

32.

Expanded Notation Concentration

Level: Grades 3-4

Time: 10-15 minutes

Number of
Players: 2 or more

Materials and
Preparation: Mark 20 (or more) cards $11\text{ cm} \times 4\text{ cm}$ (must be an even number) in pairs using whatever place value is being studied. For example:

321	8104	64
$(3 \times 100) + (2 \times 10) + (1 \times 1)$	$(8 \times 1000) + (1 \times 100) + (0 \times 10) + (4 \times 1)$	$(6 \times 10) + (4 \times 1)$

Laminate cards.

- Procedure:
1. Cards are spread out, face down, either in a random or an ordered fashion.
 2. Each player chooses a card. The player who chooses the one with the highest numerical value begins the game.
 3. A player turns over 2 cards. If there is a match, the pair is kept by the player, who may choose again. If there is no match, the play moves on to the next player.
 4. Play continues until all cards have been matched.
 5. Players count the number of matched pairs that they have. The person who has the most pairs is the winner.

Variations: This "concentration" format can be extended to many other concepts, such as fractions, addition, subtraction, and symmetry.