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As we live in a rapidly changing society, exposure to and fluency in Science, Technology, Engineering, and Mathematics (STEM) ensures students will gain the skills they will need to succeed in the 21st century. It is essential that students gain practice in becoming good problem solvers, critical thinkers, innovators, inventors, and risk takers.

Teacher Tips

Encourage Topic Interest

Help students develop an understanding and appreciation of different STEM concepts by providing an area in the classroom to display topic-related non-fiction books, pictures, collections, and artifacts as a springboard for learning.

What I Think I Know / What I Would Like to Know Activity

Introduce each STEM unit by asking students what they think they know about the topic, and what they would like to know about the topic. Complete this activity as a whole-group brainstorming session, in cooperative small groups, or independently. Once students have had a chance to complete the questions, combine the information to create a class chart

for display. Throughout the study, periodically update students' progress in accomplishing their goal of what they want to know, and validate what they think they know.

Vocabulary List

Keep track of new and content-related vocabulary on chart paper for students' reference. Encourage students to add words to the list. Classify the word list into the categories of nouns, verbs, and adjectives. In addition, have students create their own science dictionaries as part of their learning logs.

Learning Logs

Keeping a learning log is an effective way for students to organize thoughts and ideas about the STEM concepts presented and examined. Students' learning logs also provide insight on what follow-up activities are needed to review and to clarify concepts learned.

Learning logs can include the following types of entries:

- Teacher prompts
- Students' personal reflections
- Questions that arise
- Connections discovered
- Labeled diagrams and pictures
- Definitions for new vocabulary

Living Things

All living things need air, water, and food.
All living things grow and change.

People are
living things.



Animals are
living things.



Plants are
living things.



Think About It!

1. What do all living things need?

2. Is a squirrel a living thing? How do you know?



“Living Things”—Think About It! (continued)

3. Look at the pictures below. Circle the things that are living. Tell a partner how you know each thing is alive.

a) toy car



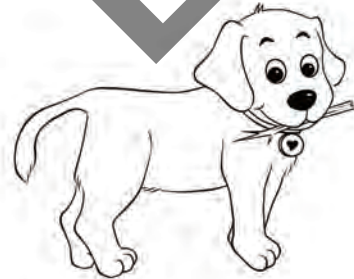
b) teddy bear



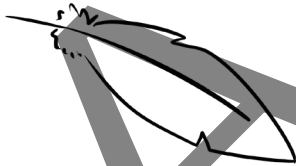
c) man



d) dog



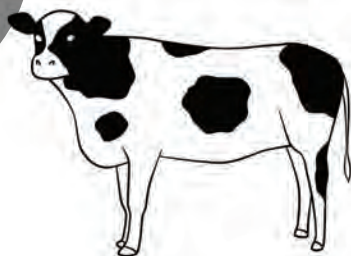
e) feather



f) stool



g) cow



h) flower





Living Things Collage

Look for pictures of living things in magazines.
Cut out the pictures and glue them below.

Write a sentence about living things.



Nonliving Things Collage

Look for pictures of nonliving things in magazines.
Cut out the pictures and glue them below.

Write a sentence about nonliving things.

My Body

Draw a line from each label to the right part of the body.

hair

ear

nose

wrist

chin

arm

neck

chest

stomach

foot

head

eyebrow

hand

eye

mouth

elbow

shoulder

knee

leg

ankle

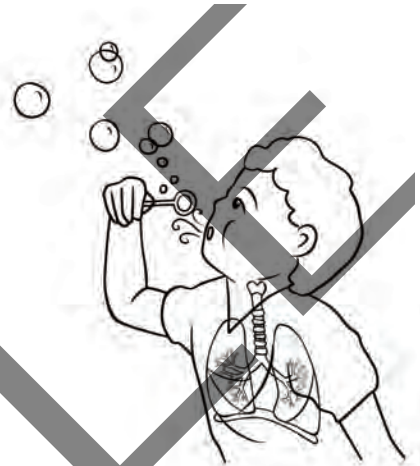


Your Body Helps You

Your brain helps you to learn and think.



Your lungs help you breathe.



Your heart pumps blood around your body.



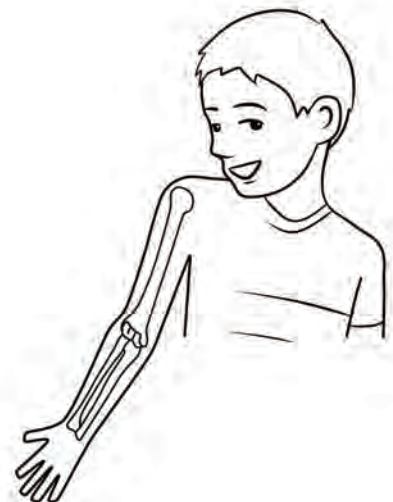
Your muscles help your body move.



Your stomach and intestines digest the food you eat.



Your bones help hold up your body.



"Your Body Helps You"—Think About It!

Solve each riddle. Use the words below.

bones fingers brain muscles lungs heart teeth

1. We help your body move. _____
2. You use us to bite an apple. _____
3. I help you to learn and think. _____
4. I help you hold a brush. _____
5. We help you breathe. _____
6. I help you pump blood around your body. _____
7. We help hold up your body. _____

Brain Stretch

Arms help you to reach and to carry things.
Feet help you to stand and move so you
do not fall.



Tell a partner what ways other body parts help you.