

GROWING AND CHANGING

BENCHMARKS and TASKS

SC.B.1.1.5 The student knows that every human action requires energy that comes from food.

SC.F.1.1.3 The student describes how organisms change as they grow and mature.

SC.F.2.1.1 The student knows that living things have offspring that resemble their parents.

- The student observes and records that organisms change in some ways and stay the same in some ways as they grow.
- The student recognizes that plants and animals produce offspring with similar characteristics but individual differences (e.g., kittens in a litter may be colored differently).

KEY QUESTION

How do we change as we grow?



BACKGROUND INFORMATION

Every living thing comes from another living thing of the same kind. Heredity is the passing on of traits and characteristics from parents to offspring. Some characteristics may be good, and some may be undesirable.

MATERIALS

Teacher

several pictures of the teacher that span from infancy to adulthood
colored circle stickers or Post-it notes
bathroom scales
measuring tapes or sticks
1 large sheet of butcher paper
marker

Animals and Their Babies (Benchmark Education Co.)

Growing Older (Benchmark Education Co.)

Growing Up (Dominie Press)

Per student

student's photographs from infancy to present
1 sheet construction paper
markers

TEACHING TIPS

Plan ahead:

1. Ask a parent or an older student to help measure and weigh each student. You may want to measure and weigh the students early in the year and again near the end of the year in order to discuss how the students have changed.
2. Send home a letter to parents requesting several pictures of the student from infancy to present.

ENGAGE

1. Display your personal photographs in random order. Ask students what they notice about these photographs.
2. Select students to put the photographs in order by when they were taken. The class should agree with the order of the photographs. Students should continue to arrange the photographs until they come to a consensus about the order. Ask students how they decided which photograph came first, second, etc.

EXPLORE

1. Display the students' photos one at a time. Have students guess whose photo is displayed. Continue for all students. (This activity could also be done in small groups with parent helpers.)
2. Discuss the similarities and differences between baby photos and the way students look now. Ask: *What do you think caused these changes?* (Eating – supplying energy for growth)
3. Measure the height and weight of each student. To measure height, hang white butcher paper on the wall. As students come up one at a time, the teacher should mark the student's height by placing a dot with the student's name on the paper. Record student's weight next to the dot. (This part of the activity may be done in small groups or with parents assisting.) If weight is an issue, omit that part.

EXPLAIN

1. Show students how to fold the construction paper to make a tri-fold book. Students should draw themselves at 3 stages of life—as an infant, as a first grader, and as an adult. They should then write and complete the appropriate sentence under each picture.
 - a. When I was a baby, I ...
 - b. In first grade, I ...
 - c. When I grow up, I ...
2. Through questioning and discussion, help students recognize that they change as they grow and that children resemble their parents:
Do people change as they grow?
How have you changed since you were born?
How have you stayed the same?
How are humans like animals? How are they different? (If possible, show a set of animal photos (e.g., egg, baby bird; kitten, cat).
Share the book *Animals and Their Babies*.
Are you taller now than you were as a baby?
Do you weigh more now?
Can you think of any other ways you have changed as you have grown older?
How are you like your parents? How are you different?
3. Through questioning and discussion help the students recognize that every human action requires energy that comes from food.
Ask:
What have you done to help your body grow? (Energy comes from food.)

EXTEND/APPLY

1. Have students observe people in different stages of growth. Students may wish to bring in magazine pictures or family photos to share.
2. Share the poem, "Me", with the class.

ME
I am bigger than a baby.
I am bigger than a flea.
I am happy I am growing,
Happy as can be.
When I become a grown-up,
I hope that I will be-
Older, Bigger, Smarter,
And still be glad I'm me.

by Beth Crampton

3. Share the books listed in the teacher materials list.

ASSESSMENT

Students put the photographs of a classmate in order of growth and explain why they chose that order.

Novice	Basic	Expert
Student does not put any photos in the correct order and cannot give any reasonable explanations.	Student puts one or two of the photos in the correct order and gives a reasonable explanation for those.	Student puts all of the photos in the correct order and gives reasonable explanations for the entire order.