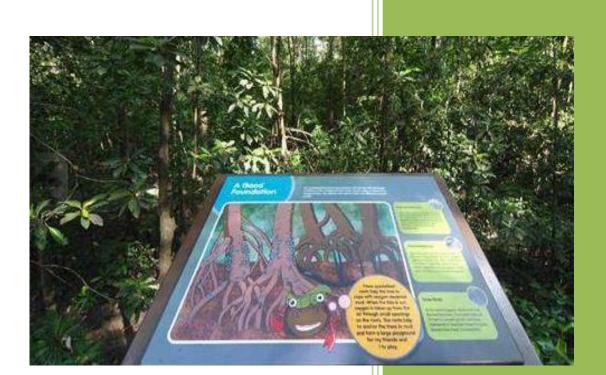


A Trip to Pasir Ris Park



Pre-Learning Journey Worksheet

Who lives here?

- 1. Spot the garden animals in your school.
- 2. Record the name and type of animal.
- 3. Decide if they are beneficial or harmful to garden plants and tick the correct box.

No.	Animal I Spotted	Type of animal (e.g. insect, mollusc, amphibian, reptile, bird, fish etc.)	Tick below: Beneficial Harmful	
			To Plants	To Plants
1.	e.g. Earthworm	worm	~	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

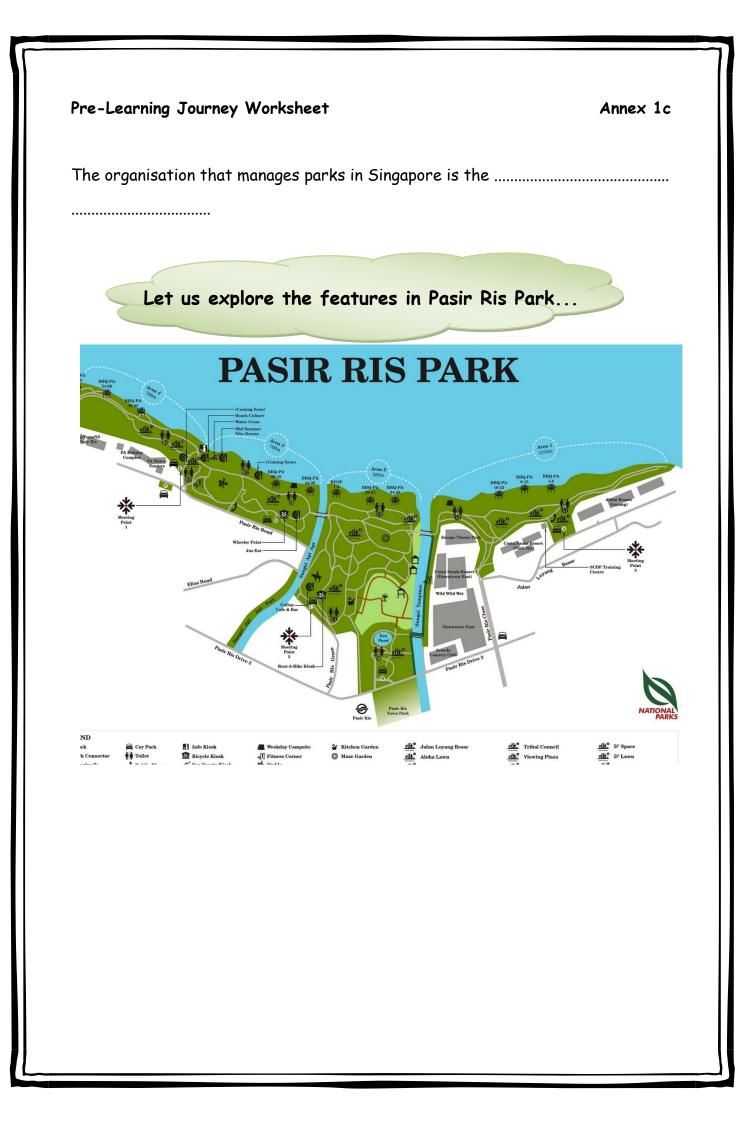


Annex 1a

Pre-Learning Journey Worksheet

Annex 1b





Based on the given map of Pasir Ris Park, make a list of some of features that you can see.

The 2 park features that my group will be visiting are and

Let's research on...

Feature 1	Feature 2	
		~~~~

#### Factsheet: Let's Visit Pasir Ris Park

Tucked away in the park is a mangrove swamp and kitchen garden, all within close proximity of one another. The Pasir Ris Mangrove Swamp houses a thriving habitat of unique plants and animals. Venture into the dense mangrove forest on the boardwalk and you will come across mud crabs, mud skippers, monitor lizards and sea snakes. Healthy scores of butterflies and dragonflies can be seen in various parts of the mangrove.

The mangrove acts as the lungs of the world along with other mangroves found elsewhere. It stabilises our climate and weather. It is a habitat for plants and animals and provides food for animals and people. Mangroves are also a source of medicines, traditional medicines, wood, charcoal and other raw materials for industries. It provides jobs for people and helps in coastal protection.

The ground material is water- logged and oxygen deprived mud. The gas emitted is hydrogen sulphide which results from the rotting of the lower layers of mud. The mangrove is washed by sea water and fresh water. They have glossy leaves to reduce evaporation. They have specialised fruits which start growing on the parent plant before dispersal and are buoyant and dispersed by water. Pasir Ris is divided into 3 parts by the rivers, Sungei Api Api and Sungei Tampines.

The Kitchen Garden allows one to view, smell and touch a wide array of vegetables, culinary herbs and spices commonly used in local cuisines. Traditional Chinese Medicine (TCM) herbs are also grown in a corner of the garden.

#### Kitchen Garden

#### Annex 3

Name at least five culinary herbs or spices that can be found in the Kitchen Garden.

Identify two Traditional Chinese Medicine (TCM) herbs that you can find in the Kitchen Garden and list some of its uses.

Describe and draw one particular plant that you like (e.g. smell, plant and leaf structure).

According to the guide, what are the conditions for the plants to grow well in the garden?

Draw a picture of the compost tumbler which can be found in the garden. What is it used for? What materials do you need to make the compost?

List four vegetable plants found in the Kitchen Garden.

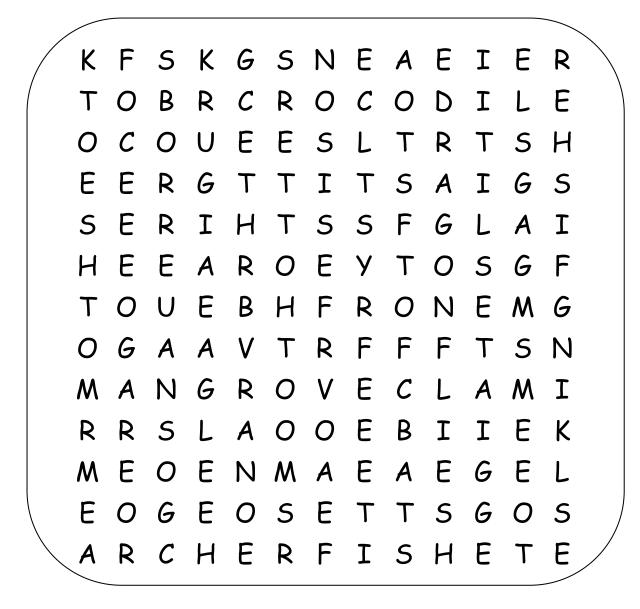
# Mangrove Swamp Annex 4 Name four interesting fauna species that are found in the Mangrove Boardwalk. What is the distance of the Mangrove Boardwalk? ..... km Describe and draw one particular plant that you like (e.g. smell, plant and root structure).

All organisms adapt to changes in their environment. State one adaptation of an organism that you have observed in the Mangrove Forest.

Draw a possible food web of the Mangrove Forest.

State at least one problem that you have noticed which may lead to the destruction of the Mangrove Forest.

Find 12 words related to the Mangrove in this word search.

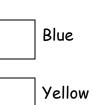


# Adventures in Pasir Ris Mangrove

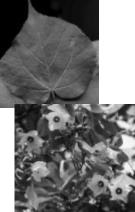
# 1. Name the following animals.

Mudskipper	Tree Climbing Crab	Spider
Monitor Lizard	Paradise Tree Snake	Smooth Otter
X		AND
2. What is the colour of t	he Sea Hibiscus flower?	





Red



Annex 4a

)			CRAWL		
	LAND	WATER	MUDSKIPPE	R SKIN	
Ιc	am a	I live in 1	both	and	My two
			of my head. I		
			thro	ough the m	nud and even
•••••	ul	p the roots of a	a tree.		
i)	LFAVES	KINGFI	ISHER WAT	FR	TRFF
' <i>'</i>			D SIX T		the second second
	* <b>* *</b> * * <b>-</b> •				
ea [.]	ten by fishes	During high tio . I must stand	de, I climb up . outside the wate	er or I will be	to avoid being e eaten by birds
 ea sua	ten by fishes ch as mb trees of u	During high tic . I must stand and the p to	de, I climb up . outside the wate e Malayan metres.	er or I will be	to avoid being e eaten by birds
ea suc clii	ten by fishes ch as mb trees of u FISH	During high tio . I must stand and the p to BITE	de, I climb up . outside the wate e Malayan metres. WATER	er or I will be	to avoid being e eaten by birds
ea suc clii	ten by fishes ch as mb trees of u FISH	During high tic . I must stand and the p to	de, I climb up . outside the wate e Malayan metres. WATER	er or I will be	to avoid being e eaten by birds
ea sua clii	ten by fishes ch as mb trees of u FISH MALAYAN V	During high tid . I must stand and the p to BITE WATER MONIT	de, I climb up . outside the wate e Malayan metres. WATER	er or I will be TREES TAIL	to avoid being e eaten by birds I can
ea sua clii ï) He	ten by fishes ch as mb trees of u FISH MALAYAN V ello, I am the f	During high tic . I must stand and the p to BITE WATER MONIT	de, I climb up . outside the wate e Malayan metres. WATER FOR LIZARD	er or I will be TREES TAIL	to avoid being e eaten by birds I can
ea sua clin i) He for	ten by fishes ch as mb trees of u FISH MALAYAN V ello, I am the r	During high tid . I must stand and the p to BITE WATER MONIT the and am also o	de, I climb up . outside the wate e Malayan metres. WATER FOR LIZARD	er or I will be TREES TAIL	to avoid being e eaten by birds I can I love to hunt 
ea sua clin i) He for to	ten by fishes ch as mb trees of u FISH MALAYAN V ello, I am the r catch me bec	During high tid . I must stand and the p to BITE WATER MONIT the the and am also a cause I will try t	de, I climb up outside the wate e Malayan metres. WATER FOR LIZARD an expert in climb	er or I will be TREES TAIL oing or lash out wi	to avoid being e eaten by birds I can I love to hunt Do not try th my powerful
ea sua clin ii) He for to	ten by fishes ch as mb trees of u FISH MALAYAN V ello, I am the r catch me bec	During high tid . I must stand and the p to BITE WATER MONIT the the and am also a cause I will try t	de, I climb up . outside the wate e Malayan metres. WATER FOR LIZARD an expert in climb to	er or I will be TREES TAIL oing or lash out wi	to avoid being e eaten by birds I can I love to hunt Do not try th my powerful

4. Put the following in the correct boxes.

BIRDS	FISHES	PLANTS	MAMMALS
KINGFISHER	HALFBEAK	OTTER	WILDBOAR
CATTAIL	MULLET	BAT	MUDSKIPPER
HERON	FERN	SQUIRREL	ARCHERFISH
WOODPECKER	PIEGON	SIMPOH AIR	SEA HIBISCUS

#### 5. Word Search

Find 10 words related to Pasir Ris Park.

PASIR	RIS	PARK	POND	BIRDS
NATURE	FISHES	PLANTS	ANIMALS	TREES

Ρ	L	A	Ν	Т	S	D	R	Ι	В	A
A	A	S	L	A	M	I	Ν	A	Т	R
S	D	R	Ν	S	Т	M	R	R	R	D
Ι	R	Е	Κ	S	A	U	R	S	E	N
R	I	M	A	E	I	N	R	E	E	0
S	T	Ρ	E	F	I	S	Н	E	S	Ρ

6. Match the following pictures to what they eat.

#### PREDATOR



#### Water Monitor Lizard



#### Lesser Dog Faced Bat



# •

#### Smooth Otter



# Creeper Shell



Paradise Tree Snake





<u>PREY</u>



#### Changeable Lizard



## Algae



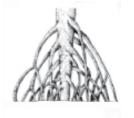
#### Green Chromide

### 7. Match the following correctly by joining the dots.











Mud lobster	
Mound	

















Lizard

• •

# I am good at • catching fish

# I have a long

I have yellow

I have my own

swimming pool!

flowers

 powerful tail to help me swim

## I am home to

the Mudlobster

# I help the tree

to stand strong

#### **Reflection Time**

#### Annex 5



What is one feature that you like most in Pasir Ris Park? Why?

How do you think the features in Pasir Ris have benefited visitors to the park?

What other features would you like to see in the park?

As students, what is one thing you can do to help make the park a better place for park users?

Without NParks, what do you think Singapore will be like?

How do you feel about working in a group? What has your group done well? What can be improved?

#### Evaluation and Feedback Form

#### Annex 6

No.	Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
1	I know more about NParks and its contributions towards the progress of Singapore into a City in a Garden.				
2	Despite the constraints and challenges that NParks faces, I am confident that it will continue to stay committed and find innovative ways to work around them.				
3	Pasir Ris Park is an ideal recreational and educational place for all Singaporeans to learn and enjoy about nature.				
4	I enjoyed the learning journey to Pasir Ris Park and will definitely tell my family and friends about Pasir Ris Park.				
5	I am proud to have a park like Pasir Ris in Singapore.				

#### Task

#### Introduction:

You are a member of the school's Gardening Club. You have been tasked by the club's President to visit and write about Pasir Ris Park in the club's blog to promote Pasir Ris Park and to share the experiences of your visit.

#### Your Roles are:

- 1. To understand and appreciate the flora and fauna found in Pasir Ris Park.
- 2. To learn about the importance of Pasir Ris in Singapore's natural heritage.
- 3. To learn how Pasir Ris Park has evolved over the years.
- 4. To promote Pasir Ris Park as a learning and recreational park for all.

#### Your Task:

At the end of your visit to Pasir Ris Park, your team is to complete the blog.

#### Some useful questions to guide your team:

- 1. What is role and purpose of Pasir Ris Park in Singapore?
- 2. Who is the organisation behind the management of Pasir Ris Park today?
- 3. Why should we visit Pasir Ris Park?
- 4. What are the important features that can be found in Pasir Ris Park?
- 5. What changes have Pasir Ris Park gone through over the years?
- 6. What can be done for the future of Pasir Ris Park as a learning and recreational park?

### Process:

Assigning specific roles for each member of the team Example

- 1. Group Leader (Lead and co-ordinate)
- 2. Scribe (Recording information)
- 3. Photographer (Take photos)
- 4. Researcher (Searching for information on the history, flora and fauna, what to look out for at the parks etc.)
- 5. Map reader (if they are carrying out the task without a guide)

### Websites:

- 1. http://www.NParks.gov.sg/cms/index.php?option=com_visitorsguide&task =parks&id=26&Itemid=73
- 2. http://www.NParks.gov.sg/cms/docs/parks/PRP_Brochure.pdf
- 3. http://www.wildsingapore.com/places/prp.htm
- 4. http://mangrove.nus.edu.sg/guidebooks/text/1017.htm

<b>Project Rubr</b> i Group Membe				Annex 8
CATEGORY	4	3	2	1
Organisation	The blog is very well organized. One idea or scene follows another in a logical sequence with clear transitions.	The blog is pretty well organized. One idea or scene may seem out of place. Clear transitions are used.	The blog is a little hard to follow. The transitions are sometimes not clear.	Ideas and scenes seem to be randomly arranged.
Focus on Assigned Topic	The entire blog is related to the assigned topic and allows the reader to understand much more about the topic.	Most of the blog is related to the assigned topic. The story wanders off at one point, but the reader can still learn something about the topic.	Some of the blog is related to the assigned topic, but a reader does not learn much about the topic.	No attempt has been made to relate the blog to the assigned topic.
Accuracy of Facts	All facts presented in the blog are accurate.	Almost all facts presented in the blog are accurate.	Most facts presented in the blog are accurate (at least 70%).	There are several factual errors in the blog.
Spelling and Punctuation	There are no spelling or punctuation errors in the final draft. Character and place names that the author invented are spelled consistently throughout.	There is one spelling or punctuation error in the final draft.	There are 2-3 spelling and punctuation errors in the final draft.	The final draft has more than 3 spelling and punctuation errors.
Photographs	Original photographs are detailed, attractive, and creative and relate to the text on the page.	Original photographs are somewhat detailed, attractive, and relate to the text on the page.	Original photographs relate to the text on the page.	Photographs are not present OR they are not original.

#### Copyright Acknowledgement:

- Photograph of Pasir Ris Park on Cover Page is taken from http://www.NParks.gov.sg/ cms/popup/pasir-education.html
- Maps in Annex 1b and 1c are taken from the National Parks Board website.
- Word Search in Annex 4 is created from www.armoredpenguin.com/wordsearch/
- Cliparts and graphics in Annex 1a, 1c, 4 and 5 are taken from http://office.microsoft.com/ en-us/images/
- Rubrics in Annex 8 is created from Adapted from rubistar.4teachers.org
- All other information, resources, pictures and photographs are adapted from the National Parks Board and NParks Flora and Fauna websites.

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