CA1 1.4 Experimental Design Puzzle

Complete the puzzle below. When you finish, a message will be displayed.

Answer questions and transpose letters into Quotation grid. Words in quotation end at filled squares.

A. ___ ___ ___ ___
28 104 162 59
An observation agreed upon by the majority of relevant experts.

B. ___ Y ___ ___ ___ ___ ___ ___ ___ ___
74 112 129 82 14 1 61 16 116
A testable, educated prediction.

C. ___ ___ ___ ___ ___ ___ ___ ___
92 153 20 160 158 101 149 49
Something which can be measured or observed.

D. ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
42 2 134 52 50 163 7 23 71 141
A test of a hypothesis.

E. ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
58 140 87 132 3 35 152 155 81 29 13
The variable which you select or control. (The cause)

F. ___ ___ ___ ___ ___ ___ ___ ___ ___
157 34 21 85 17 51 118 161 72
The variable which you observe. (the effect)

G. ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
108 9 96 4 64 100 47 5 137 43 68
Variables which could cause the effect, if you let them.

H. ___ ___ ___ ___ ___ Y
18 77 54 151 117
An explanation which helps build hypotheses and explain observations.

I. ___ ___ ___ ___ ___ A ___ ___ A ___
46 30 10 130 22 99 121 73
A very old and trusted theory.

J. A ___ F ___ ___ ___ ___
144 98 53 24 119
In an experiment, you change the independent variable to learn how it ____ the dependent variable.