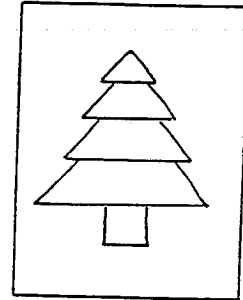


## TEACHER MATERIALS - Evergreen Tree

- CONCEPTS:**
- Mathematics - standard units of measurement
  - shape
  - symmetry
  - shape fitting
  - position
  - patterns
  - Life Science - 1A - 1.1, 1.5
  - Art



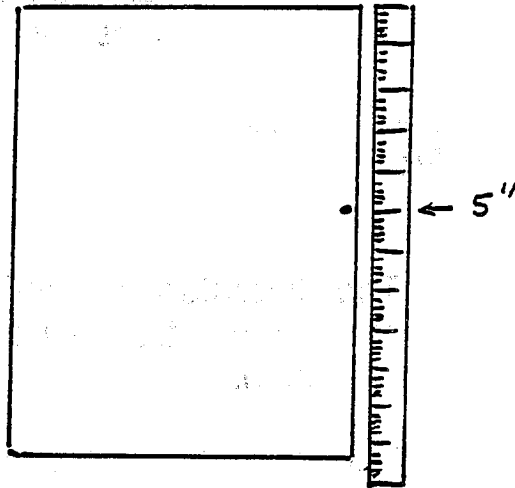
- OBJECTIVES:**
1. The students will effectively use a ruler to make measurements, draw lines, and create triangles, and a rectangle.
  2. The students will then assemble those triangles and rectangle into a "tree."

**BACKGROUND:** This lesson is a method of utilizing measurement and art to explore the structure and symmetry of a coniferous tree.

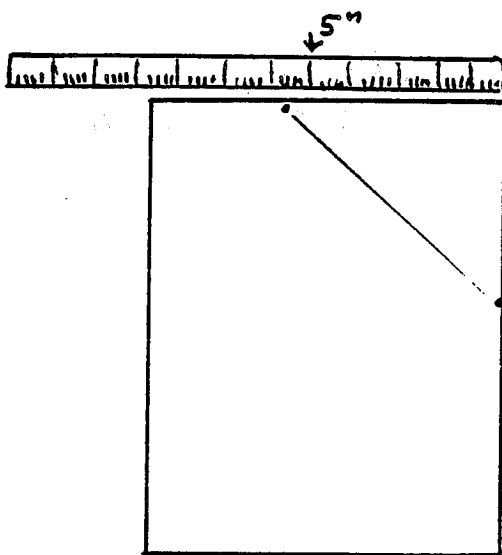
- MATERIALS:**
- Construction paper
    - green
    - brown
    - any contrasting color
      - yellow
      - white
      - pink
  - Scissors
  - Ruler
  - Pencil
  - Glue

**ACTIVITIES:**

1. Have the students make their own evergreen tree out of 4 descendingly sized triangles and one small rectangle.
  - A. On a sheet of green construction paper, have the students measure 5 inches from one corner.

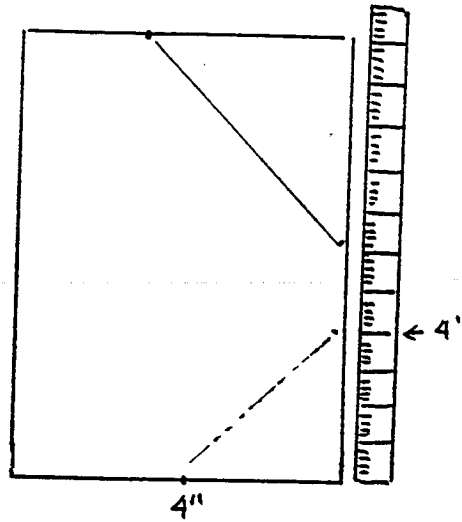


Make a dot at the edge of the paper and 5 inches from the corner on the other side.

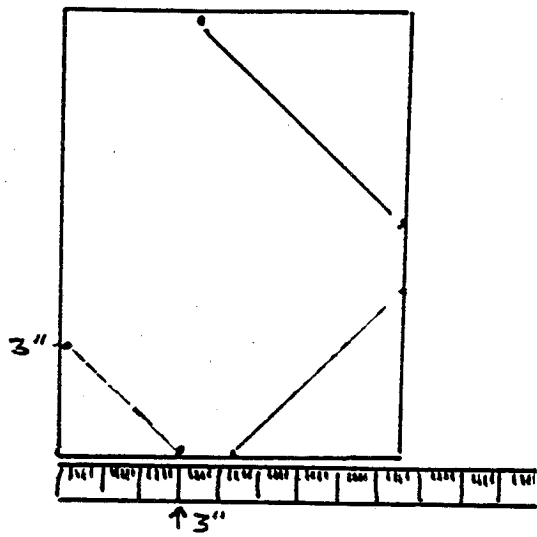


- B. Draw a line between the two dots.

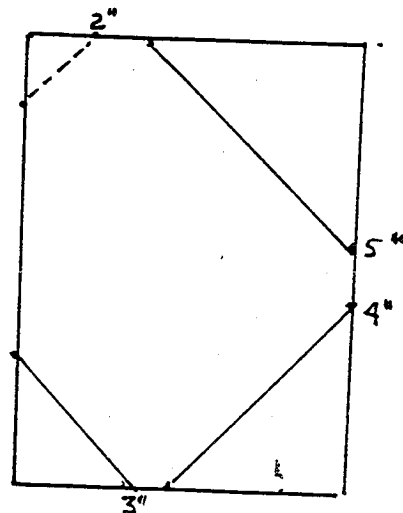
C. On the opposite corner, repeat the procedure at 4 inches.



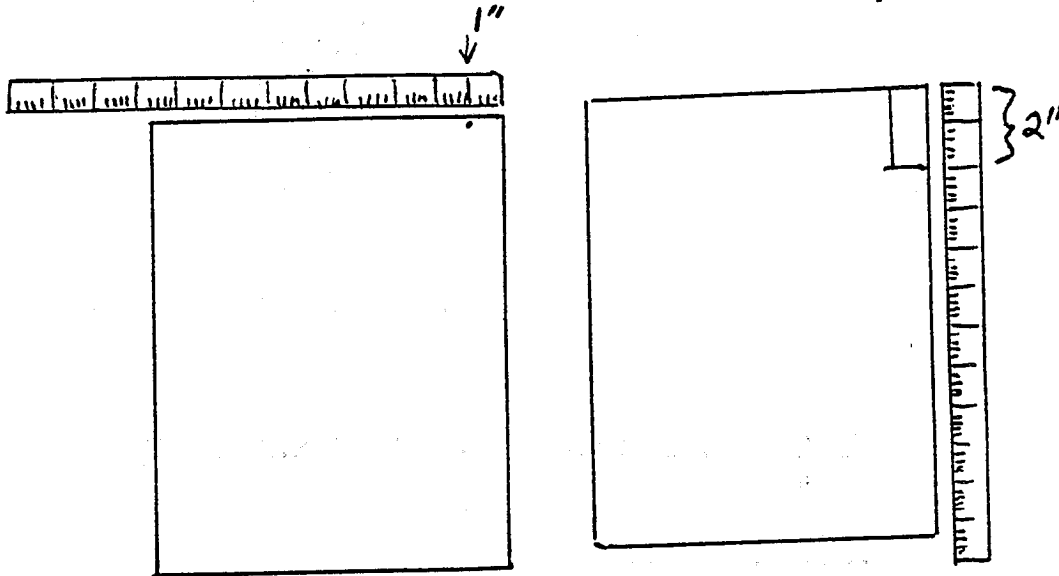
D. Do the same at the other corners at 3 inches and at 2 inches.



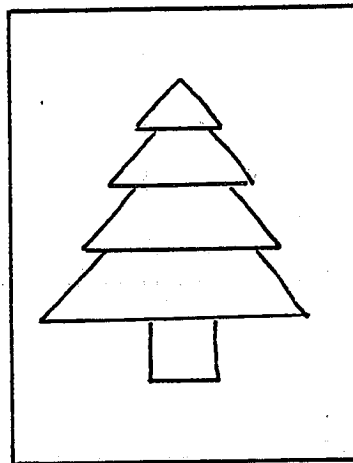
E. Cut out the triangles on each of those lines.



F. On the brown construction paper, have the students measure and cut out a 1 inch by 2 inch rectangle.



G. Paste the triangles and tree trunk on the third piece of construction paper so that they resemble an evergreen tree. The trunk bottom should be centered 1 1/2 to 2 inches from the bottom of the page.



2. If this version is too difficult for your student to use at the time of year you'd like (say Christmas) then use either worksheet A or B.
  - a. Make copies of the version which you prefer for your class.
  - b. Have the students measure the sides of the triangles with their ruler,

- c. fill in the blanks,
- d. assemble their tree and decorate it if you like.

**This idea was contributed by piloting teachers Carol Vasso, JoAnne Walsh and Mary Kay.**

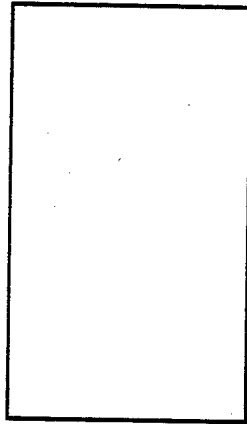
or

- e. Have the students measure just the longest side of the triangles and follow the rest of the direction in #2.

Name

inches

inches



inches

inches

Name- \_\_\_\_\_

