



Source: Illustrative Mathematics

Crossing the Decade Memory Game

Materials:

- Number cards

Directions:

I) Students place all the number cards that end with "_9" face down in an 3x3 array on the left and all the number cards that end with "_0" face down in a 3x3 array on the right. Working in pairs or trios, students take turns. The first student selects a card from the left array, stating the number name and the counting number that follows ("I have 39, I need 40").



- 2) He or she then picks one card from the array on the right (the "_0" numbers), hoping to find the target number. If the student does not find a pair, both cards are replaced face down in their original spots. It is now the second student's turn to choose a card from the "_9" array and to try to find the appropriate "_0" card. Students should try to remember where each number is located.
- 3) When a student finds a matching pair he or she keeps that pair of cards. Play continues until all cards have been matched. The student with the most matched pairs wins.

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Teacher Notes:

- It is very important to train the students to draw a card from the left and state what they need before they draw from the right. This will encourage them to think about and problem solve the next decade number. When the students get in the habit of picking up two cards simultaneously the game become much more about luck (although they do have to confirm that it is a pair, so do get some practice) and students are less likely to internalize the information and use it when counting.

Variations:

- Students who become proficient with playing the game to support counting forward can gain experience in backward counting by picking from the right array first (the "_0" numbers) and then looking for the correct "_9" number. Changing the cards to 20-21, 30-31, 40-41, 50-51 etc. with the "_0" numbers on the left and the "_1" numbers on the right is very supportive for another common error in backward counting which is to leave out the decade number when counting backward ie. "33, 32, 31, 29, 28".









Graphics and Fonts





