

PRESCHOOL MYOPIA CURRICULUM

Scott See-Well



Amber Active

Eric Eat-Right

FOREWORD

The Pre-school Myopia Curriculum toolkit is designed by the Health Promotion Board to equip pre-school educators with knowledge on pertinent information on myopia prevention in children, thereby helping pre-schoolers to prevent or delay the onset of myopia.

This toolkit consists broadly of three lessons. Each lesson plan may come with a song chart, take-home activities and interactive elements. Each take-home activity reinforces the importance for teachers to partner parents in providing a supportive environment beyond school and in homes, to cultivate good habit formation in children. Teachers can help to encourage more active parental participation through engagement of/reminders to parents. All crafted take-home activities aim to reinforce myopia prevention messages for pre-schoolers.

We want to thank you for joining us in this crucial effort to educate the pre-schools about myopia prevention. Remember, you do play an important part in shaping the health and future of our children.

This toolkit is brought to you by the Youth Preventive Services Division, Health Promotion Board.

What is myopia?



Eric Eat-Right

What should I do to protect my eyes from myopia?



Amber Active

Eric, myopia is commonly known as "short-sightedness".

Amber, spend more time outdoors to protect your eyes from myopia.



Scott See-Well

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HABIT FORMATIONS AND REINFORCEMENT

The Habit Loop comprises 3 elements: Cue, Routine and Reward, and is a neurological loop that governs habit formation. Some examples following the Habit Loop principles, are shown here and recommended as part of the teaching process to form good habits.

Examples of habit loop (cue-routine-reward) that can be included into the curriculum:

| CUE | ROUTINE | REWARD |
|-------------------------------------------|------------------------------------------|-------------------------------------------------------------------------|
| Sunny Weather | Bring the children outdoors for some fun | Promise the children more outdoor fun for the next lesson |
| Children look sleepy during class | | |
| After a long sit-down or near work lesson | | Praise the children for good active play outdoors |
| Lesson theme is on Appreciating Nature | | "Sticker reward system" with stickers on messages for myopia prevention |

BENEFIT OF HABIT LOOP APPROACH

Cue-routine-reward is a simple-to-use tool for teachers to capitalise on any teachable moments to educate and reinforce good eye care habits. Good habits take time and need to be frequently practiced before they become second nature. Teachers are free to exercise their creativity in determining the cues and rewards. With consistent practice, good eye care habits can follow children well into their adulthood.

Habit Loop (Cue-Routine-Reward)



* Source: Adapted from "The Power of Habit" by Charles Duhigg

Topic 1

UNDERSTANDING MYOPIA

Target Group : K1 and K2 Children
Duration : 30 to 40 minutes



Scott See-Well

INTRODUCTION

Myopia is commonly known as short-sightedness. A person with myopia is able to see close objects clearly but objects that are further away will appear blurred.

Well, myopia is not just about the inconvenience of wearing spectacles. It can give rise to eye complications and even blindness in the long term.

Unfortunately, there is no cure for myopia. BUT, we can protect our eyes by spending more time outdoors, every day.

LEARNING OBJECTIVES

At the end of the lesson, children will be able to:
Understand what is myopia and how it affects him/her

MATERIALS NEEDED

Clear Image (See Placard 1A)
Blurred Image (See Placard 1B)
Song Chart (See Placard 1C)



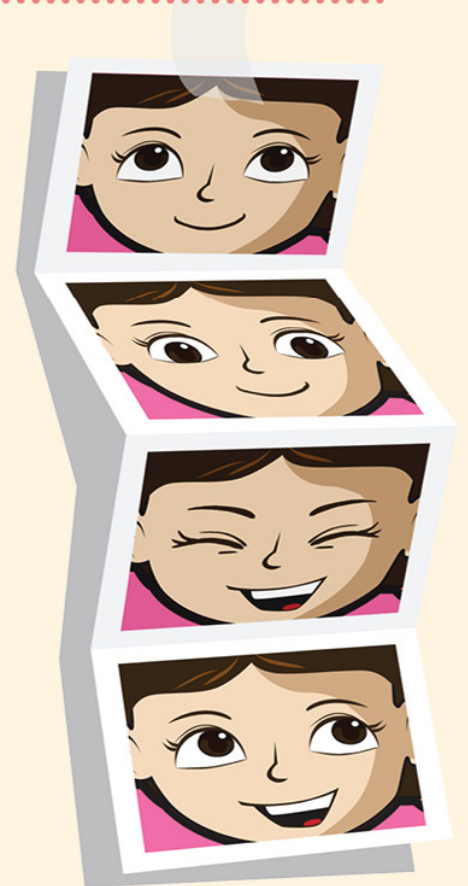
SUGGESTED ACTIVITY

- Bring the students to an outdoor venue. Ask them to look at the things around them. Get them to share what they see.
- Now, ask the students to close their eyes. Ask them if they can see anything. Explain to them the importance of their eyes.
- Show a picture of the clear image (See Placard 1A) and ask the students to describe the picture.
- Show a picture of the blurred image. (See Placard 1B) and ask the students to describe the picture again.
- Explain to the students that if a person is myopic, he/she will see blurred images without the vision aids.
- Highlight to the students that if one cannot see the board clearly or distant objects clearly, one should inform the parents or teachers.
- Sing the song (See Placard 1C).



AT SCHOOL

Teachers to observe and look out for students who may be at risk of being myopic.



TAKE HOME ACTIVITY

- Myopia Word Search

Find and circle out the following bold words in grid box with your parents.
Ask your daddy/mummy to share the meaning of the words with you.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| U | R | A | L | G | U | Y | G |
| J | E | S | P | E | V | O | L |
| P | W | Q | K | N | O | N | A |
| O | Q | Z | I | D | H | E | S |
| L | D | X | M | N | E | A | S |
| M | Y | O | P | I | A | R | E |
| A | J | U | D | F | L | E | S |
| F | L | T | O | P | T | L | D |
| Z | M | D | N | E | H | R | F |
| C | P | O | L | F | Y | S | E |
| B | O | O | K | V | I | D | S |
| N | O | R | J | B | L | O | O |

Myopia Also known as short-sightedness; a condition where a person with myopia is able to see close objects clearly but objects that are further away will appear blurred.

Glasses Also known as eyeglasses or spectacles, are devices consisting of lenses mounted in a frame that holds them in front of a person's eyes so that the child can see things far away clearly.

Outdoor Outdoor time of 2 to 3 hours a day can help protect your eyes against myopia.

Near Reduce time spent on unnecessary near work indoors (i.e. playing computer games indoors).

Healthy A healthy diet can help you look and feel good, as well as give you the energy to do the things you want to do.



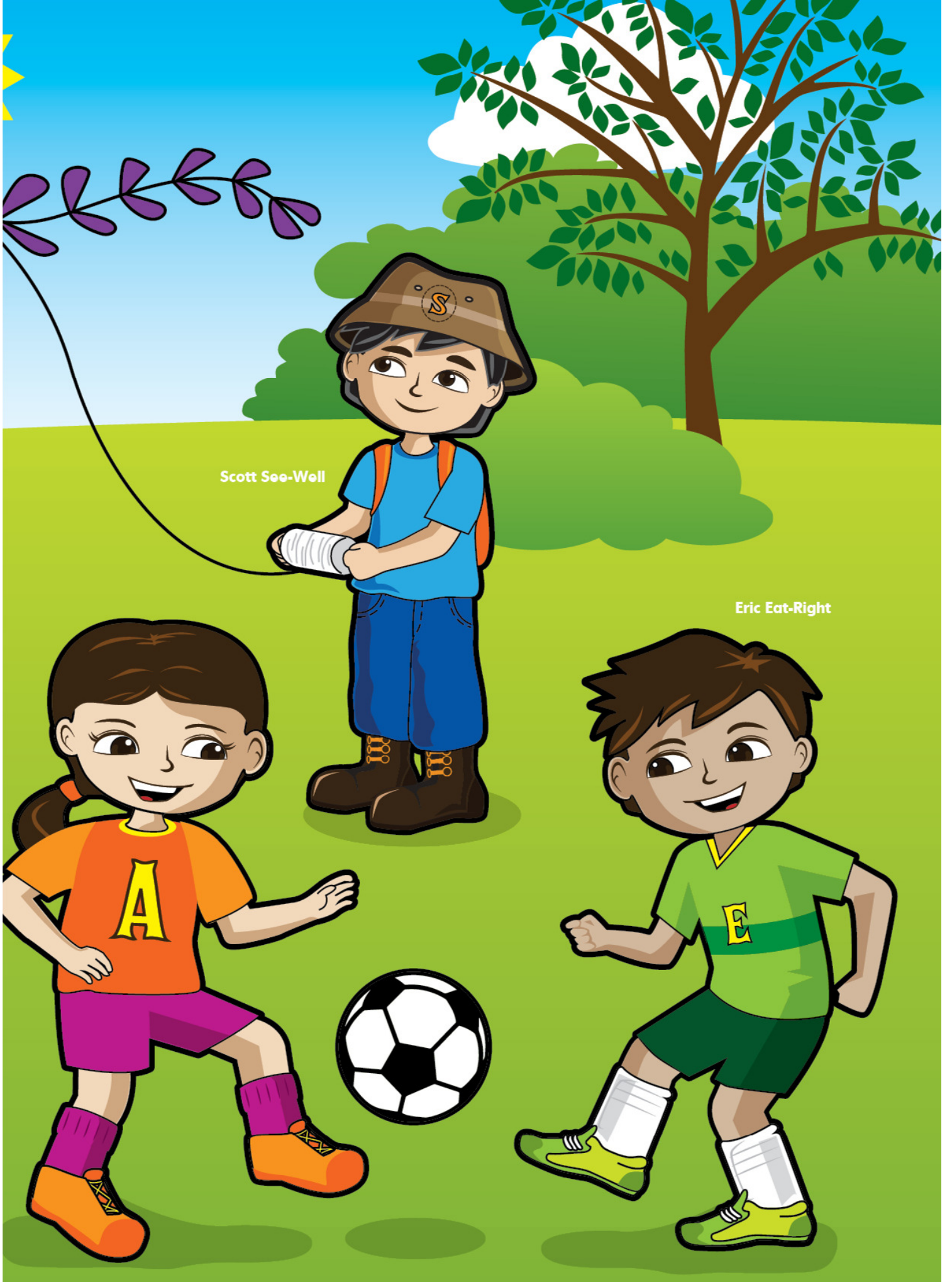
Amber Active

Eric Eat-Right



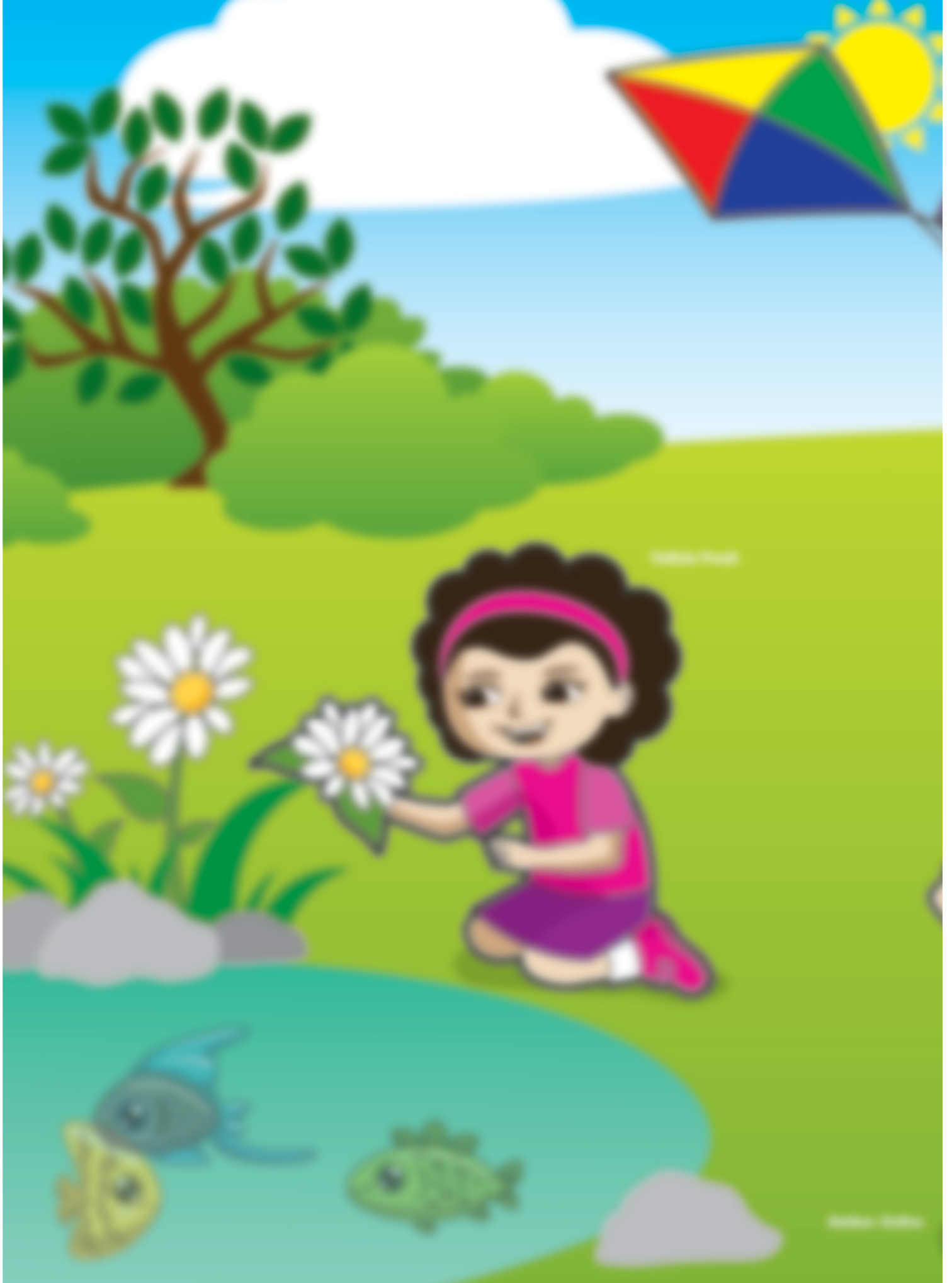
Felicia Fresh

Amber Active



Scott See-Well

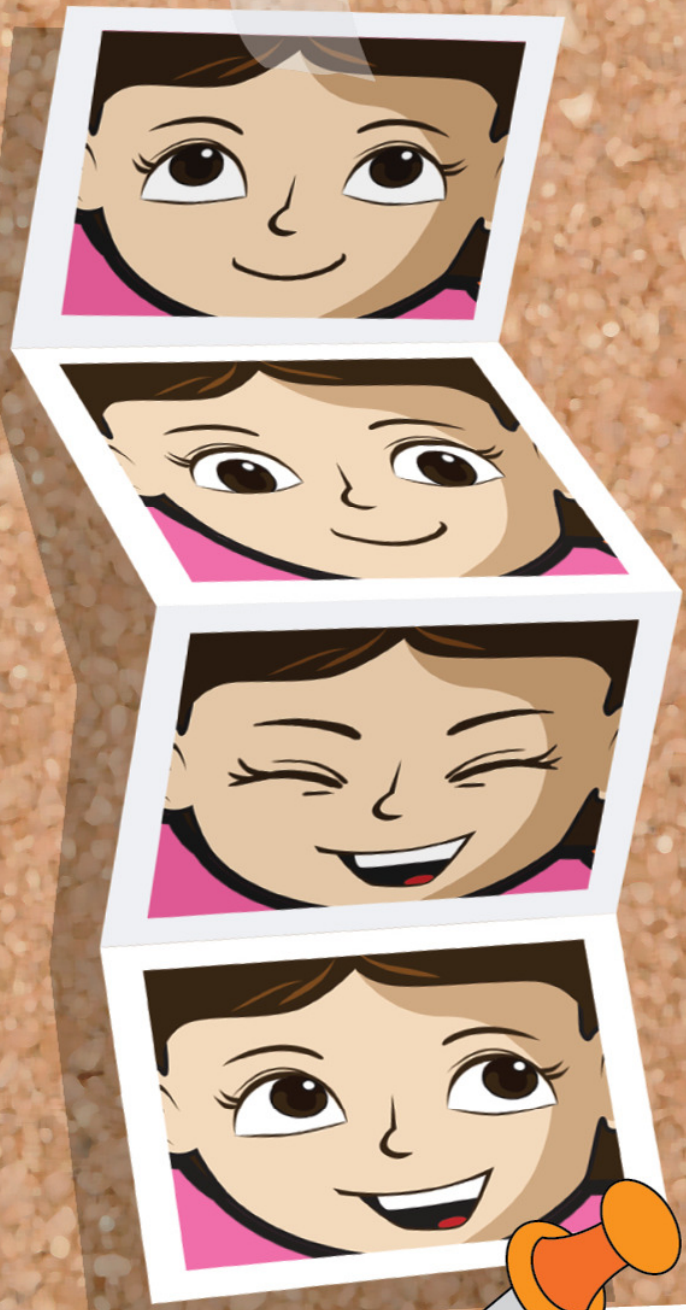
Eric Eat-Right





Boy with Hat

Boy with S



(To the tune

**I move
I move m
I squeeze
Then I make
I do the b
And I ca
That's what**

**I love to g
Cos it's go
I can walk
Or play wit
I do the bli
And to sl
That's how I**



of Hokey Pokey)

my eyes up

y eyes down

my eyes close

them go around

linky, blinky

an see far

my eyes can do

o outdoors

od for eyes

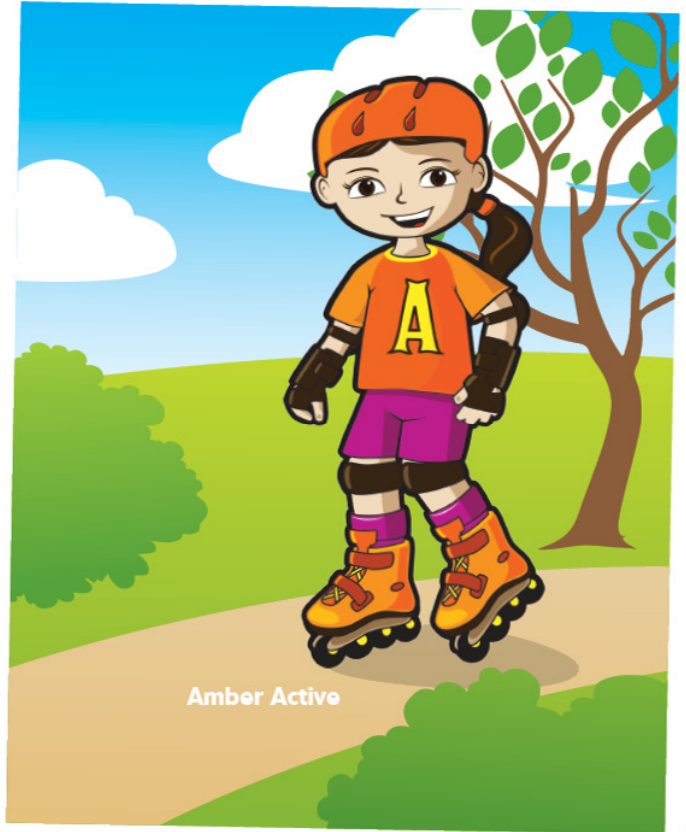
in the park

h my friends

inky, blinky

leep early

rest my eyes



Topic 2

WE TAKE CARE OF OUR EYES

Target Group : K1 and K2 Children
Duration : 30 to 40 minutes

INTRODUCTION

Singapore has one of the highest myopia prevalence rate in the world. With the advent of the digital lifestyle, children are inevitably spending more time indoors than outdoors, both in school and at home. There's a constant use of IT gadgets e.g. handheld games or computer for educational or leisure purpose. If a person is constantly involved in near work, he/she may likely develop myopia.

So, spending time outdoors every day can protect your eyes from myopia. The more time spent outdoors, the lower the risk of developing myopia. Studies have shown that an average of 2 to 3 hours per day of outdoor time for younger children may protect the child against myopia.

SUGGESTED ACTIVITY 1 Nature Scavenger Hunt (Time allocation: 10 minutes)

1. Bring the students to an outdoor venue e.g. garden or a park to carry out this activity.
2. Distribute a copy of the **Nature Scavenger Hunt List** to every student. (See Placard 2A).
3. Let the students look around the park or garden for tree leaves, twigs, stones, or flower petals that can be found in the list.
4. Put a tick on the items that they found.
5. After the completion of the nature scavenger hunt, proceed to activity 2.

LEARNING OBJECTIVES

At the end of the lesson, children will be able to:
Learn to take care of their eyes through outdoor exploration with nature

MATERIALS NEEDED

- Nature Scavenger Hunt List (See Placard 2A)
- Rainbow Necklace (See Placard 2B)
- Drawing Paper
- Pencil
- Labelled shapes cut from paper
- Yarn or string





SUGGESTED ACTIVITY 2

Creating Art With Nature (Time allocation: 30 minutes)

1. Each child should be given a drawing paper, pencil and at least 3 items e.g. leaf or pebble found in the park or garden.
2. Place one item on the drawing paper and trace out the shadow of the item. They can also use their parts of their body e.g. fingers, hands.
3. Create their own masterpiece by using different objects given to them.
4. After completion, they can colour the masterpiece using the watercolour pens.

In this activity, children get to experiment with shadows, shapes and using the small objects, they will learn to form, draw and overlap shadows to create a masterpiece of their own. They will also learn the names of the different objects.

Optional: Teachers can bring their own objects like toy animals or objects with interesting shapes.

During the activity, the teacher can share with the children:

- How being outdoor is fun i.e. playing with friends at the playground or even have a picnic with family.
- Encourage the children to go outdoors more often.
- Take a break after continuous near work i.e. take a walk at a nearby park.

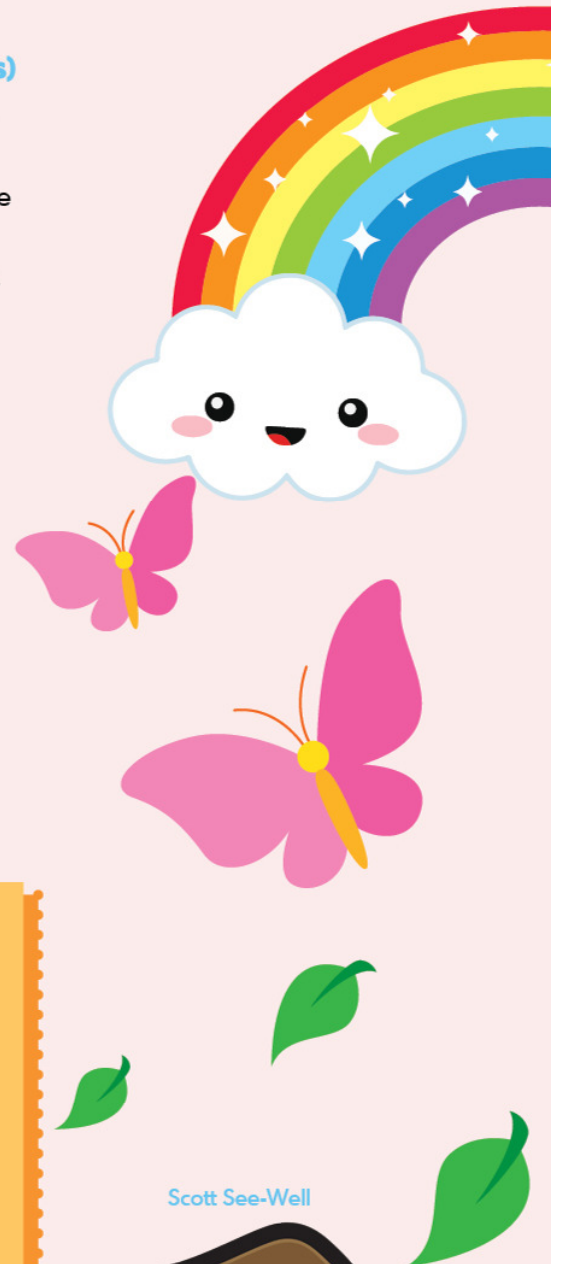


TAKE HOME ACTIVITY

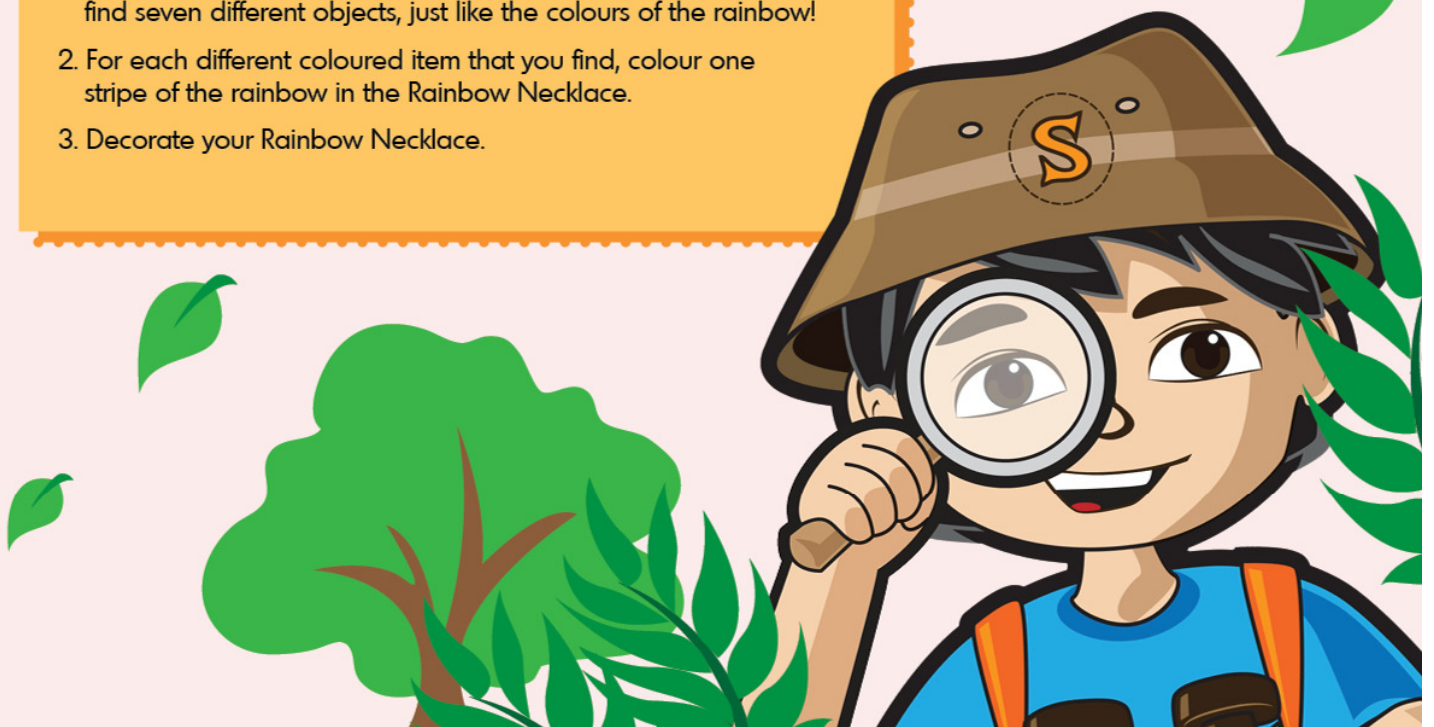
- Welcome To My Rainbow World

For this activity, each child is to be given a copy of Placard 2B to colour in (See Placard 2B).

1. Ask your parents to bring you outdoors and go on a mission to find seven different objects, just like the colours of the rainbow!
2. For each different coloured item that you find, colour one stripe of the rainbow in the Rainbow Necklace.
3. Decorate your Rainbow Necklace.



Scott See-Well



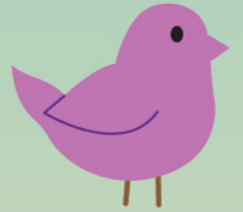
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NA SCAVI



Flower



Water



Tree



Rocks



Bug



NATURE HUNGER HUNT

Bird



Green leaf

Grass



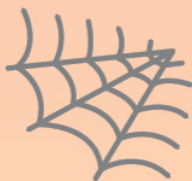
Brown leaf

Fern



Sand

Cloud

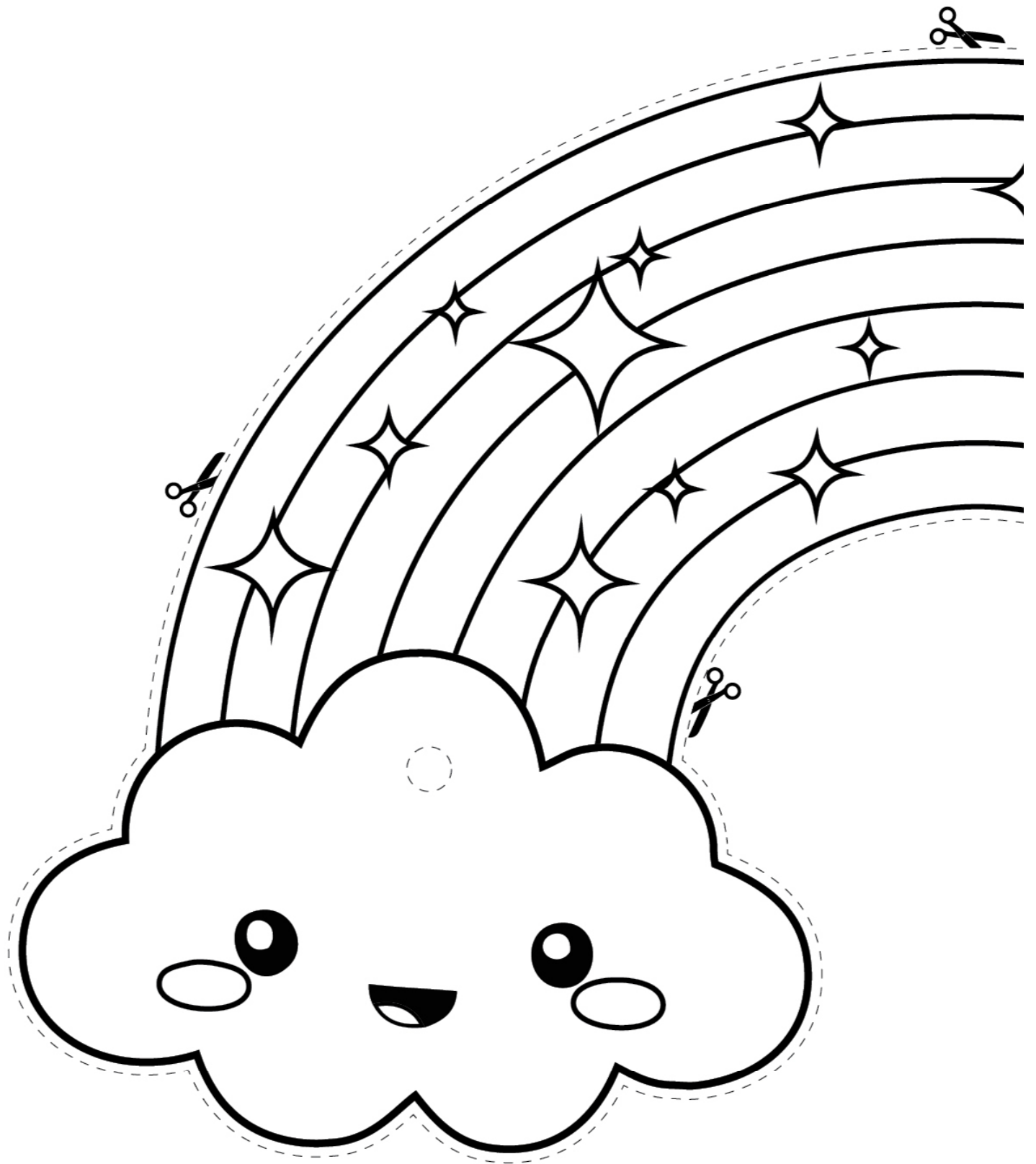


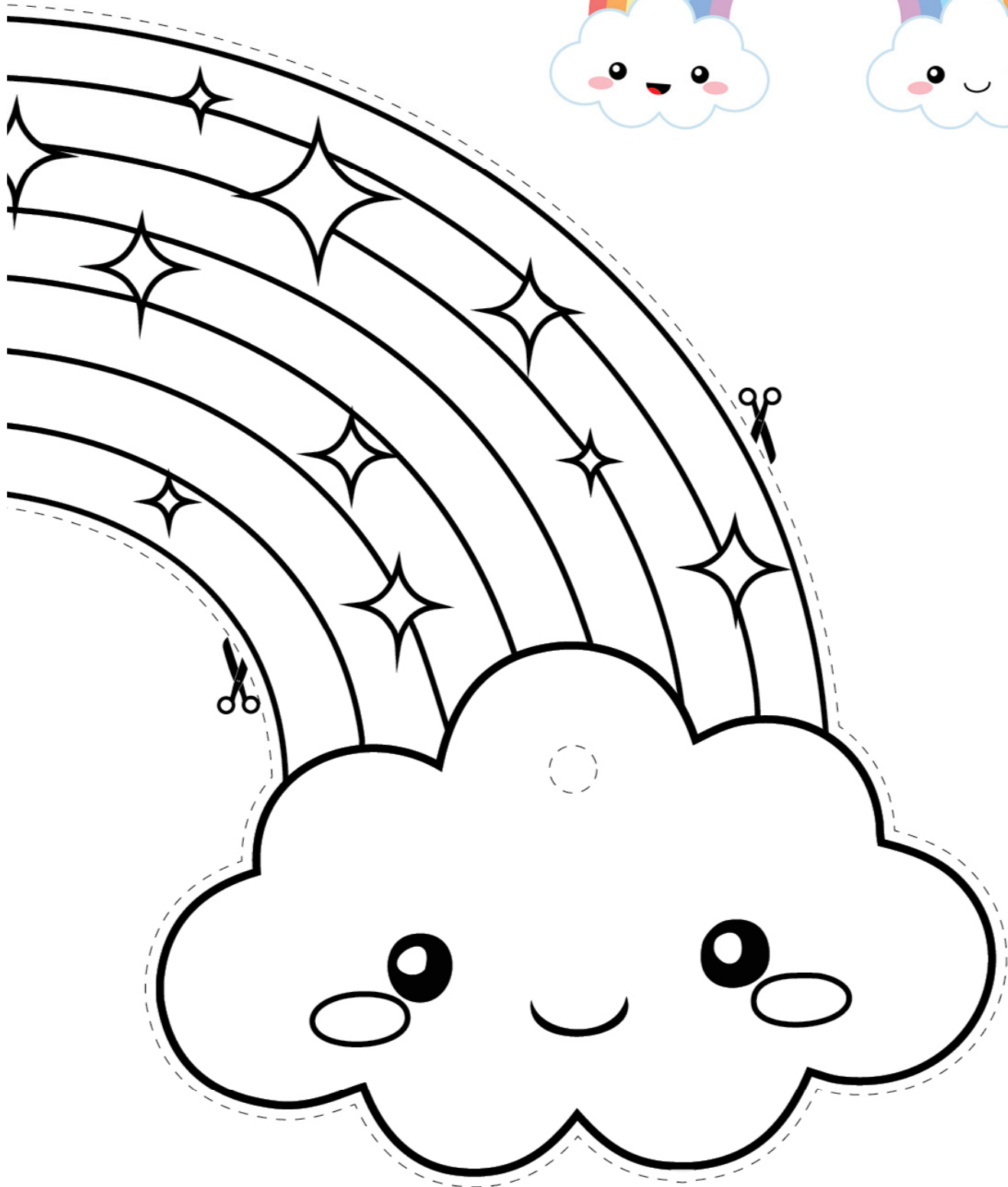
Spiderweb

Ant



Butterfly





Topic 3

OUTDOOR TIME IS GOOD FOR OUR EYES



Target Group : K1 and K2 Children
Duration : 30 to 40 minutes

INTRODUCTION

In Singapore, about half of our children develop myopia by the age of 12. While the causes of the myopia are still unknown, research has shown that genetic and environmental factors play a part in the development of myopia. There is increasing evidence which suggests that more time outdoors has a protective effect against myopia.

At home and in school, parents and teachers can combine the dual objectives of being active and protecting their children's eyes against myopia by doing physical activities outdoors. So, to "keep myopia away, go outdoors and play".

LEARNING OBJECTIVES

At the end of the lesson, children will be able to:
Understand that outdoor time is good for the eyes and body.

MATERIALS NEEDED

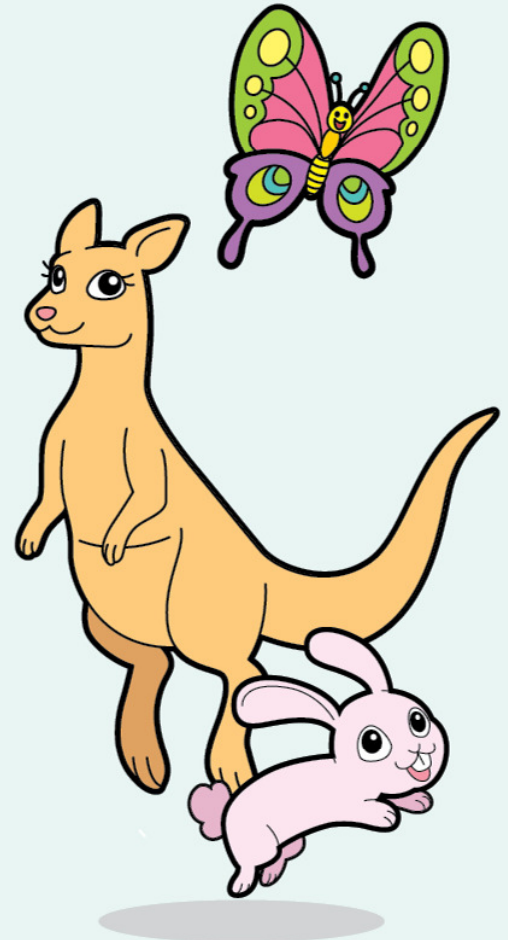
- Colour Cards (See Placard 3A)
- Animal action Cards (See Placard 3B)
- Bookmarks (See Placard 3C)

SUGGESTED ACTIVITY

- Choose an appropriate time of the day (avoid the hottest part of the day).
- Bring the students to an outdoor venue e.g. park or playground to carry out this activity.
- Divide the children into two groups and get them to form a big circle.
- Place a ball or any item in the centre of the circle.
- Teacher will pick a colour card (See Placard 3A) from a bag. Students will have to find an object similar to the colour that teacher has picked and shout out the name of the object that they see around.
- The student who shouted the first correct answer will get to pick an Action Card (See Placard 3B).
- All the students from the winning student's group should do the indicated action together. If done well, the students are rewarded by moving forward by one step. The intensity of the actions can be varied according to the age and readiness of motor skills in the students.
- The activity ends when one of the groups reaches the object in the centre first.

In this activity, children get to exercise through the body movements that they mimic, like an animal. This can help the child to relax, improve motor-skills and experience how fun being outdoors can be.

Teachers also can use the colour and action cards and turn them into another fun outdoor activity with the students.



TAKE HOME ACTIVITY - My Outdoor Journal

1. Share with your parents on what have you learned and tell them "Outdoor time is good for the eyes".
2. Ask your parents to bring you to an outdoor venue for fun activities e.g.
 - Go for a nature walk to one of your neighbourhood parks or visit a new park – one which may not be in the vicinity of your school or neighbourhood.
 - Go for an educational trip to a local farm or Botanic Gardens.
 - Plan and organise a hiking trip or a photography expedition to nature reserves.

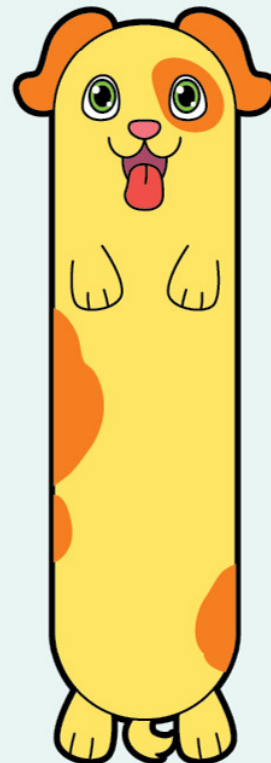
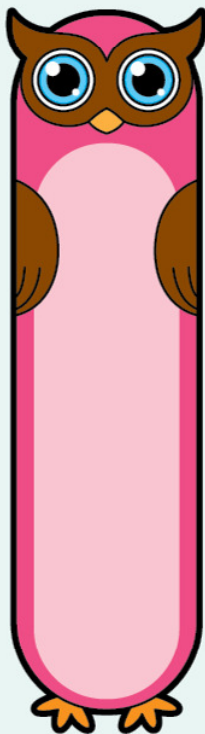
Decorate the bookmarks (See Placard 3C) with your memories of your day out.

3. Encourage your parents to increase the outdoor time with you during weekends.
4. Bring the completed bookmarks to school and exchange with your friends. So, your friends can learn and carry out the fun activities together with their family.

Dear Parents,

Do you know that spending time outdoors can protect your child's eyes against myopia and keeps the body active and the mind alert.

Help your little one's mind and body by engaging them in an outdoor activity over the weekend.



RED

YELLOW

PURPLE

ORANGE

BLUE

GREEN

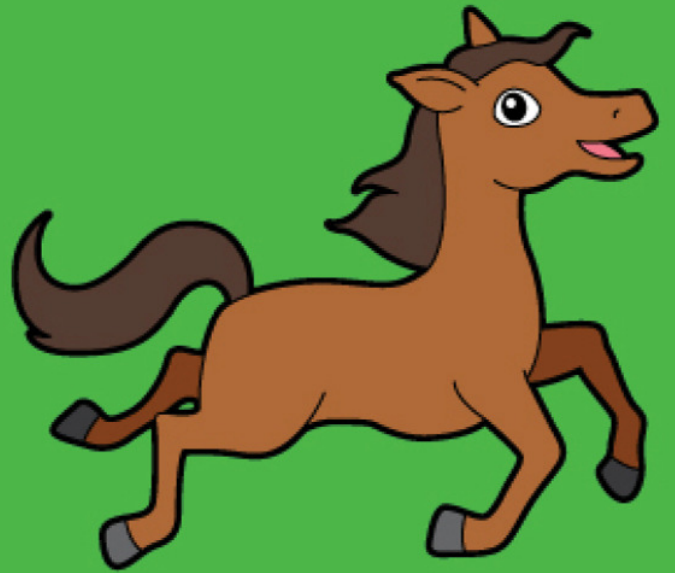
BROWN

PINK

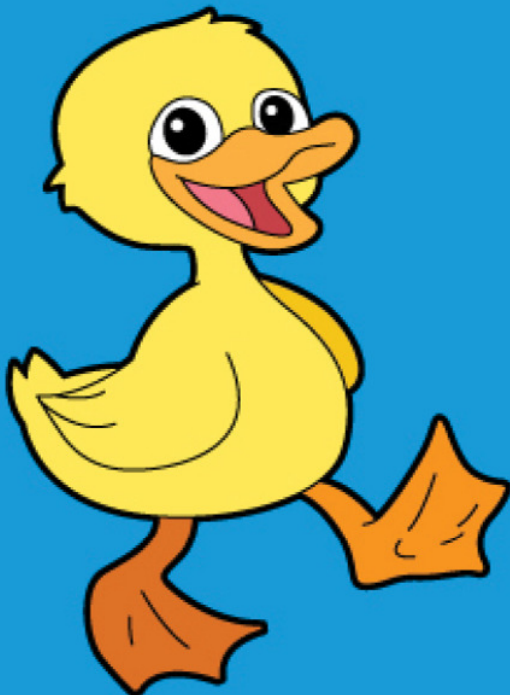
Bounce like a kangaroo



Gallop like a horse



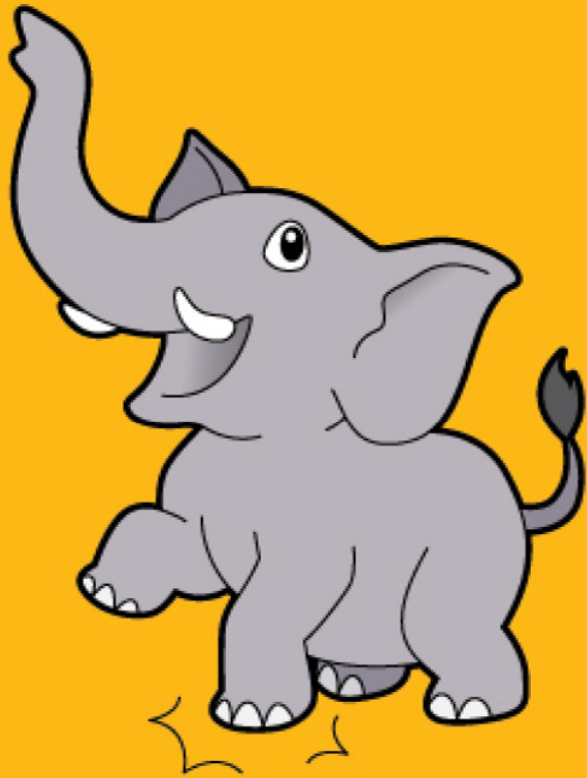
Waddle like a duck



Hop like a bunny



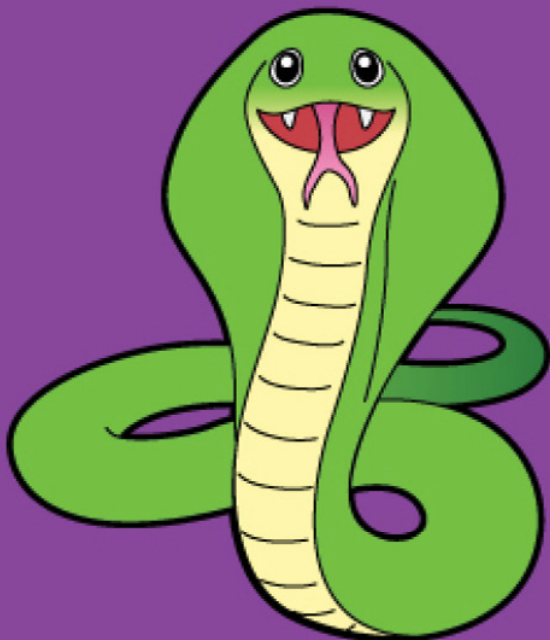
Stomp like an elephant



Flutter like a butterfly



Slither like a snake



Swing like a monkey

