



## ALBERT'S ALPHABET by Leslie Tryon

Albert is a problem solver; he is able to meet a challenge in a given time frame with a minimum amount of materials. He plans, measures, and then uses his tools. He successfully creates an alphabet across the school playground by three o'clock!

Students of all ages love a challenge but they need to work within a time frame and they need to achieve success. This activity provides both, and it can be extended into an activity involving measurement of volume.

**MATERIALS:** 1 #1 lb. box of sugar cubes per student group, cafeteria tray (optional)

**ACTIVITY:** Divide students into groups of two or four and give each group a box of sugar cubes and tray if available. Give them the following two challenges to be completed in twenty minutes.

**CHALLENGE #1:** Build a set of stairs with the greatest number of steps.

**CHALLENGE #2:** Build as many letters of the alphabet as you can with your cubes.

**EXTENSION:** Older students can find the total volume of the staircase or all the letters. Each cube is approximately 1 cm on each side or 1 cubic centimeter.

**TEACHER NOTES:** This is an ageless activity; it can be used almost anywhere. I gave it to a young teacher who used it as her demo lesson when applying for a job. The sugar cubes can be used again

and again. Please tell students that they may not eat them. The activity could be used as a center; the book is a real lap book. Students must hold it to see all the amazing details. It could incorporate a math lesson as the clock on the wall tells how much time Albert has used up as well as how much time he has left.

**SOURCE:** Adapted from an activity used in *IPS/Introductory Physical Science* demonstrated by Robert Emerich in a summer workshop.

**STANDARDS:**

**BSL:** 1.3, 1.13, 3.3, 3.4, 11.1, 11.2, 12.5, 12.8, 12.10, 12.11

**NCTM:** 1a, 1b, 3b, 4d, 9a, 9b

**SCS:** A1, B1, B2, H2, H5

Tryon, Leslie. Albert's Alphabet. Atheneum/Macmillan Publishing Co., 1991. ISBN#0-689-31642-9.