TEACHER MATERIALS - Time

CONCEPTS:

Mathematics

- comparison of time

- story problems

- number lines

Listenina

- predicting

Reading

- predicting

Life Science

- 1A - 1.3, 1.4, 1.43, 2.5

Physical Science - 1C - 2.2, 2.3

OBJECTIVES:

1. The students will compare time, as they know it, with

growing plants and seasons.

The students will be able to read a numberline/timeline

of plant growth or life cycle.

BACKGROUND: Plants and animals take time to grow and produce food. A dairy cow will be bred at 15 months, carry her calf for 9 months and calve at 2 years of age. She will then lactate (give milk) for 305 days, be "dried off" for 60 days and calve once again. A cow will not give milk until she gives birth to a calf.



Plants have various times to complete their life cycle. Peas can produce a crop in 75 days from the time they are planted. Lettuce can be cut 60 days from the time it is planted and radishes in as little as 30 days. An apple tree (today's dwarf varieties) will be five years old before it produces any quantity of apples. This lesson compares the timing of these type of "agricultural facts" with the timing of various student facts and figures.

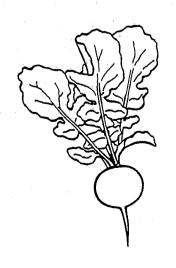
ACTIVITIES:

1. Have the students read the worksheets and compare time by answering the questions.

- 2. Read the lessons to the students if necessary.
 - 3. Make a 'number timeline of growing" drawn to scale. (This example is not drawn to scale due to space limitations.)
 - a. If you use 1 inch for each day a 30 foot wall will equal almost 1 year.
 - b. Use this to gauge the scale you use.

1 day 1 wee	(1 month) k 30 days	60 days	75 days	2 years	5 years
l planting	radish	l lettuce	l peas	cow to have	l apple
day or birth date			$x = x^{2}$	calf and give milk	tree

- c.Place the symbols on the appropriate places. Fill in student activities for what they do daily or weekly.
- 4. Measure the height of the students before completing "A Cherry Tree and Me" worksheet.





1. A cow will have a calf when she is two years old.

Is she older than you or younger?



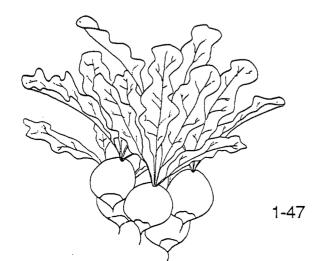
2. Peas can be picked from a pea plant in 60 days.

Radishes can be pulled in 30 days.

Which one takes longer?

3. Which plant in question 2 grows for 1 month?

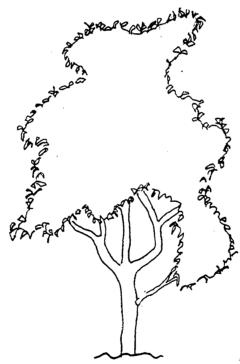
Which plant in question 2 grows for 2 months?



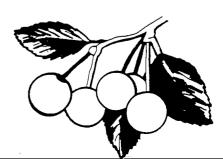
A Cherry Tree and Me

1. You can pick cherries when a cherry tree is five years old. Is this tree older or younger than you are?

2. This tree is ten feet tall. How tall are you? Which is taller? Draw yourself next to the tree.



3. If you planted a cherry tree today, when could you pick cherries?



Name-

Timeline 0 1 day 30 days 60 days 75 days 1 1 1 1 1 plant pick pick pick radishes lettuce peas

1. Do you cut lettuce before or after you pick peas?

2. Do you pull radishes before or after you cut lettuce?

3. Which do you pick first?

4. Which do you pick last?

