Suppose an experiment has sample space $S = \{a, b, c, d, e, f, g, h\}$ with equiprobable outcomes. How many events in S occur when the experiment is conducted once?

(a) 128

(b) 1

(c) 256

(d) 2

(e) $\binom{8}{2}$

(f) $\binom{8}{1}\binom{8}{7}$

(g) 0

(h) 8

(i) 7

(j) None of these

Solution: $2^7 = 128$.