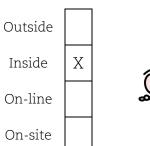
## Strands:

Number & Quantity
Algebra
Functions
Geometry X
Statistics & Probability

### Materials:

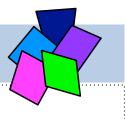
- Quadrilateral cards (1 copy of each)
- Property cards (10 copies of each)
- Scrap paper for recording points.

## Where:



# Game of Quads

Which properties fit which types of quadrilateral? Deepen your familiarity with quadrilaterals in this game for 2 to 4 players.



### Set-Up:

- Cut out the Game of Quads cards.
- The youngest player deals each player 6 property cards and places the rest face down in the center of the playing surface.

**Object of the Game:** Match property cards with each type of quadrilateral.

# Pre-Game Play:

• Turn over one quadrilateral category card and 6 property cards. In turn, let players choose one card from those shown to match the quadrilateral category. Ask players to explain their choices. Ask other players if they agree and if not why not.

# Playing the Game:

- 1. If you have 3 or more of the same card, replace one of the cards.
- 2. All players play simultaneously. The dealer turns over a quadrilateral category card.
- 3. From your hand, play as many property cards as possible that fit the quadrilateral card. Lay the cards face down in front of you. For example, if the quadrilateral is rhombus, opposite sides are parallel so that property fits the category. Though a square is a rhombus, not every rhombus has four 90-degree angles so that property does not fit the rhombus category.
- 4. When each player has found at least 3 cards, all players flip over the cards they played on the table. Verify that opponents' cards fit the category.
- 5. a. Earn 1 point for each correct property card you played.
  - b. If a player disagrees with a property card and can explain why it does not fit the category, the player earns 1 point for each incorrectly chosen property card.
  - c. Discard the property cards played in this round.
- 6. From the deck, restore your hand to 6 cards.
- 7. Repeat steps 1 through 6 until each quadrilateral category has been used.

**To Win:** The player with the most points after 8 rounds wins.

#### Think About It:

- 1. Which quadrilaterals share the same properties?
- 2. Which quadrilaterals are not parallelograms? How do you know?
- 3. Which type of quadrilateral has the most properties? Show which the property cards match this quadrilateral category.

#### Variations:

**Game of Quad Shapes:** Play as above using shape cards in place of the quadrilateral name cards.

**Game of Quads Hierarchy:** Lay out all the quadrilateral name cards. Determine which quadrilaterals share the same properties to create a hierarchy of quadrilaterals.

# Helpful Hints:

- For players struggling to match property cards with quadrilateral categories or shapes, ask questions such as, "How do you know a quadrilateral is a rhombus?"
- If the player can list properties of some quadrilaterals but has difficulty with others, ask, "Does this quadrilateral share any of the same properties with other quadrilaterals?"