

All Boxed In

Sheet 2

NAME _____

Take a 20-cm-by-20-cm piece of grid paper and cut congruent squares from each corner. Fold up the sides to form a rectangular-shaped box with no lid. Determine the volume of the box and complete the following chart. Repeat this process on other 20-cm-by-20-cm pieces of grid paper for several different-sized cut squares.

Height (cm)	Length (cm)	Width (cm)	Volume (cm ³)

Let x be the height of the box and let y be the volume of the box. Plot the ordered pairs (x,y) and analyze the data.

“Weather” It’s a Function

Most years have 365 days. The first day of the calendar year is 1 January; 15 January is the fifteenth day of the calendar year; 1 February is the thirty-second day of the calendar year, and so on. Decide whether a relationship exists between the number of the day of the year and the normal high temperature for that day for the first and fifteenth days of each month. Use weather data from your local area. Let x be the number of the day of the year and y be the normal high temperature on that day. Plot all ordered pairs (x,y) and analyze the data. The following chart format can be used.

Day	Temperature

