**Worksheet – Randomized Block Design (aka Repeated Measures)**

**Optimal Length of Chopsticks**

**Dataset:** chopstick2\_rcb.dat

**Source:** S-H. Hsu and S-P.Wu (1991). "An Investigation for Determining the Optimum Length of Chopsticks," Applied Ergonomics, Vol. 22, #6, pp. 395-400.

**Description:** Randomized Complte Block Design to compare 6 lengths of chopsticks (180mm, 210, 240, 270, 300, 330) in 31 subjects (blocks). Data simulated to obtain their ANOVA. Response is food-pinching efficiency (number of peanuts picked, and placed in cup), technically discrete.

**Variables/Columns** Food Pinching efficiency 1-8/ Trt(Length)16 **/** Block (Individual) 23-24

Treatments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ # trts = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Blocks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ # Blocks = \_\_\_\_\_\_\_\_\_\_



TSS =

SSTR =

SSBL =

SSE =



