

As Time Goes By

This activity encourages students to take a long term view of a familiar everyday food item as it changes and decays. As they watch the changes, they'll chart observations, predictions and differences over time.

What You Need:

for each student:

- an organic item which will decay over time
We recommend an apple, a lemon or other citrus fruit, a piece of bread, or a banana.
- paper
- pencil or colored pencils
- observation chart (found on page 25)

for the class:

- a box of large resealable plastic bags, or an empty aquarium

To Get Ready:

Because this activity will take place over the course of a number of days, you may want to clear a space in the classroom to store the fruits or food as they change. The aquarium works well for storage because it is enclosed and allows students to see.

Some students are allergic to mold or bothered by the odors of decay, so if you decide not to use an aquarium, try providing individual resealable plastic bags.

If you prefer not to choose or purchase items for each student, invite students to bring something from home to observe over time. Be sure to mention that they should not bring meat.



To Start, Ask:

Have you ever noticed what happens to a piece of bread if you leave it sitting out for many days in a row? What usually happens to your carved pumpkin after Halloween?

Now, Try It:

- Introduce the activity by letting students know that in order to find out about how things change over time, this activity will go on for many days in a row.

- Pass out the food items that you have brought (or ask students to pull out what they have brought from home), and invite them to make predictions about how their food item will look in a week. How will it be different in a month?
- Invite students to observe their items carefully, noticing details they may not have noticed before. Pass out colored pencils and paper so that students can draw pictures of their items for their field journals.
- Ask students where they would like to store their items as they observe them. Do the students think it will make a difference whether or not items are stored in the dark? in sunlight? in a hot place? in a refrigerator?
- Encourage students to fill in charts noting how the item looks and how they predict it will change. Students may want to personalize their charts since they will be working with them for many days to come.
- Continue to check on the items for at least three weeks. Talk about the changes during class time.

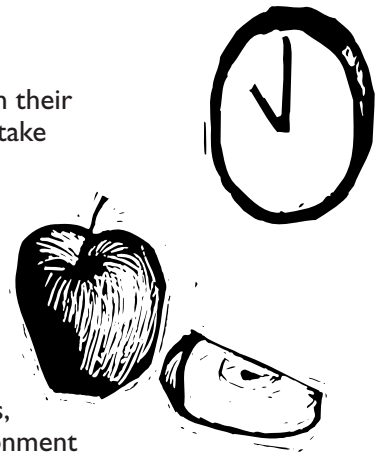


Ask Students Again:

Each day, make time for students to observe their food items and record their observations on their charts. Invite two or three students to share changes that they've noticed with the entire class.

If You Want to Try More:

The seed planting activity which many teachers conduct with their classes in the spring can also be a great way for students to take a longer look. Create a chart and encourage students to record their observations and measurements of their plants as they grow. Daily observations, measurements, and charting will help them to become more keen observers.



Scientist Spotlight:

Mycologists are specialists who study fungi, like mushrooms, slime molds and bacteria. Fungi are important to our environment because they help to break down organic matter, like plants, so that they will decay more quickly. As mycologists do their work, they carefully observe the life cycles of different fungi, usually using microscopes, over different periods of time.

Assess What Happened

Using the Field Journal Entry sheet (on p. i), invite students to respond to the following statement:

After two weeks, my food item changed in the following ways:

