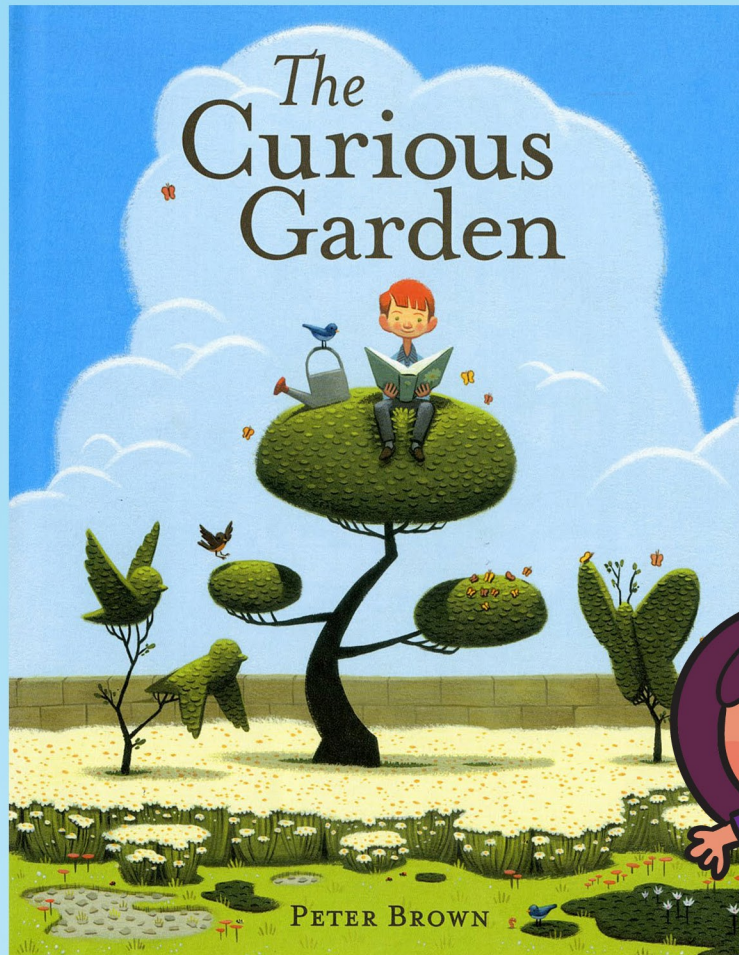


Educator's Guide for



Supported by:



INTRODUCTION

This educator's guide is based on the storybook entitled, "The Curious Garden" by Peter Brown. It has been carefully crafted by Kidz Meadow teachers for early childhood educators to implement the activities together with their preschoolers. The listed activities are closely related to the events in the book and are suitable for children aged 5 to 6 years old.

The guide aims to instill interest among educators and preschoolers to care for nature and to encourage them to set up their own garden in the schools. In this guide, there are three recommended phases that can be adopted when introducing and getting the children to understand the contents of the book.

PHASE 1, "Getting to know the book", needs to be conducted at three reading stages: before reading the book, during storytelling and after reading the book. It provides suggested questions to ask at each of these reading stages.

In **PHASES 2 and 3** of the guide, activities are grouped within a focus topic.

PHASE 2, "Let's get to work", focuses on activities that can be conducted based on the scenarios found in the storybook within our local context. Pages of the storybook are indicated for easy reference. At this stage, centres will also have the opportunity to work with NParks and other agencies.

PHASE 3, "Let's do our part", are suggested activities to showcase children's journey throughout the project where they can create their own storybook based on their experiences or even pledge their commitment towards preserving the nature.

We hope that the early childhood educators will find this guide useful.

Created by:
Educators from Kidz Meadow Kindergarten & Childcare Centres



PHASE 1: GETTING TO KNOW THE BOOK

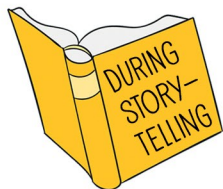
A day before storytelling and after going through the prompting questions with the children, the teacher plays the video of *The Curious Garden Story* with narration and sound effects.



PROMPTING QUESTIONS

(Refer to the cover page)

1. What do you think this story is about?
2. What is the boy doing? How does he feel?
3. What animals do you see? Are they happy? Why?
4. What are you curious about?
5. Where can you find gardens in Singapore?
6. Where is your favourite garden?
7. Do you think a garden is beautiful? What makes a garden beautiful?
8. What makes a garden not beautiful anymore? How will you feel?



GUIDING QUESTIONS

(Read the story to the children first)

- | | |
|--------------------|--|
| Pg 1 - 2 | <ul style="list-style-type: none">• What can you see in this picture?• Are there any plants? Why isn't there any? |
| Pg 5 - 6 | <ul style="list-style-type: none">• What did Liam see when he went onto the railway to take a closer look?• How did Liam feel when he sees the plants are dying? What did he do?• What do you think is a gardener? |
| Pg 7 - 8 | <ul style="list-style-type: none">• What did Liam do to save the plants?• Why did Liam feel like a gardener? |
| Pg 15 - 18 | <ul style="list-style-type: none">• What happened to the plants during winter?• What did Liam do during winter? |
| Pg 23 | <ul style="list-style-type: none">• Why did Liam pull out some of the plants? |
| Pg 25 | <ul style="list-style-type: none">• What happened when there are more gardeners? |
| Pg 27 to last page | <ul style="list-style-type: none">• What happened to the city after many years later?• Does the neighbourhood look beautiful after all these years? |



APPLICATION QUESTIONS

- | | |
|--------------------|--|
| Pg 1 - 2 | <ul style="list-style-type: none">• Is our neighbourhood like this? Why do you say so? |
| Pg 7 - 8 | <ul style="list-style-type: none">• Does Singapore have any gardeners? Where can we find them? |
| Pg 15 - 18 | <ul style="list-style-type: none">• Do you think Liam should care for the plants after winter since most of the plants had died? Why? |
| Pg 25 | <ul style="list-style-type: none">• Do you think it is good to have more gardeners? Why? |
| Pg 27 to last page | <ul style="list-style-type: none">• Do you want your neighbourhood to be a place like the story? Why?• What can you do to make your neighbourhood more beautiful than before? Who can help you? |



PHase 2: Let's Get To Work

For every activity, teacher to bring the children back to the storybook at the pages indicated in the guide.



FOCUS TOPIC: IT'S OUR GARDEN!

Teacher to make reference to the first and the last page of the storybook.

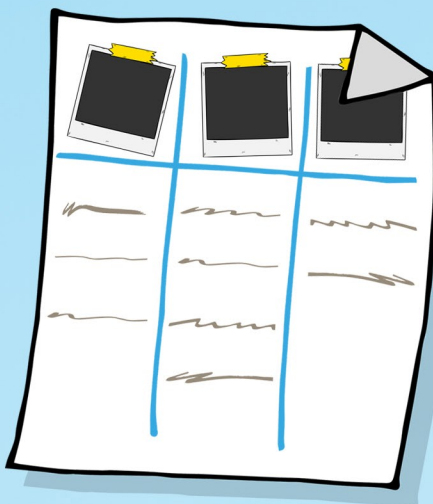
Learning Outcome : Children are given opportunities to analyse and interpret data, draw conclusion and verbalise their findings.



ACTIVITY 1: SPOT THE DIFFERENCE

Get the children to compare the pictures on page 1 and the last page of the storybook.

Write down their responses on *mahjong* paper.



ACTIVITY 2: GRAPHING

Get the children to do graphing by voting for the picture that looks beautiful to them. They can cast their vote by pasting or writing their names on the column of the preferred picture.

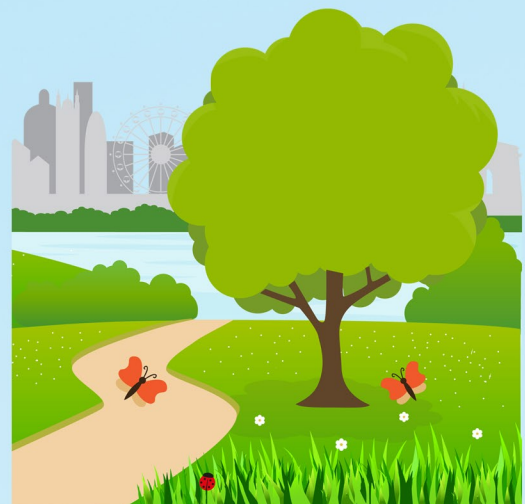


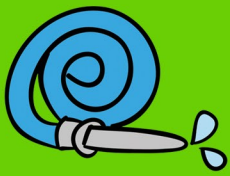
ACTIVITY 3: VIDEO OF CITY IN A GARDEN

Get the children to watch the video entitled, "Our City in a Garden" by National Parks Board from their YouTube Channel.

Ask the children what they want Singapore to look like in ten year's time?

How can we help Singapore to be a city in a garden?





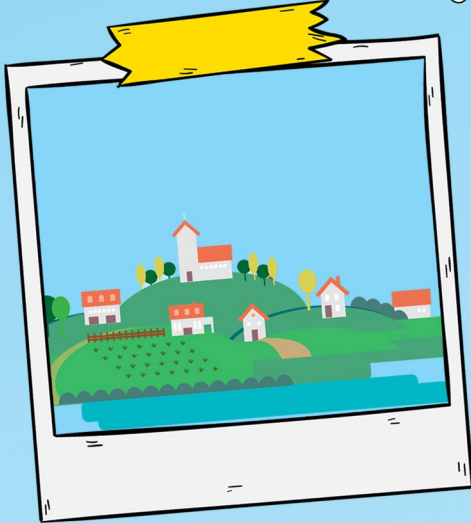
FOCUS TOPIC: WE NEED PLANTS!

Refer to the first and the last page of the storybook.

Learning Outcome : Children are given opportunities to share their observations, hypothesis and ideas with peers and teachers.

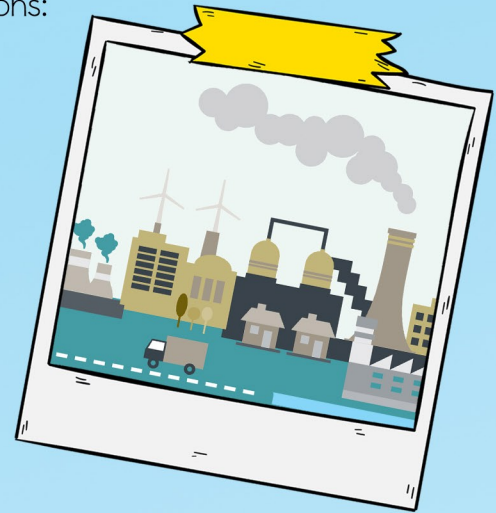


ACTIVITY 1: PICTURE TALK



Refer to the responses obtained from SPOT THE DIFFERENCE activity. Ask the children these questions:

- Why do we need plants?
- What do plants provide us with?
Example: food, medicine, clothes, perfume, furniture, etc.
- What happens if there are no plants?

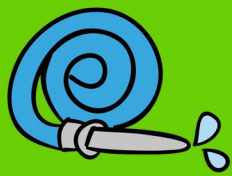


ACTIVITY 2: IN TOUCH WITH THINGS MADE FROM PLANTS

Bring in common objects created from plants such as clothing made from cotton, fruits, vegetables, wooden chair and paper. Select objects that are commonly found in our daily lives.

Teachers are encouraged to extend the children's thinking by getting them to brainstorm on how the items are being processed from a plant.





FOCUS TOPIC: WEEDS, WEEDS EVERYWHERE!

Refer to pages 9, 21, 22, 23 and 24 of the storybook.

Learning Outcome : Children are given opportunities to gather information and use their five senses to explore objects, materials and the environment.

Teachers may visit the following websites for articles related to weeds before conducting the activities:

Article: Discover beneficial weeds in the garden (Mother Earth News webpage)

Article: Weeds-Hidden Gems Among Us (Nature Love You.sg webpage)

Article: Weeds in Real Life, Delightful Additions to Miniature Garden (My Green Space (NPARKS) webpage).



ACTIVITY 1: PICTURE TALK (USING THE STORYBOOK)

Questions to ask

Page 21: What plants grow faster? Why is it a good thing to have weeds in the garden?

Page 23: Why do gardeners remove the weed just like Liam did? Why are some of the weeds not being removed?

The importance of weeds: Some weeds can be helpful in the garden by holding top-soil, pulling up water and nutrients, providing food, controlling insects' population and more.



ACTIVITY 2: LEARNING JOURNEY TO HORT PARK

Activities before the learning journey

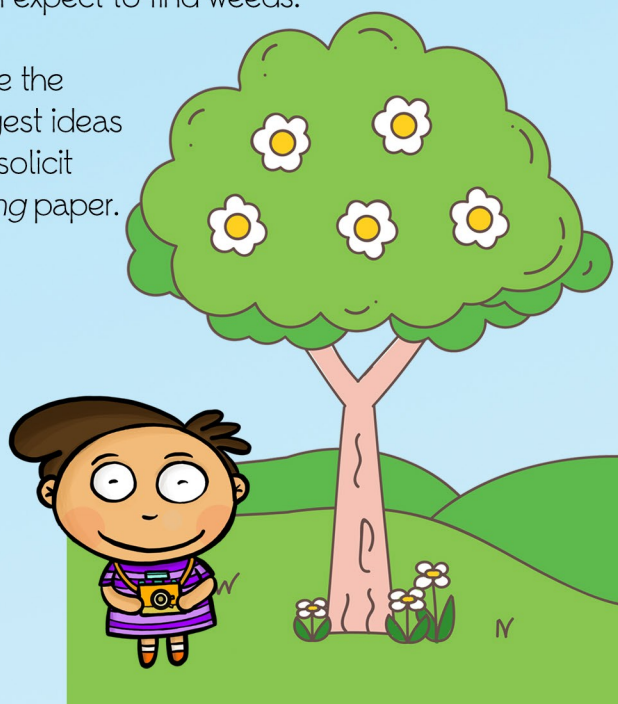
Teacher to recce the park and find out what it has to offer. In line with the topic of weeds, focus on the specific areas in the park where children can expect to find weeds.

After the recce and prior to the park visit, teacher will share the information gathered with the children. Teacher can suggest ideas on what they can look out for during the actual visit and solicit ideas from the children by listing them down on a mahjong paper.

On-site activities

When visiting the park, do make reference to the ideas that were listed earlier. Look out for weeds and take pictures of them. The pictures will be useful as a teaching material and for creating posters of weeds.

Besides that, do visit the Lifestyle Corner for children to gain prior knowledge on indoor gardening and terrarium making.





FOCUS TOPIC: WEEDS, WEEDS EVERYWHERE!

Refer to pages 9, 21, 22, 23 and 24 of the storybook.

Activities after the learning journey



ACTIVITY 3: WEEDS CHART

Show the pictures of weeds taken during the visit to Hort Park to the children. Together with the children, teachers will create a poster of weeds or 'Names of the Weeds' chart.



ACTIVITY 4: OBSERVING THE WEEDS

Bring the children out to spot weeds in the neighbourhood and observe the different types of real-life weeds that are commonly seen in Singapore gardens or parks. Teacher to bring along the poster of weeds or the weeds chart as reference for children to spot them.

Get the children to describe the features of the weeds. Record their conversations with voice recorder or video recording.



ACTIVITY 5: BYE-BYE WEEDS

Teacher to go through the poster of the weeds with the children before going for nature walk. Teacher to circle which are the weeds that are safe to be picked as some weeds may have thorns or sharp edges.

Then, bring the children out for nature walk and get them to pick the weeds circled on the poster. Children are to place them in a ziplock bag for follow up activities such as craft, terrarium making and as a reference to be placed in the school's discovery corner.

Weeds picking from public garden is allowed in Singapore as advised by NParks but must be supervised.





FOCUS TOPIC: WEEDS, WEEDS EVERYWHERE!

Refer to pages 9, 21, 22, 23 and 24 of the storybook.

Activities after the learning journey



ACTIVITY 6: WEEDS CRAFT

Weed Collage Album

After picking the weeds during nature walk, get the children to paste the variety of weeds on a piece of construction paper to create a collage. Compile all the collages made by the children by punching holes at the side of the collages and tying a string to it. This makes a beautiful collage album that can be displayed at the discovery corner.

Weed Brushes

Attach the weeds to a twig. Ensure that the twig does not have any sharp edges. Teachers may get the children to paint using the weed brushes.



ACTIVITY 7: WEAVING WITH WEEDS

Use 2 tree branches to create a loom with strings. Start weaving using weeds, sticks or long dried leaves.

Paste sticky transparent plastic sheet at both sides of the weaves. Allow for the weeds to stick to the plastic sheet to create a sun catcher. Hang it near the garden to catch the light for the plants!



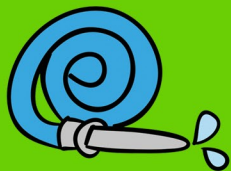
ACTIVITY 8: TERRARIUM WITH WEEDS

Show the pictures of the terrarium taken during the visit to Hort Park. Create a terrarium by using the weeds. Children can add small figurines or other plants to beautify the terrarium. Teachers may refer to Street Directory (Wholesale Nursery) and Green Culture Sg website for list of suppliers for the resources.



*Note: Weed is also referred as Wildflower in Singapore's context.
Do refer to a 'A Guide to the Wildflowers of Singapore' at
www.natureloveyou.sg or NParks website for more information.*





FOCUS TOPIC: MUSIC FOR PLANTS

Refer to page 7 of the storybook.

Point to the boy and ask the children what he is doing.

Learning Outcome : Children are given opportunities to understand the growth of plants through music and body movement.



ACTIVITY 1: MUSIC FOR PLANTS

Questions to ask

Why do you think the boy is singing to the plants?

Do you think plants like loud music or gentle music? Why?

Inform the children that music also plays a part in plants growth. Teachers may refer to **Article: How to use Music to boost Plant Growth (Smiling Gardener)**. Researchers have found that marigolds listening to rock music died within 2 weeks while those in the classical music room 6 feet away were flowering. Amazingly, the right sound can produce tremendous improvements in plant growth.

To illustrate, teachers can play different type of music during garden activities.



ACTIVITY 2: GROW LIKE A PLANT

Show the video on life cycle of plants entitled, “From a seed to a flower” by ChiTeaDust on YouTube Channel.

Explain to the children that just like us, plants go through changes as they grow. The roots will move downwards to take in water and the branches and leaves will move upwards to take in sunlight. Children can take turns to play the different roles and move their body accordingly.

Once the children are familiar with the movements of these 3 plant parts, play a song and get the children to pretend that they are plants. Following the rhythm of the song, children will slowly grow from a seed to a plant. Once they are an adult plant, they will take on their roles and move like the different plant parts. *Recommended Music: String Quartet or Sitar*



ACTIVITY 3: SONGS FOR OUR GARDEN

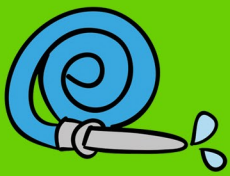
Get the children to create a song based on what they have learnt to a familiar tune. Sing the newly created songs with the children during their nature walk or gardening. Teachers may also add in gardening actions to make the song more engaging.

For example: Oh My Garden 
(to the tune of Twinkle Twinkle Little Star)

Oh my Garden, how are you?
Are there weeds disturbing you?
Is the sunlight right for you?
Have you drunk your water too?

 Oh my Garden, looking good.
We are singing just for you.





FOCUS TOPIC: WEATHER AFFECTING PLANT'S GROWTH

Refer to pages 15 and 19 of the storybook.

Learning Outcome : Children are given opportunities to to be able to suggest possible outcomes or solutions to a problem.



ACTIVITY 1: PICTURE TALK

Refer to page 15 of the storybook.

Get the children to recall the story on how winter had affected the growth of the plants. Get the children to reflect and guess other types of weather that can affect the growth of the plants. (Note: Recall the needs of a plant)

Questions to ask

- What do plants need to grow?
- What happens if the plants receive the sunlight but not water?
- What type of weather makes you feel hot?
- When the weather is hot, do you feel thirsty? Do you think plants will be thirsty too? If plants do not receive water for many days, what will happen to them?
- What happens when plants take in too much water and in what type of weather does this happen?
- How do you think the plants will feel if there is too much water for them?



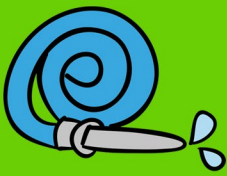
ACTIVITY 2: ARTICLE TALK

Refer to Article, “How Haze Affect Singapore’s Greenery” from Channel NewsAsia. Teacher is to simplify the article by highlighting the factors that will affect plants’ growth. As haze is a result of man’s actions, go through the factors that can cause the haze by asking these guiding questions:

- What does haze look like? (Sample answer: Smoky)
- What does haze smell like? (Sample answer: Smoke)
- What happens if there is smoke in the air? Can you breathe? Do you think the plants can breath too?

Get the children to draw or write their thoughts on the article.





FOCUS TOPIC: LET'S TAKE A NATURE TRIP!

Refer to page 25 of the storybook.

Learning Outcome: Children are given opportunities to be able to recognise their roles and responsibilities in keeping the environment clean.



ACTIVITY 1: LEARNING JOURNEY

Teachers may visit NParks website www.nparks.gov.sg/gardens-parks-and-nature to source for gardens and parks that they can visit for the children's learning journey.

Other recommendations will be: The garden at Sentosa Siloso Beach Resort and gardens in primary schools. Do seek permission accordingly.



ACTIVITY 2: LOCAL NURSERIES

Want to bring the children to a local nursery or need to get gardening tools? Do visit Street Directory (Wholesale Nursery) and Green Culture Sg websites for fresh ideas.





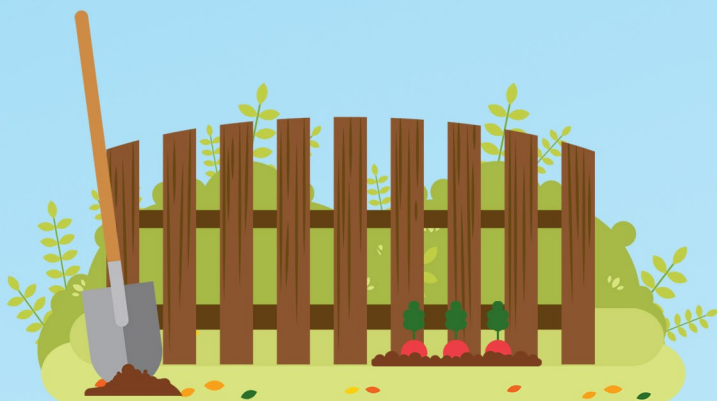
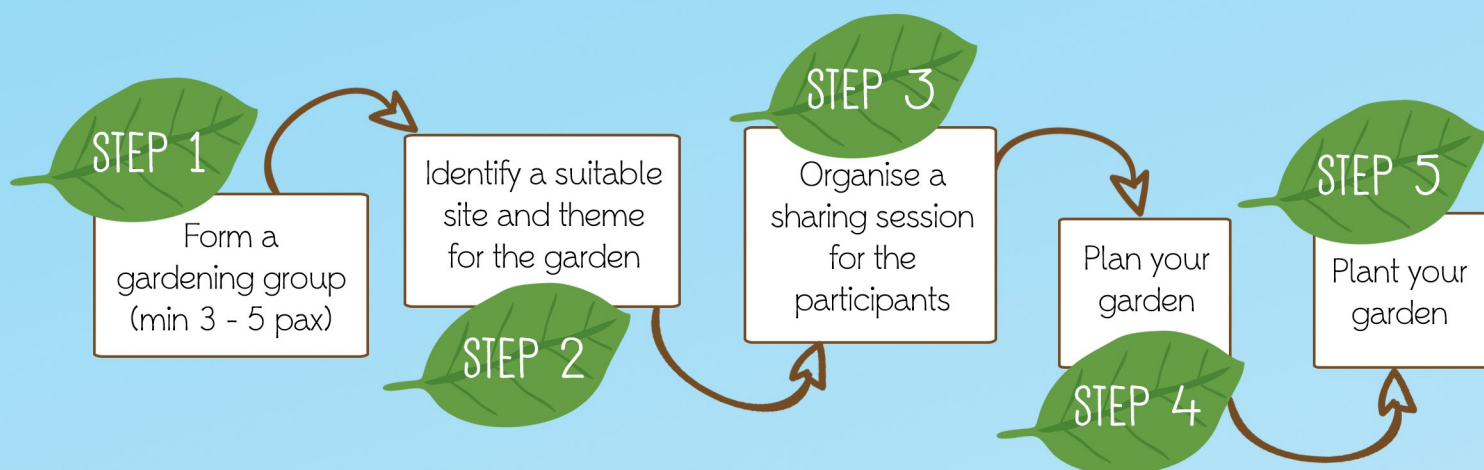
FOCUS TOPIC: SETTING UP A GARDEN

Learning Outcome: Children will gather resources, plan and conduct investigations to be able to set up a garden with adult support and supervision.



ACTIVITY 1: COMMUNITY IN BLOOM (CIB) BY NPARKS

Set up an outdoor garden with these easy 5 steps found in NParks website.



For more information, centres may liaise with NParks to be part of the CIB project.

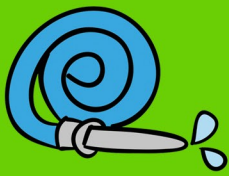
If you are part of the CIB project, you will receive a starter kit that consists of information on 1001 plants, guide book, seeds, gardener's tools like gloves, shears, hats and etc.



ACTIVITY 2: INDOOR GARDENING

Check out NParks website for some cool indoor garden ideas under Community In Bloom Initiative such as Terrarium, Chest of Drawer Plants and Bottled Plants.





FOCUS TOPIC: GARDENING TOOLS

Refer to page 8 of the storybook.

Picture shows Liam using a pail with holes as a watering can.
He became more resourceful in making his own tools.

Learning Outcome: Children to be aware of the need to conserve natural resources



ACTIVITY 1: BRAINSTORMING SESSION

Get the children to brainstorm on the gardening tools that can be done by using recycled materials.

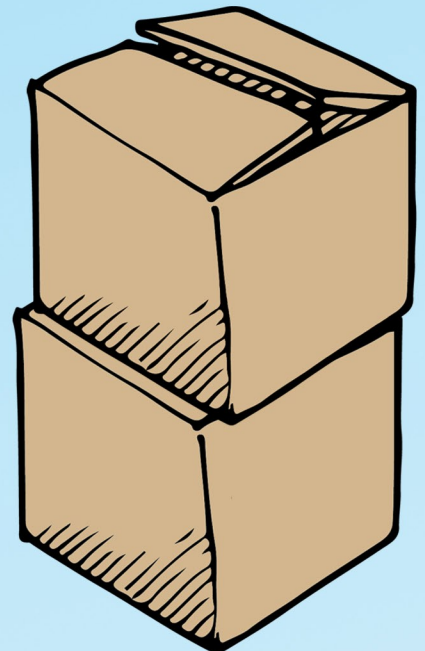
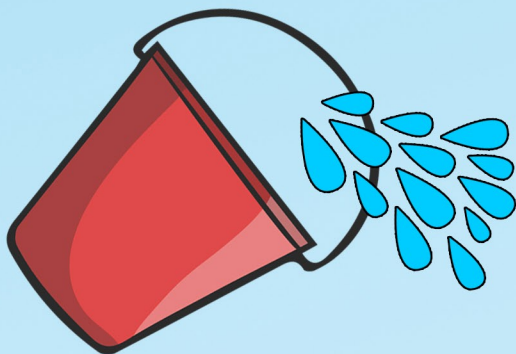
Encourage parents to contribute recycled items or gardening tools.



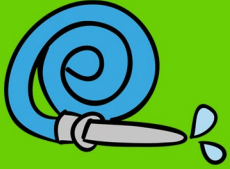
ACTIVITY 2: MAKING GARDENING TOOLS

Some of the gardening tools that can be done using recycled materials are:

- Mini shovel using cardboards or bottles.
- Watering can using a container with holes.



PHASE 3: LET'S DO OUR PART



FOCUS TOPIC: INSTILLING VALUES TO THE CHILDREN

Learning Outcome: Children to learn the importance of responsibility, care and respect for living things and the environment.



ACTIVITY 1: PLEDGE TO BE A NATURE LOVER

Get the children to brainstorm the values that someone should have to be a nature lover. Create a class pledge by constructing the information gathered during the brainstorming session into sentences. Say the pledge out loud as a class.

For example: We, Class of K2A, pledge to be responsible and keep our neighbourhood clean.



ACTIVITY 2: MESSAGE FOR OUR GARDEN

Distribute nature cut-out card stocks or print out templates such as leaf or flower to the children. Encourage the children to think on what they would want the garden to know about their feelings.

Get them to pen down their thoughts by writing things that they will do to care for their gardens or how they feel about their gardens.

Display their beautiful messages at the gardens!





FOCUS TOPIC: AS THE PROJECT BLOOMS...

Learning Outcome: Children are given opportunities to be able to reflect and recall prior experiences and share their feelings and thoughts.



ACTIVITY 1: DOCUMENTING THE JOURNEY

Have the children document step by step what they did throughout their learning journey. End of the project, teacher compiles all the documents to create a journal.

Recommended to include the children's response, circulars, parental involvement activities and testimonials. Teachers to highlight their creations of gardening tools using recyclables.



ACTIVITY 2: OUR CURIOUS GARDEN STORY

With the guide of the storybook, get children to create a story of their garden. Encourage them to think about their feelings and thoughts.



ACTIVITY 3: COOKERY WITH PARENTS

Share the journey with parents at the end of the project. Conduct a cookery lesson day during the sharing session, where children can use the herbs grown in the garden as part of the cookery. They can also use banana leaves as a plate to serve their delicacies!



ACTIVITY 4: SUSTAINING THE GARDEN

Now that you have set-up a garden, how can you sustain it? How can you continue to build on the children's interest? What activities can you plan that will excite and involve them?

For ideas on activities that can be done in the preschool garden, do get a cop of the Adventures in the Garden Guide.



ACKNOWLEDGEMENT

The Educator's Guide for "The Curious Garden" storybook is an interweave of effort by the educators from Kidz Meadow Kindergarten & Childcare Centres.

Special thanks to
Early Childhood Development Agency (ECDA) and
National Parks Board (NParks)
for their support and contributions to this guidebook.

We hope the 'A Garden in Every Preschool' project which is in partnership with Association for Early Childhood Educators (Singapore) (AECES), Preschool Market and Lifelong Learning Council, will blossom into a reality, making every preschool a garden of knowledge.

Let's Build

a GARDEN in every

