Property Cards

The student will justify steps used in justifying expressions and solving equations and inequalities. Justifications will include the use of concrete objects, pictorial representations, and the properties of real numbers.

SOL A.4b

Materials: deck of Property cards

Groups: groups of 4 students

Game:

The cards are shuffled and placed face down in rows and columns (like a memory game). The objective is to match the property to an appropriate example. Students should determine the order of play. On an individual's turn, two cards are revealed. If these cards are a match, then the individual removes that pair from the playing field and continues to play until two non-matching cards are selected. The winner is the student with the most cards.

$3 \bullet 4 = 4 \bullet 3$	**Additive identity**
Commutative property of addition	**Distributive property of multiplication across addition**
Additive inverse	**Additive identity**
Associative property of multiplication	$3 \bullet \frac{1}{3} = 1$
$12+4+1=4+1+12$	**Commutative property of multiplication**
Associative property of addition	**Multiplicative identity**

Commutative property of multiplication	**Associative property of addition**
Additive inverse	**Distributive property of multiplication over addition**
Associative property of multiplication	$3x + 6 = 3(x + 2)$
$8(x + 2) = 8x + 16$	$-3 \bullet 1 = -3$
-2+0=-2	$\frac{1}{8} + -\frac{1}{8} = 0$
$-\frac{1}{2} \bullet (-2) = 1$	$(8 + 14) + 5 = 8 + (14)$

Multiplicative inverse	$9 \bullet (2 \bullet 12) = (9 \bullet 2) \bullet 12$
Multiplicative identity	$5 + 2 = 2 + 5$
Multiplicative inverse	$3 \bullet 2 \bullet 4 = 2 \bullet 3 \bullet 4$
$-4 + 4 = 0$	$(3 \bullet 2) \bullet 1 = 3 \bullet (2 \bullet 1)$
$\frac{1}{5} \bullet 1 = \frac{1}{5}$	**Commutative property of addition**
$(2+3)+4=2+(3+4)$	$8+0=8$