

Bud Observation

Grade(s): 2-5	Topic: Buds	Season: Late Winter / Early Spring (February, March)
Timing: 50 minutes including 5 minute APK, 5 minute intro, 30 minute outdoor observation, 5 minute prediction, and 5 minute conclusion. Follow-up: Students adopt a tree bud during this lesson and need to check up on it every one, two, or three weeks until late spring or even summer vacation so they can observe it blossoming and then turning into the fruit of the tree.		
Objectives: <ul style="list-style-type: none">• Students practice observation, drawing and description skills by focusing on their orchard tree branches and buds.• Students form a bond with trees by adopting a branch and its buds and observe buds as part of a season-long study of flowering plants' life cycles.		
Materials: <ul style="list-style-type: none">• Diagram of a branch, including the bud.• A branch or branches with buds to accompany your introduction• One piece of approximately 12" long yarn or string per student.• Sticky labels such as address labels, or masking tape for each student• Permanent marker(s) for writing on labels• Magnifying glasses• <i>Bud Observation</i> worksheets• Branch and Bud Vocabulary Sheet		
Prep Needed: Cut enough 8" pieces of yarn that every student in class has one, and write each students' name on an address label before class.		
Degree of need for extra teacher or parent helper? High		
Journal Prompt: Why do trees and plants have buds? What do they look like and what do they turn into?		
Lesson Sequence: Reactivate Prior Knowledge (5 minutes) Pass around one or more tree branches with buds on them. Ask the students what part of the tree this is. Using the diagram, point out some different parts of the branch, including the buds. Introduction (5 minutes) Remind the class what a bud is and ask the class, "What do you think will come out of the buds we see on the trees? flowers? leaves? Who thinks nothing will come out? Why/Why not? Why do you think plants make buds, with a hard outer covering?" Review plants' basic needs for water, light, and nutrients to help the class predict what will happen to the buds. Point out the buds on some branches you bring to the classroom. "Today we're going to look at the buds on the fruit trees outside. You all get to choose a bud and see how it changes from one week to the next! We will draw and describe our buds so that we can see how they change over time!" Bud Observation (20 minutes total) <i>Choose Buds (10 minutes)</i> In the orchard, demonstrate what the students will be doing. Show them how to choose a		

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bud at their eye level to observe and how to tie their name tag so that the yarn is just under the bud **in a way in which it will not slip off**. Pass out the bud labels with the students' names on them. As the children finish tying their labels, give each student a bud observation sheet and have them stand in a big circle. *Make sure that students to tie their string so tightly that it could choke the branch/bud or become difficult to take off at the end of the season.*

Observing, Drawing and Writing Observations (10 minutes)

Go over the sheets briefly. You might want to give them clues as to what they can look for: textures, shape, color, etc. Review safe use of magnifying glasses and pass them out. Students should observe the buds while drawing (staying close to the bud), drawing large, and show as much detail as possible.

Make Predictions (5 Minutes)

Have students predict how their bud will look in one or two weeks, depending how often you will be taking them outside. After they have finished writing their predictions, share them.

Conclusion (5 Minutes)

Share drawings and predictions and review what students learned about branch anatomy.

Vocabulary:

Alternate
Auxiliary bud
Bud
Branch
Leaf scar
Lenticels
Opposite
Terminal bud

Vocabulario:

Alterno
Auxiliar
Capullo
Cicatriz de la hoja
Lentículos
Opuesto
Rama
Terminal

Extensions / Homework Ideas:

- Draw your budding tree as a page or chapter in your Orchard Tree Through the Seasons book (see Orchard Tree Through the Seasons lesson)