



**CALVERT™**  
PUBLICATIONS

**1st Grade** | Teacher's Guide  
Part 2



# SCIENCE

# 1. GROWING

## PAGES 2 AND 3

### MATERIALS NEEDED

- pencils
- writing tablet
- scissors
- glue
- Worksheet 1

**Concept:**

Plants, animals, and people grow.

**Objective:**

I can name three things that grow.

**Process:**

Observing

**Reading Integration:**

Recalling details, irregular verbs (grow/grew)

**Vocabulary:**

kitten, deer, cub, grew, living, (plants, animals, people, garden, bear)

*Note: Vocabulary words in parentheses were previously introduced and are being reviewed.*

**Teaching Pages 2 and 3:**

Remind the children that the last two workbooks were about things that grow.

Ask questions. For example:

“Can you name some things that grow that you learned about in *Science 104* and *105*?” (plants, animals)

Tell the children that the first section of the workbook will review a few of the things they learned in *Science 104* and *105* and then help them learn some ways people grow.

Present the vocabulary. Stress the irregular past tense of *grow* (*grew*). Read the introductory sentences to the class or have them read by a volunteer.

GROWING UP HEALTHY | Unit 6

### 1. GROWING

All living things grow.  
Plants grow.  
Animals grow.  
People grow.



#### Plants and Animals Grow

Look at the seed.  
Dan put the seed in a pot of soil.

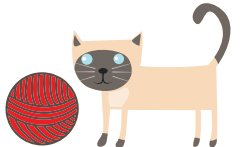
Dan watered the seed.  
The seed grew.  
The seed grew into a plant.




2 | Section 1

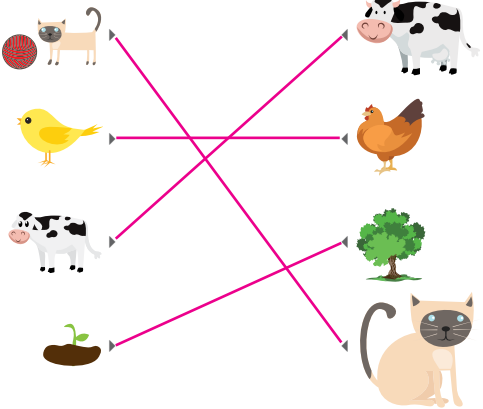
Unit 6 | GROWING UP HEALTHY

Look at Tat.  
Tat is Dan's kitten.  
Tat is growing.  
As Tat grows,  
she gets bigger.  
Soon Tat will be a cat.



.....

 Match the small plant or animal to what it will be when it grows bigger.



Section 1 | 3

Ask the class to identify the vocabulary words.

Continue to read through the page. Have the children recall and discuss the growing seed. They may have grown a plant in *Science 105*, so they will be able to talk about how it grew.

Read the sentences on page 3 to the class or have them read by children.

Continue discussing how animals grow. Review names of baby animals with the names of their grown-up versions.

*Examples:* puppy / dog  
 calf / cow  
 fawn / deer  
 chick / hen, rooster, chicken  
 cub / bear  
 colt / horse

Go over the directions for the exercise. Put an example on the board. Use a puppy and dog, pictures or words. Draw a line to match.

Have the children complete the exercise independently. Check it together.

**Activities:**

1. Do Worksheet 1.

Read the sentences with the children.

Instruct the children to find the words that finish the sentence, to cut these words out, and to paste them in the right place.

Have the children read the sentences and talk about the animals.

2. In the writing tablet, have the children write these sentences:

*That kitten will grow to be a cat.*

*A seed will grow to be a plant.*

Science 106 | Student Worksheet

**Cut out the sentence endings.  
Glue them in the right places.**

A chick will grow to be

A seed will grow to be

A puppy will grow to be

A cub will grow to be

A fawn will grow to be

**Glue endings here.**

a chicken.

a plant.

a dog.

a bear.

a deer.

---

a deer.

a bear.

a plant.

a chicken.

a dog.

Science 106  
Worksheet 1  
with page 3

Teacher Check  Initial \_\_\_\_\_ Date \_\_\_\_\_

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## PAGES 10 AND 11: MOUNTAINS

### MATERIALS NEEDED

- pictures of mountain regions (plants, animals, formations, and so on)

#### Concepts:

Mountains are rocky and cool. Mountains are divided by valleys where the animals can find grass to eat.

#### Objective:

I can tell about different kinds of land.

#### Process:

Observing

#### Reading Integration:

Main idea, recalling details, plurals

#### Vocabulary:

goat, valley, mountain

#### Teaching Pages 10 and 11:

Tell the children that the next few pages will help them learn something about mountain regions. They will learn about some plants and animals that live there.

Have a child read the paragraph, or read it to the group.

Ask the children to identify the vocabulary words and to tell something they can learn about mountains from what they read in the paragraph.

You might ask questions to promote recall. For example:

“What kind of animal is Max?”

“Is it hot in the mountains?”

“What are mountains made of?”

*Note:* Page 11 will help them learn more about mountains. Introduce the word *valley*. On the picture of mountains point out where the valleys are found (between the mountains).

### Mountains

“I’m Max Mountain Goat.  
I live high on a mountain.  
It is a tall mountain.  
It is cold where I live.  
I have a warm coat of fur.  
My mountain is made of rock.  
I like to jump and run.  
I jump from rock to rock.”



“Sometimes, I go down the mountain—  
down, down to the valley.  
I go down to eat.  
Sweet grass grows in the valley.  
I eat and eat.”



Circle the right word.



goat goats



animal animals



mountain mountains



rock rocks

Have the children notice that very often mountains are covered by forests, except for the highest peaks. The mountain goat climbs high above the forests and comes back down to eat and to find shelter when the weather is bad.

Have a volunteer read the paragraph.

*Ask:*

“Where does Max go to eat?”

“What grows in the valleys?”

Tell the children that the exercise will help them to remember when to add *s* to a word when it means “more than one.”

Have a child read the direction. Let the children complete the page independently. Check it together.

**Activities:**

1. To extend the concept, have the children find out (from books, parents, or other sources) some other animals or plants that live in the mountains. They could make a poster, collage, or a diorama of animals and plants to be found there.
2. Include mountains in the “sandbox” model projects.
3. If you live in a mountain community, a field trip to a mountain park, a mine, or other point of interest would be appropriate.

## PAGES 8 AND 9: ACTIVITY PAGES

### MATERIALS NEEDED

- pencils
- scissors
- crayons
- pins or small tacks

#### Teaching Page 8:

Ask a volunteer to read the directions. Go over the words in parentheses and the sentences, if necessary.

Have the children complete the activity at the top of the page independently, giving individual help as needed.

Check it together as reinforcement.

#### Reading Integration:

Listening, following directions

#### Teaching Pages 8 and 9:

Read the first two directions on the bottom of page 8 to the children.

Verify that the students have correctly completed the first two instructions.

Ask students to stop after they color both sides of the pinwheel, and demonstrate where to cut on an example pinwheel.

Continue through the directions, one at a time. Provide help where needed.

Discuss with the children how it takes very little air to turn the little wheel.

Let children explore their pinwheels with using the fan, blowing by mouth, and just turning around while pulling the pinwheel through the air.

Discuss windmills and the work they do.



Write *can* or *cannot* in each blank.

We cannot (can, cannot) see air.

We cannot (can, cannot) feel air.

We can (can, cannot) feel wind.

We cannot (can, cannot) see wind.

We can (can, cannot) see things that the wind moves.

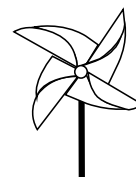
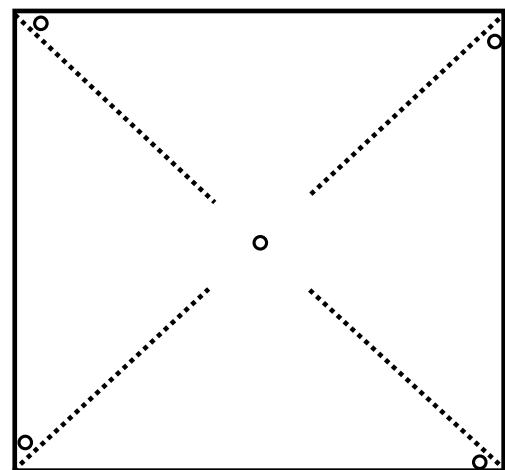


Make the wind work. Make a pinwheel.

**You will need:**

- scissors
- a pencil
- crayons
- a pin or a small tack

1. Cut out the next page of your book on the dotted line.
2. Cut out the square and color it on both sides.
3. Cut to the end of each dotted line.
4. Ask someone to help you bring each of the corner dots to the center dot.
5. Push the pin or small tack through all the dots into the pencil eraser.
6. Find some wind and see if your pinwheel turns!



## PAGE 11: WATER

### Concepts:

People, animals, and plants need water.

### Objectives:

I will know about energy.

I will know about the energy we use.

### Processes:

Observing, comparing

### Reading Integration:

Recalling detail, main idea, vocabulary development, sequencing

### Vocabulary:

rain

### Teaching Page 11:

Use a map and point to different bodies of water. The map can be of your state.

Discuss the importance of water to life as it has been taught in earlier workbooks.

Discuss the importance of rain (gardens and crops grow, rivers and lakes fill up, providing water for people and animals).

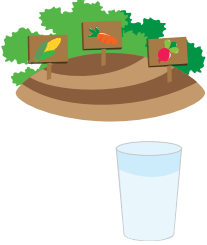

Read the text to the children, allowing time for discussion.

Unit 8 | ENERGY

### Water

You have learned we get energy from the sun and the wind.  
Energy can come from water.  
Plants need water.

People need water, too.  
Let's think of how we use water.  
We use water to take a bath.  
We use water to wash clothes.  
Can you think of more ways we use water?

Section 1 | 11

## PAGE 11: ACTIVITY PAGE

### MATERIALS NEEDED

- vocabulary-word cards
- pictures representing the words
- pencils
- crayons
- Worksheet 3

### Vocabulary:

fisherman, oar, oarlock

### Teaching Page 11:

Introduce the vocabulary. Match the words to the pictures.

Ask a volunteer to find and read the direction sentences.

Review the vocabulary words by finding them as labels on the picture.

Have the children complete the page independently, giving individual help as needed.

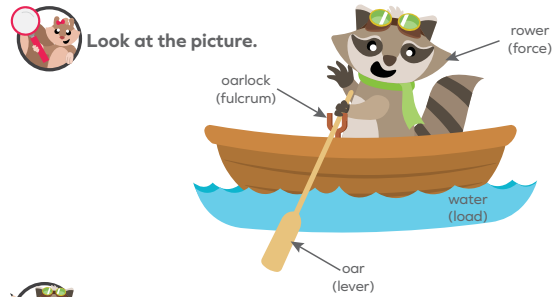
Check it together by having the children identify the part of the picture that goes with each sentence.

### Activity:

Do Worksheet 3.

Discuss the illustration.

Have the children explain the labels and the operation of the wheelbarrow.



Write the correct word in each space.

rower    oar    water    oarlock

The oar is a lever.

The rower applies the force.

The water is the load.

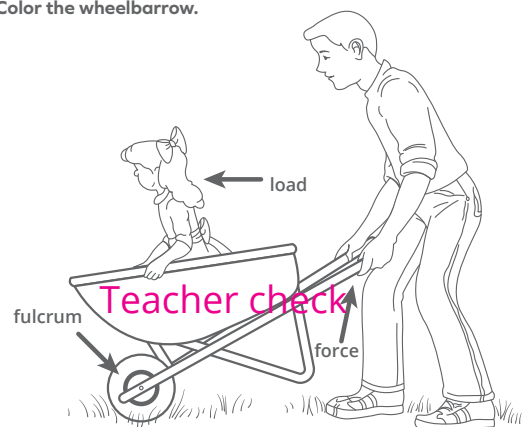
The oarlock is the fulcrum.



Before you take the Self Test, study what you have read and done. The Self Test will check what you remember.

A wheelbarrow is a lever.

Color the wheelbarrow.



Discuss the position of the fulcrum in front of the load.





## PAGES 12 AND 13: SELF TEST 1

### MATERIALS NEEDED

- pencils
- Worksheet 4

#### Concept:

Evaluation.

#### Objective:

I can tell about some levers.

#### Reading Integration:

Following directions, recalling details

#### Teaching Pages 12 and 13:

Review the vocabulary words from Section 1.

Practice matching words to pictures when it is possible.

Read all directions with the children. Be sure they are understood.

The general proficiency of your group should dictate whether you choose to direct the self test or allow the children to proceed independently, once directions are given.

In either case you should be available to answer questions and to help with the vocabulary as needed.

Check immediately. Review any concepts missed.

### SELF TEST 1

Each answer = 1 point

Write the correct word in each space.

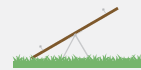
bottle lever scissors

A lever is a simple machine.

A lever can open a bottle.

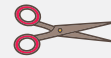
A pair of scissors is two levers working together.

Circle the levers that will work to pull out the nail.

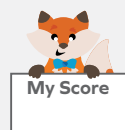


12 | Section 1

Match the levers with the jobs they do.



Teacher Check  
Initial Date



Section 1 | 13

## PAGES 8 AND 9: TASTE AND SMELL

### MATERIALS NEEDED

- vocabulary-word card
- pictures of things that create pollution you can smell
- pencils
- Worksheet 6

#### Concept:

You can observe by the senses of taste and smell.

#### Objective:

I can tell about things I see, hear, smell, taste, and feel.

#### Processes:

Observing, comparing, classifying

#### Reading Integration:

Main idea, recalling detail, speaking in a group, following directions

#### Vocabulary:

(pollution)

*Note: Vocabulary words in parentheses were previously introduced and are being reviewed.*

#### Teaching Pages 8 and 9:

Ask the children to recall what they learned about taste and smell and how they work together (see *Science 103*).

Provide discussion time.

Read the text to the class or have it read by a volunteer. Allow time for questions and discussion.

*Discussion question:* Show pictures of things that create pollution. Give the children an opportunity to present ideas of what can be done about it.



### You Taste and Smell

You can observe with your mouth and your nose.

When you wake up in the morning, you smell and taste the good food that gives you energy for the day.

Your nose can smell good things. It can smell flowers.

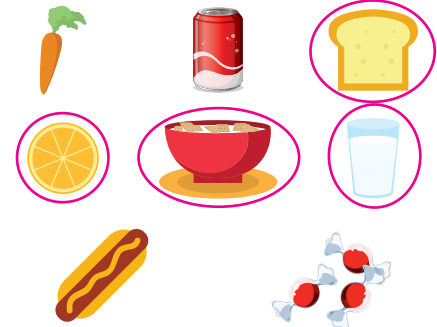
Your nose can smell bad things. Some things make the air smell bad. They are called pollution.



Can you do anything about pollution?



Circle good foods for breakfast.



Circle each correct answer.

I can smell a flower (rock).

I can taste a pie (dress).

I can hear music (block).

Ask a volunteer to find and read the two direction sentences on page 9.

Have the children complete the page independently, giving individual help as needed.

Check together.




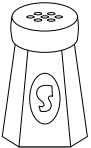
**Activity:**

Do Worksheet 6.


Read the directions. Make sure the children understand the directions. Let them do the page independently. Check together. Clear up any difficulties.

Student Worksheet | Science 110

Which sense do you use?  
**Write T for taste.**  
**Write S for smell.**  
**Write TS if you can taste and smell.**

 <div style="border-top: 1px solid blue; border-bottom: 1px solid blue; padding: 5px 0;">S</div>	 <div style="border-top: 1px solid blue; border-bottom: 1px solid blue; padding: 5px 0;">TS</div>
 <div style="border-top: 1px solid blue; border-bottom: 1px solid blue; padding: 5px 0;">TS</div>	 <div style="border-top: 1px solid blue; border-bottom: 1px solid blue; padding: 5px 0;">T</div>

Science 110  
Worksheet 6  
with page 9



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