

Description of the MEFS App™



Figure 1. Example screen shots of a MEFS, part A, using a color-based rule.



Figure 2: Example screen shot of a MEFS, Part B, using a shape-based rule.

The MEFS App tablet game is administered 1-on-1. Children begin at different levels based on their age.

At each level, children are instructed to sort virtual cards into one of two boxes according to specific rules (e.g., "If it's red put it here, but if it's blue put it here"), and switch rules with increasing difficulty across levels (See Figure 1). The "A" portion of the MEFS App asks the child to apply one rule while the "B" portion asks the child to apply a second rule.

Highly adaptive, the MEFS App starts at an age-dependent level and adapts to each child's abilities. Children advance from lower to higher levels if they pass, and continue to advance until they fail. Each of the **7 levels** has two parts that are automatically scored. Children must be correct on at least four out of five trials to move forward. If children fail the starting level, the program automatically goes back to an easier level until the child's current level of functioning is reached. Outcome scores are based on **accuracy** and **response time**.