

Task No. ASM-412 Simple Electronic Breadboard

Instructions

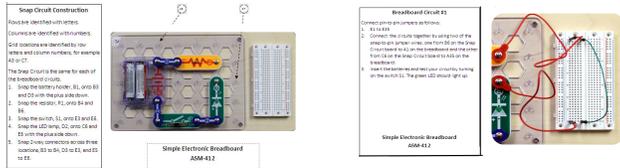
Primary Task

Primary Skill: Assembly

Primary Objective: To assemble an electronic circuit from components using a diagram

Secondary Task

No secondary task



Set-up: Open the boxes and set the lid aside. In the student's workspace place the box of components on the left, the laminated jigs and wood jig in the center, and the empty box on the right.

Directions:

1. Choose a circuit to build - use the laminated guides for step-by-step instructions
2. Build the Snap Circuit[®] section first.
3. Build the breadboard section.
4. Insert batteries and test the circuit. Remove the batteries. Place the assembly, the batteries, and any unused parts in the right-hand box.
5. When completed nest the boxes, close and return to the storage area.

Re-Set: The teacher disassembles the circuit and returns the components and wood jig to the empty box.

Modifications: Start with one or more components installed.

Information

Ability Level: Advanced

Targeted Skills:

- Use visual discrimination skills to distinguish objects with different attributes.
- Use fine motor skills to develop the pincher grip and palmar arch to grasp release items intentionally.
- Use dexterity of fingers, strength of palms, and wrist movement to assemble the snap-on circuit pieces.
- Develop proprioceptive feedback.
- Decrease hand fatigue and increase bilateral coordination when using both hands simultaneously.
- Use hand/eye coordination to manipulate objects and transfer them to a new location.
- Use cognitive tasks such as decision making and judgment when following assembly directions in a sequential order.

Components:

- 1 set of Snap Circuit[®] components and jumper wires
- 1 wood jig with circuit boards attached
- 3 breadboard circuit diagrams (easy, difficult, & hard)
- 1 Snap Circuit[®] diagram
- Task Card
- Rubric(s)
- 2 storage boxes and 1 lid (boxes nest to save space)

Support/Resources:

- Instruction Sheet (teacher)
- Task Card (student)
- Rubric(s)
- Scaffolding Manual
- Free Download on our website: www.hot-ideas.org/downloads

Example of Circuit 2 assembly

