

Beehive array generator

(for now not controlling for positioning of colors/shapes in ALL mode)

- Number of items to be generated with these settings (#)
- Condition name

Array parameters:

- Number of covers (#covers)
- Number of items (#items)
- Number of blanks (#blanks)
- Define shapes = {C,R,T,Q}
- Define colors = {b,r,g,y,k}
- Define sizes = {70,60, ... }
- Define target items: (#color1-shape1-size1, #color1-shape2-size1 ...) or (6rC60, 5bR40 ...) or (6color1-C-size1 ...) or (#colorX-shapeX-sizeX)
- Define distractor items (#color1-shape1-size1, #color1-shape2-size2 ...) or (6rC60, 5bR40 ...) or (6color1-C-size1) or (#colorX-shapeX-sizeX)

(where 1,2,3.. = constant for all items after selection; X = varies between items)

Presentation parameters:

- Mode of presentation (ALL, ALL for #ms, SEQ(quential))
- Number of rows (#) or Random (no overlap)
- Number of frames (#)
- Min (non-blank) items per frame (#)
- Min target items per frame (#)
- Max covers revealed per frame (#)

Optional set parameters:

- Introduce Shape1,2,3,4 in frame (#1,#2,#3,#4, blank if random)
- Introduce Color1,2,3,4,5 in frame (#1,#2,#3,#4,#5, blank if random)
- Introduce Size1,2,3 in frame (#1,#2,#3, blank if random)
- Introduce Shape1,2,3,4 by frame (#1,#2,#3,#4, blank if random)
- Introduce Color1,2,3,4,5 by frame (#1,#2,#3,#4,#5, blank if random)
- Introduce Size1,2,3 by frame (#1,#2,#3, blank if random)
- Introduce ALL Shape1,2,3,4 by frame (#1,#2,#3,#4, blank if random)
- Introduce ALL Color1,2,3,4,5 by frame (#1,#2,#3,#4,#5, blank if random)
- Introduce ALL Size1,2,3 by frame (#1,#2,#3, blank if random)

Questions:

- Question1 (Any string) [“Are most of the Shape1 Color1”]?
- Answer1 (YES or NO)

- Message to display while Q1 is running (Any string)
- Question2 (Any string)
- Answer2 (YES or NO)
- Allowed to answer preemptively (YES or NO)

Experimenter goes through items, decides whether to keep or discard each item.
Selected items are added to an “items” file.

Frame sequencing algorithm:

- Based on array+presentation parameters: decide how many items appear in each frame.
- Number covers from top to bottom row, left to right

First step:

- Choose number in leftmost column

Other steps:

- Cover1: choose lowest-numbered unveiled cover.
- Cover2: choose cover adjacent to cover1 $\{+1, -1, +\#rows\}$
- Cover3: choose cover adjacent to cover1 $\{+1, -1, +\#rows\}$,
if none available: choose cover adjacent to cover2
- $\{\text{Multiple of } \#rows, \text{multiple of } \#rows+1\}$ are not adjacent.