



SCIENCE CHAMPION

Hazel T. Victoria • Fatmawaty Munte

1

Student Book

Builds conceptual understanding, reasoning skills, and critical thinking through science learning




Published in Indonesia by:

PT ASTA ILMU SUKSES (member of Mentari Group)

RUKAN Sentra Niaga Puri Indah Block T1-14

West Jakarta 11610

 : 0856 9785 6420

 : @astailmusukses

 : contact@astailmu.com

 : www.astailmu.id

First published: January 2023

© 2023 Singapore Asia Publishers Pte. Ltd.

All rights reserved.

This English edition licensed to PT ASTA ILMU SUKSES. No part of this publication may be reproduced or transmitted in any form or by any means, or stored in any retrieval system of any nature without the prior written permission of **PT ASTA ILMU SUKSES**.

Science Champion – Student Book 1

Preface



is a science learning book specially designed to help pupils acquire scientific knowledge and understanding, develop skills, values, and attitudes. The scope of topics discussed at each level is arranged according to the science syllabus at the elementary level.



uses a very systematic learning method through the Inquiry approach that has been tested and proven to be an effective approach at improving student's competences in mastering science. The inquiry approach is used by Singapore to improve students' competences which is proven through their consistency as the top rank at PISA (Program for International Student Assessment) and TIMSS (Trends in Mathematics & Science Studies). The development of material for each topic is arranged in stages, starting from the easiest material to more complex material (spiral progression).



gives special emphasis on developing conceptual understanding and critical thinking skills to build a firm foundation in science. After the introduction of new concepts, students are invited to apply what they have learned in collaborative science activities. This book is equipped with a number of activities that will stimulate students' interest in the topic and consolidate their knowledge and understanding.



makes science learning meaningful and fosters a love of science learning in children with the use of colorful and engaging visuals as well as age-appropriate language.

Be a science champion!

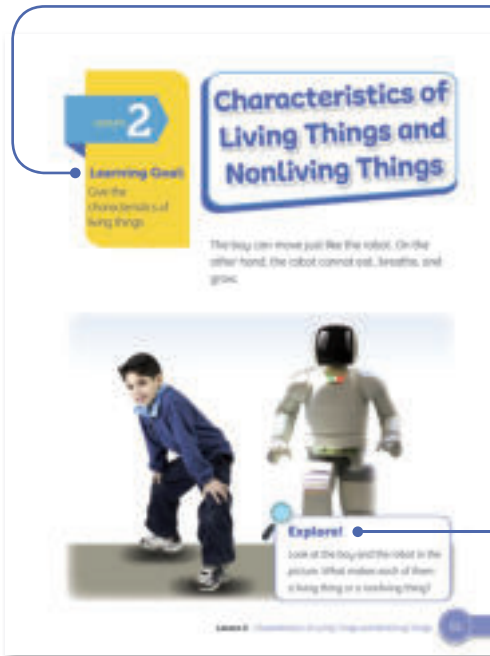
Using This Book



has some special features that guide children to understand science concepts through systematic stages. Use them to help you learn as you use this book.

1

Learning Goal sets the learning objective of each lesson.



2

Explore is designed to access the pupils' prior knowledge.

3

Science Bank presents information that enriches the pupils' knowledge and understanding of the concepts in focus.



4

Science at Work enables the pupils to explore, discover, and acquire knowledge and skills through simple yet stimulating exercises that they can do at home.

Science at Work

Sweet and Bitter Food

What You Need to Do

1. Ask your parents or your guardian to get the food below.

2. Taste each food.

Questions

1. What is the taste of each food?

2. Which food do you like better? Why?


Chapter 5

5






Looking Over allows the pupils to review the concepts presented in the lesson.

Looking Over

- Your eyes let you see objects.
- Your eyes can see colors, shapes, and sizes.








Colors





orange green purple red yellow blue

Shapes

round square rectangular circle triangle

Sizes

big small long short

Chapter 5



6

Enhance Your Skills

contains exercises designed to further develop the pupils' science skills.



7

Everyday Science

offers simple and practical application of science concepts to the pupils' real-life experiences.



8

Linking Together presents a visual summary of the science concepts presented in the chapter.

9

Chapter Test allows the pupils to evaluate their understanding and mastery of science concepts and processes.



10

Making Connections

presents knowledge and issues, and relates them to the role of science in daily life, society, and the environment.





Table of Contents

Chapter 1 Your Body

- 2** Lesson 1 The Parts of Your Body
- 11** Lesson 2 Your Eyes
- 19** Lesson 3 Your Nose
- 26** Lesson 4 Your Ears
- 33** Lesson 5 Your Tongue
- 41** Lesson 6 Your Skin
- 49** Linking Together
- 50** Chapter Test
- 52** Making Connections



Chapter 2 Living Things and Nonliving Things

- 54** Lesson 1 Things Around Us
- 61** Lesson 2 Characteristics of Living Things and Nonliving Things
- 73** Linking Together
- 74** Chapter Test
- 76** Making Connections



Chapter 3 Animals Around Us

78 Lesson 1 Animals in Different Places

89 Lesson 2 Needs of Animals

99 Linking Together

100 Chapter Test

102 Making Connections



Chapter 4 Plants Around Us

104 Lesson 1 Parts of a Plant

119 Lesson 2 Needs of a Plant

127 Lesson 3 Comparing Plants

135 Linking Together

136 Chapter Test

138 Making Connections



Chapter 5 Objects Around Us

140 Lesson 1 Grouping Objects Together

149 Lesson 2 Comparing Objects

155 Lesson 3 Objects Made from Living Things

165 Lesson 4 Objects Made from Nonliving Things

171 Linking Together

172 Chapter Test

174 Making Connections



Chapter 6 Objects in the Sky

176 Lesson 1 The Sky in the Day

184 Lesson 2 The Sky at Night

189 Linking Together

190 Chapter Test

192 Making Connections



Chapter 7 Force and Motion

194 Lesson 1 Things are Moving

201 Lesson 2 What is Force?

207 Linking Together

208 Chapter Test

210 Making Connections





CHAPTER 1

Your Body

You and the people around you are **human beings**. You have body parts that let you walk, play, read, and write. What are your body parts? How do you take care of them?



Lesson

1

Learning Goal:

Name the parts of your body and give each function/task

The Parts of Your Body

Your body is made up of different parts. Each part has a task.

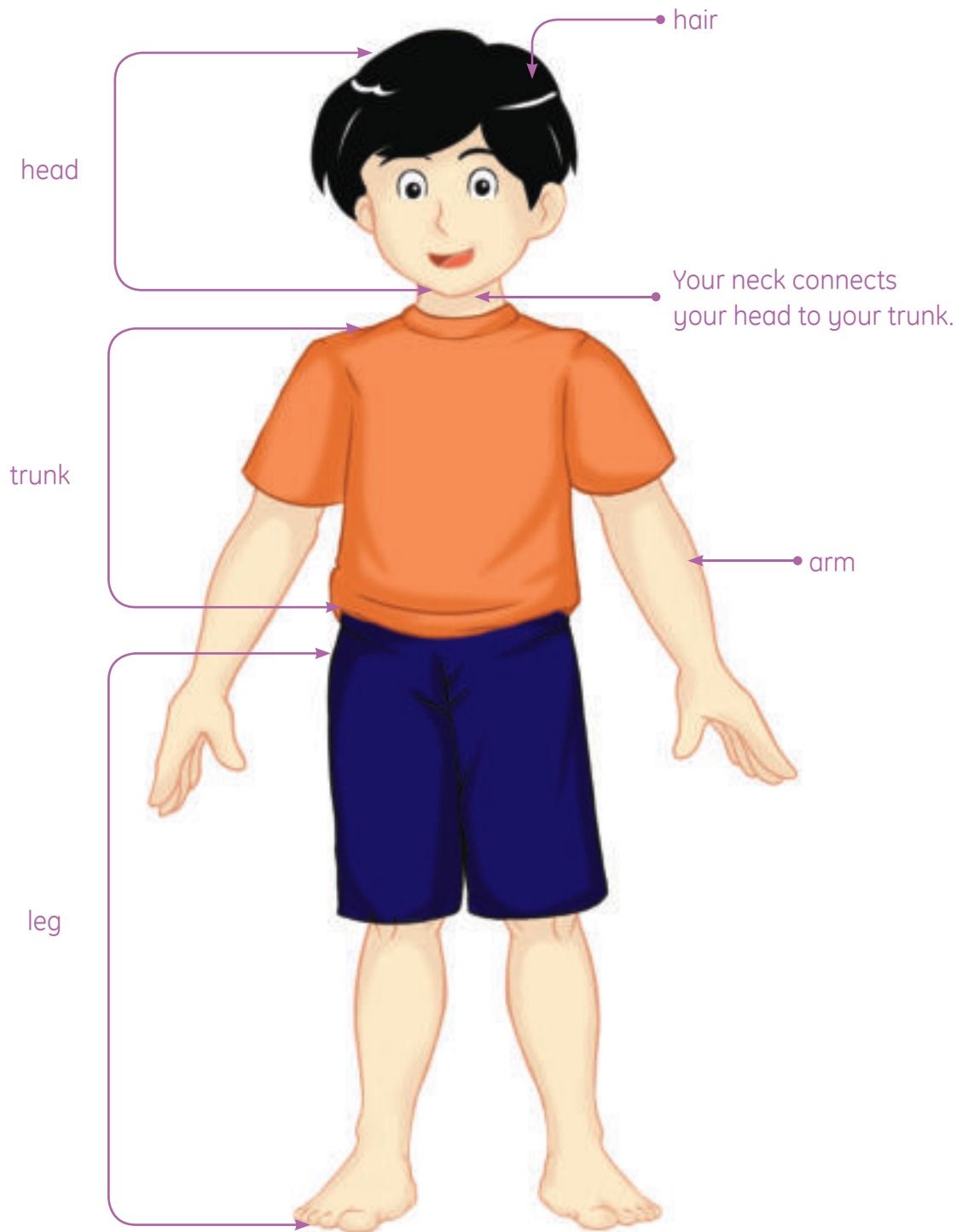


Explore!

Look at yourself in a mirror. Can you name the parts of your body?

Your Body

Your body is made up of your head, trunk, arms, and legs.
These are the parts of your body.



Your Head

Your head is made up of your eyes, ears, nose, mouth, and tongue.

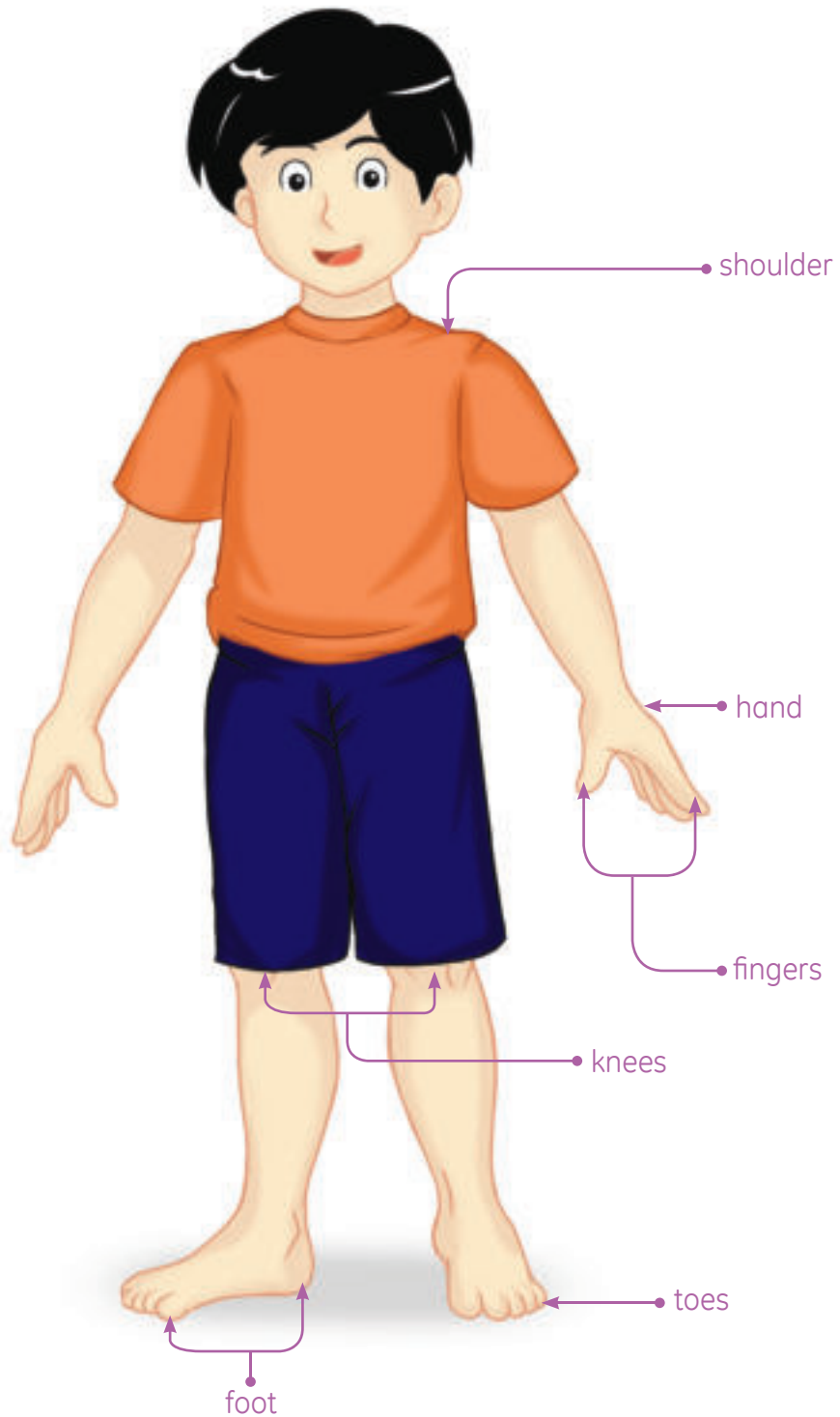


Explore!

Try to move your head from left to right.
What will happen if you do not have a neck?

Your Trunk, Arms, and Legs

Your arms and legs are connected to your trunk. Your hands and fingers are connected to your arms. Your feet, knees, and toes are connected to your legs.



Your arms let you raise your hands. Your hands let you hold objects.



Science Bank



Milk is good for your body. It makes your arms and legs stronger.

Your legs and feet let you move from one place to another. They also let you walk and jump.

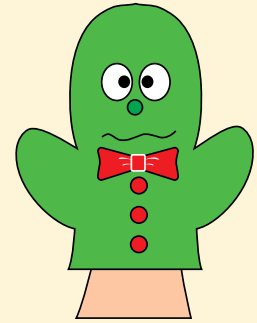




My Puppet

What You Need

- an old, clean sock
- pencil or marker
- colored paper
- glue
- scissors



What You Need to Do

1. Prepare an old, clean sock. Flatten it.
2. Draw eyes, ears, nose, mouth, tongue, and hands on the colored paper.
3. Cut out the parts.
4. Using glue, paste the eyes on the toe part of the sock.
5. Paste the other parts on the sock. Put each part in the correct place.
6. You can add some hair, clothes, or other designs to your puppet.
7. Insert your hand inside the sock and play with your puppet.

Questions

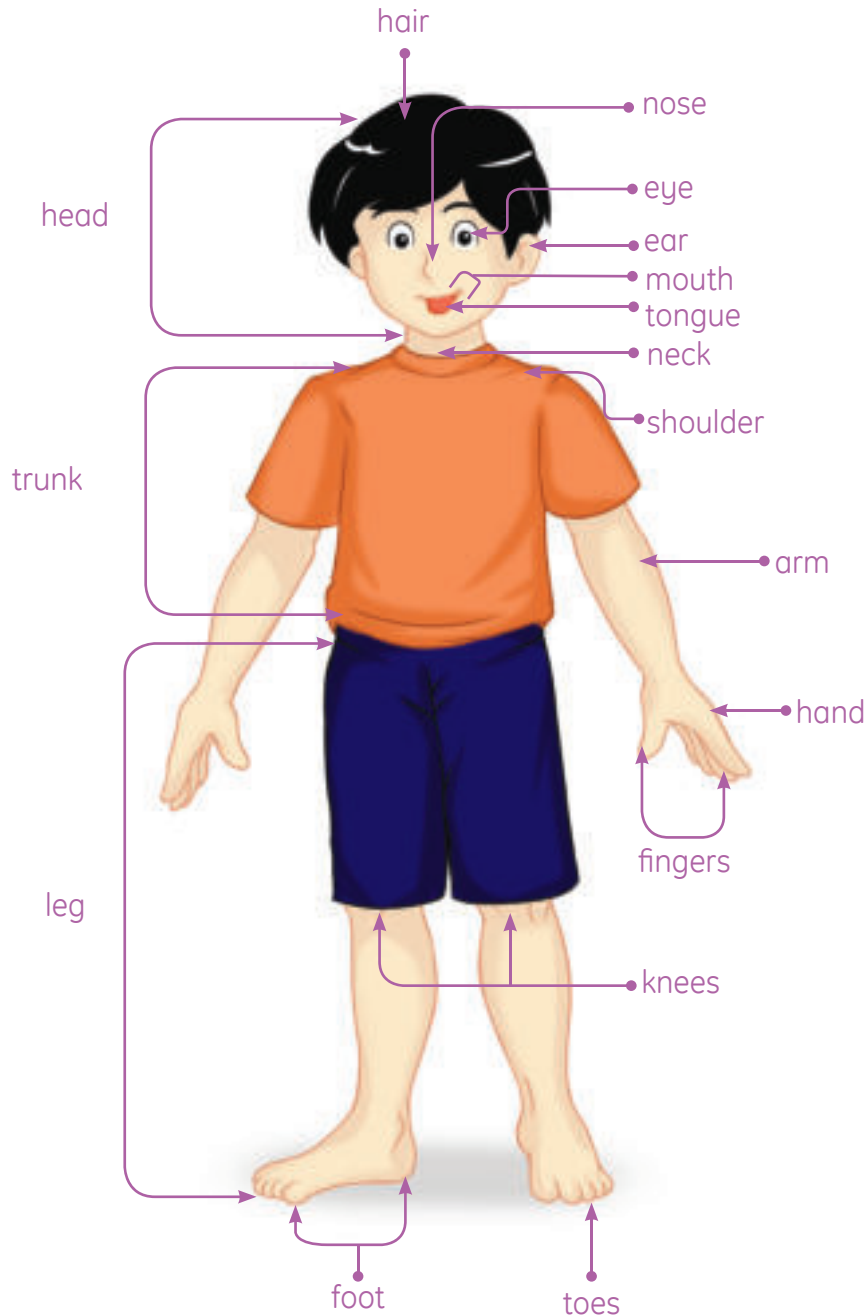
1. Does your puppet have eyes, ears, a nose, and a mouth?

2. Does your puppet have a head, a trunk, arms, and legs?

Looking Over



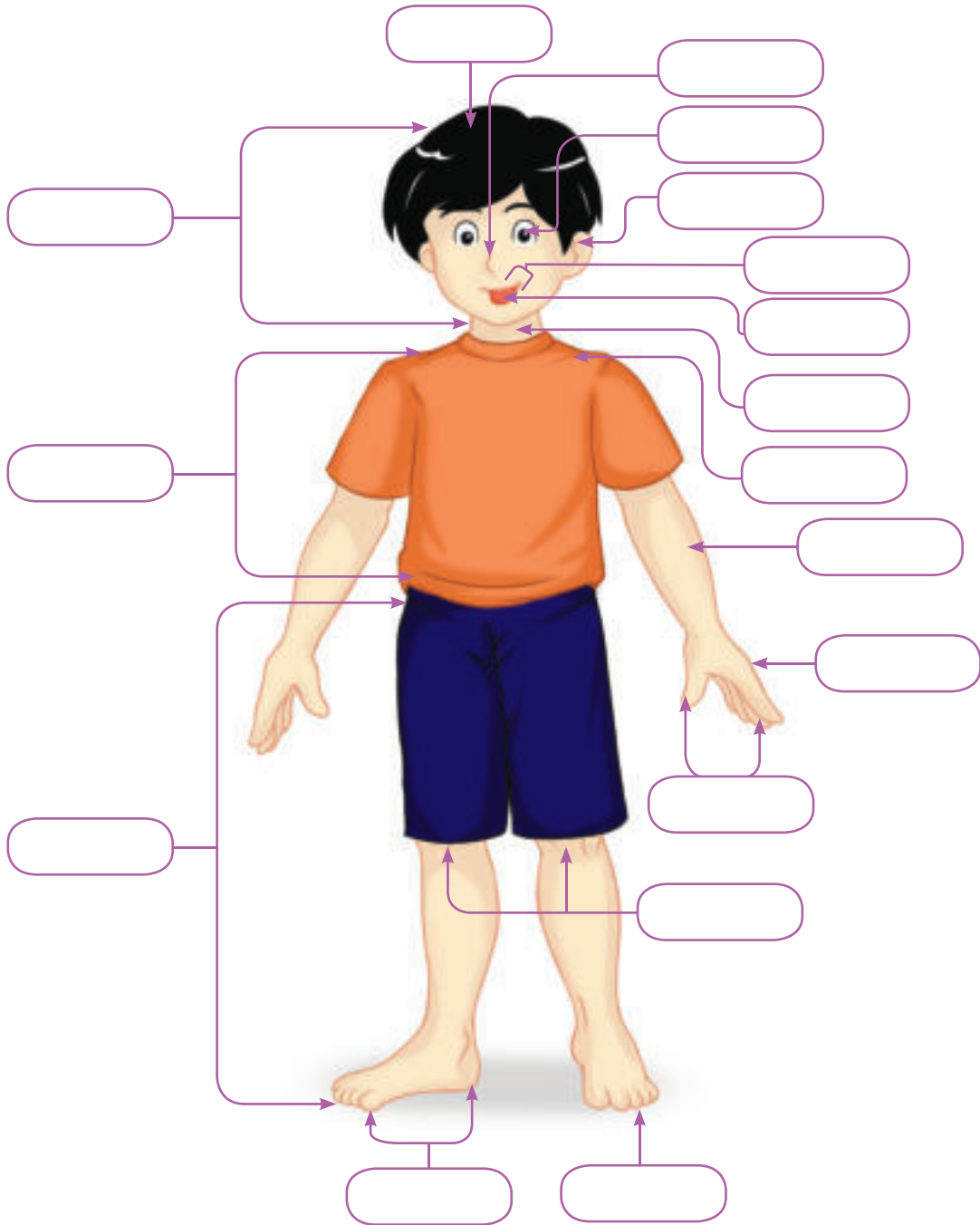
- Your body is made up of your head, trunk, arms, and legs.
- Your neck connects your head and trunk.
- Your arms and legs are connected to your trunk.





Enhance Your Skills

A. Name the parts of the body. Write your answers in the boxes.



B. Match the body parts with their names.



•



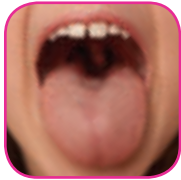
•



•



•



•



•

• hand

• eye

• ear

• tongue

• nose

• foot



● **Everyday Science**

● Is there a part of your body that is less important than
● any other part? Why do you think so?

Lesson

2

Learning Goal:

Enumerate the uses of the eyes and how to take care of them

Your Eyes

Your eyes let you see the things around you. They help you see the colors, shapes, and sizes of the things around you.



Explore!

Look around. Can you see the beautiful things around you?



What Can Your Eyes See?

Colors

Objects have different colors. They can be red, blue, yellow, green, orange, or violet.

Can you name the color of each fruit?



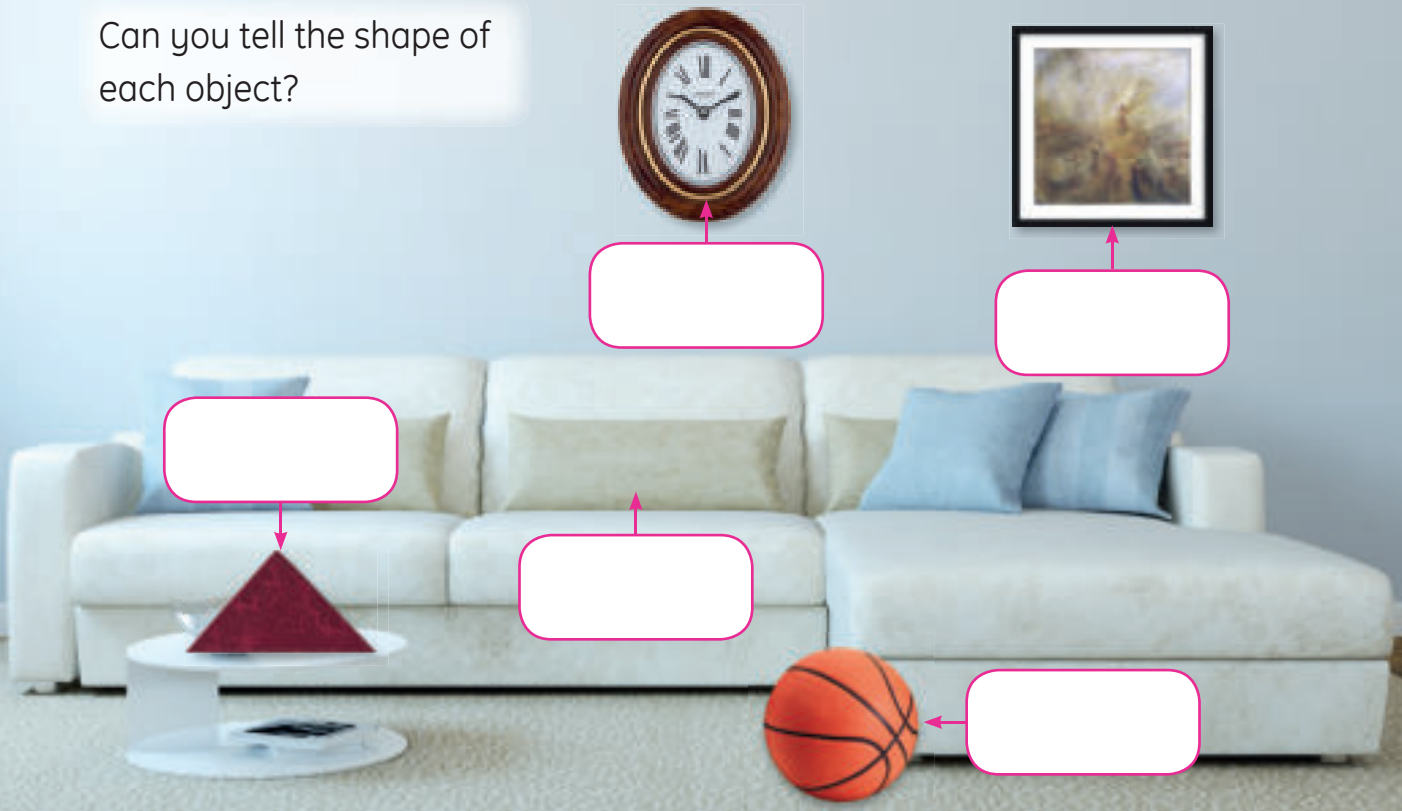
Science Bank

When the eye doctor says that you have a **20/20 vision**, it means that you have clear eyes. You can see things clearly.

Shapes

Objects have different shapes. They can be round, square, oval, rectangular, or triangular.

Can you tell the shape of each object?



Sizes

Objects come in different sizes. Some are big, while others are small. Some are long, while others are short.



big balloon



small balloon



long pencil



short pencil

Taking Care of Your Eyes

Your eyes are important. You should take care of them.



Never look directly at the Sun. Its rays can damage your eyes.



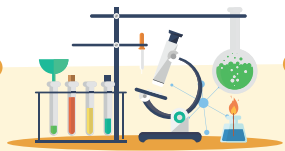
Do not rub your eyes. You might scratch and damage your eyes.



Eat fruits and vegetables. They are good for your eyes.



Have enough sleep. This will help your eyes to rest.



Things in Your Room

What You Need to Do

Go to your room. Look at the objects in it. Group them according to their color, shape, and size. Then draw them below.

A large, empty rectangular box with a thin purple border, intended for the student to draw the objects from their room.

Question

What can you say about your room after grouping the objects together?

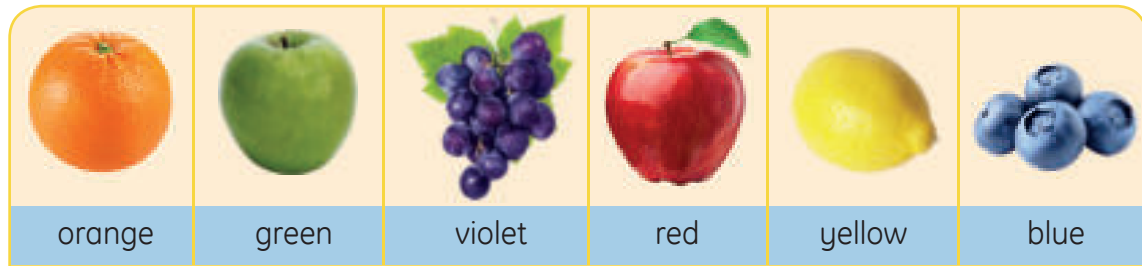
Looking Over



- Your eyes let you see objects.
- Your eyes can see colors, shapes, and sizes.



Colors



Shapes



Sizes





Enhance Your Skills

A. Name the shape of each object below. Write your answer on the line.

1.



2.



3.



4.



5.



B. Draw a in the box of your answer in each number.

1. Which ball is **big**?



2. Whose hair is **short**?



C. Encircle the fruit that has a different color.

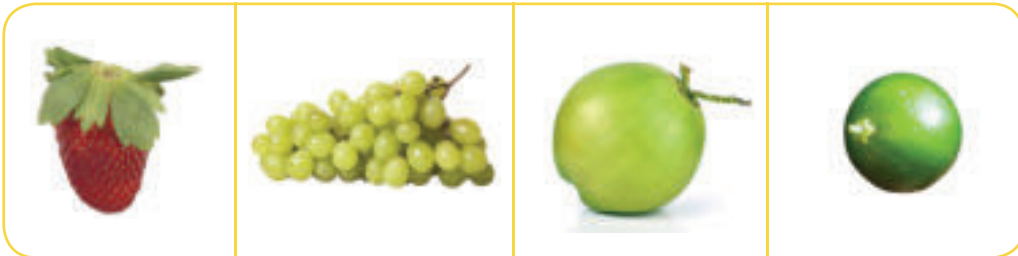
1.



2.



3.



4.



Everyday Science

If you will be given a day to visit a home for blind kids, what will you do there?