

Place Value Packaging

Place pegs into bags to solve math problems.

Difficulty increases from Level 1 to Level 3.

Materials

- 1 storage box
- 4 small bins
- 2 Place Value Number Lines (ones and tens)
- 10 clear plastic bags
- 25 large yellow pegs (tens)
- 25 small yellow pegs (ones)
- 25 large red pegs (tens)
- 25 small red pegs (ones)
- 1 plastic snap box
- 10 Level 1 cards
- 10 Level 2 cards
- 10 Level 3 cards
- 1 pad of paper



Procedure

Level 1: Match to Symbols on Cards

Setup: Place two small bins with EITHER the red or yellow large and small pegs in the center of the table. Place the Level 1 cards (yellow-bordered cards) on the table to the left.

Be sure the symbols on the cards match the pegs you are using (choose either yellow or red). Place the plastic bags on the table to the right. Place the empty storage box to the far right.

- Take a card and set it in the center front on the table. Take and open a plastic bag.
- Take large pegs that match the number of “tens” pegs on the card. Place the pegs in the bag.
- Take small pegs that match the number of “ones” pegs on the card. Place the pegs in the same bag.
- Place the card in the bag. Close the bag. Put the completed bag in the storage box.
- Repeat with remaining cards.

Level 2: Count Pegs to Match the Number on Cards

Setup: Place the “tens” number line to the left on the table. Place the “ones” number line to the right on the table. Place the small bins with the large and small red pegs in the center behind the number lines. Place the Level 2 cards (blue-bordered cards) to the left on the table in front of the number line.

Choose the side of the cards with either words or peg symbols for “tens” and “ones.” Place the plastic bags to the right on the table in front of the number line. Place the empty storage box to the far right.

- Take a card and place it in the center front on the table.
- Take large red pegs and place into the “tens” number line, sequentially from left to right, matching the “tens” number on the card.
- Take small red pegs and place into the “ones” number line, sequentially from left to right, matching the “ones” number on the card.
- Take and open a bag. Place all pegs in the plastic bag.
- Place the card in the bag. Close the bag. Put the completed plastic bag in the storage box.
- Repeat with remaining cards.



Level 2

Quality Criteria

The number and color of pegs placed on a Place Value Number Line or in a bag must match the card.

Level 3: Add Numbers Using the Place Value Number Lines

Setup: Place the “tens” number line to the left on the table. Place the “ones” number line to the right on the table. Place the small bins with the large and small yellow pegs to the left behind the number line. Place the small bins with the large and small red pegs to the right behind the number line.

Place the Level 3 cards (red-bordered cards) to the left on the table in front of the number line. Place the plastic bags to the right on the table in front of the number line. Place the empty storage box to the far right.

- Take a card and place it in the center front on the table.
- Take large yellow pegs and place into the “tens” number line, sequentially from left to right, matching the “tens” on the yellow number on the card.
- Take small yellow pegs and place into the “ones” number line, sequentially from left to right, matching the “ones” on the yellow number on the card.
- Take large red pegs and place into the “tens” number line, sequentially from left to right, matching the “tens” on the red number on the card.
- Take small red pegs and place into the “ones” number line, sequentially from left to right, matching the “ones” on the red number on the card.
- Take a blank piece of paper and copy the equation from the card.
- Using the number lines as guides, write the answer to the equation on the card.
- Take and open a plastic bag. Place all the pegs and the card and paper with the full equation in the bag.
- Put the completed bag in the storage bin.
- Repeat with remaining cards.



Level 3

Disassembly

Setup: Set empty small bins on the table in the middle. Set the storage box with filled bags to the right. Set the snap box to the left. Number lines are not needed.

Procedure—All Levels

Take a bag, open and pour contents onto the table. Close the bag and set to the far left side. Place each peg into the small bins, sorting by color and size. Place the card into the snap box. Repeat with all bags.