How do I retrain a response that asks...

• What do I know?
• What could I figure out?
A rectangular room is 16 long, 12 feet wide, and 8 feet high.
A rectangular room is 16 long, 12 feet wide, and 8 feet high.

What is the total wall area?

\[16 \times 12 \times 8\]

\[\frac{1}{2}(8)(16 + 12)\]

\[16 \times 12\]
By leaving off the question...

A rectangular room is 16 long, 12 feet wide, and 8 feet high.
What do you know?
What can you figure out?
What do you know?
What can you figure out?

Picture 1  Picture 2  Picture 3  Picture 4
Build It!

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Build It!
Build It! Directions

• Use the multiplication fact flashcards to review these facts
• Also use a 12 x 12 grid to help construct unfamiliar products
• For each fact, sort the cards into piles of “Automatic” and “Not yet automatic” based on how quickly you come up with an answer
• For any fact you do not know automatically, use the 12 x 12 grid and the distributive property to work from familiar facts to the one in question
• If playing with a partner, the partner can prompt you to explain your thinking for any facts you need to construct an answer.
How do I retrain a response that asks...

- How do I know?
Weight Shift Game

• How do you know you did the same?
• How do you know you doubled?
Jack n' Jill
0.\bar{9} = 1
Fraction Wall
Fraction Wall Directions

• Each player needs a blank fraction wall handout
• This game requires a numerator and denominator dice
1. Player 1 rolls both the numerator and denominator dice.
2. Once a fraction is formed with the dice, the player must shade this amount on the fraction wall.
3. If the entire fractional amount cannot fit on the wall, the player loses his turn.
4. The player that completely shades the entire wall first wins.
Fraction War

\[
\frac{3}{12} \quad \frac{2}{7}
\]
Fraction War

\[
\frac{5}{7} \quad \text{vs} \quad \frac{5}{8}
\]
Fraction War

\[ \frac{5}{6} \quad \frac{7}{8} \]
Fraction War

• Split the fraction cards between 2 players
• Keep the cards face down
1. Each player flips over one card
2. The player with the card displaying the larger fraction wins both cards.
• Step #1 and #2 are repeated until one player posses all of the cards.
• If the displayed cards are equal, the players will go to “war” to determine the winner. Follow these instructions to go to war:
  • Each player deals 3 of his cards face down.
  • Then each player flips over one additional card.
  • For the fourth card, whichever player has the card with the larger fraction wins all the cards on the table.
  • Repeat steps a-c if the fourth cards are equal.
0, $\frac{1}{2}, 1$ War
0, $\frac{1}{2}$, 1 War
0, $\frac{1}{2}, 1$ War
0, \frac{1}{2}, 1 \text{ War}
0, ½, 1 War Directions

- Split the fraction cards between 2 players and keep the cards face down
- Place the 0, 1, ½ cards in the center of the 2 players face down
  1. Flip over a 0, 1, ½ card
  2. Each player flips over one fraction card from her deck
  3. The player with the card displaying the fraction closer to value on the displayed 0, 1, or ½ card wins both cards
- Step #1, #2, and #3 are repeated until one player possesses all of the cards.
- If the displayed cards are equal, the players will go to “war” to determine the winner. Follow these instructions to go to war:
  - Each player deals 3 of his cards face down.
  - Then each player flips over one additional card.
  - For the fourth card, whichever player has the card displaying the fraction closer to value on the displayed 0, 1, or ½ card wins all the cards on the table
  - Repeat steps a-c if the fourth cards are equal.
How do I retrain a response that...

- Deal with anxiety blocks
- What’s the same?
- What’s different?
- What’s reasonable?
- What do I notice?
- What do I wonder?
- What do I know?
- What could I figure out?
- How do I know?