Hand Game

The Hand game aims to measure non-verbal inhibitory control in children aged 3 to 5. This task is considered a conflict inhibitory control task, in that not only the dominant response (matching the researchers's hand gesture) needs to be inhibited, but a conflicting response should be generated. Task accuracy is scored by counting the number of correctly performed trials.

The Hand Game procedure we use here is similar to that described in (Watson & Bell, 2013). The Hand game task is a variation of Luria's hand game task, which was originally used to measure IC deficits in adults with frontal lesions. The task has been adapted for use with children. In this task, children are instructed to first mimic the hand gesture (flat hand or fist) made by the researcher. This is to test that the child understands the instruction and can make the required hand gestures. Next, children are told that the rules change and that they should place a flattened hand on the table whenever the researcher presents her fist and to present a fist whenever the researcher places her flattened hand on the table. The task consists of 16 trials, eight with the experimenter's fist as the stimulus, and eight with the experimenter's flattened hand as a stimulus, arranged in a fixed pseudorandom order. Total administration time is approximately 3 min.

Reference:

Watson, A., & Bell, M. (2013). Individual differences in inhibitory control skills at three years of age. Developmental Neuropsychology, 38(1), 1–21. http://doi.org/10.1080/87565641.2012.718818.