### **Quadrilateral Concentration**

**Materials:** Deck of quadrilateral cards. May want rectangles or protractors as players get more precise. 2-4 players.

**Setup**: Set aside the Joker, and randomly deal the cards out into almost a rectangle. (I prefer 6x7 with two extra on top, but choose your own.)

**Gameplay**: On each turn, a player turns up two cards letting everyone see. If they are the exact same type of quadrilateral, you can collect them. If not, turn them down after all players have had a chance to see them. Whether it is a match or not, it is the next player's turn. (That's a little different than playing card concentration.) All players should agree on a match.

**Winner**: Player to collect the most pairs.

**Variation**: If a player makes a match, they take another turn. (Can be disengaging for kids that struggle.)

## **Quad Types:**

Square
Rectangle
Rhombus
Parallelogram
Isosceles Trapezoid
Right Trapezoid
Trapezoid
(Convex) Kite
General Convex

Chevron (concave kite) General Concave

# Quadrilateral Go Fish

**Materials**: Deck of Quadrilateral cards. Best with 3-5 players.

**Setup**: Deal 5 cards to each player. Put the rest face down in the middle, either in a neat stack, or mixed up in a big pond.

**Gameplay**: Start to the left of the dealer. On a player's turn they can ask a particular player for a specific property. For example: "Do you have a shape with opposite angles congruent?" You can not ask for a shape by name. ("Do you have a rectangle?") If the player has a card like that, they have to give it over. If they have more than one, they get to choose which card to give away. If you have a matched pair of the same type, you can play them down.

Winner: First winner is the first player to go out. Second winner is the player with the most pairs.

#### Variations:

- Instead of asking by properties, ask by name.
- Start with 7 cards.
- Allow players to play cards on other people's pairs. (If you have a pair of rectangles I can play a rectangle.)



## Quadrilateral Guess Who

Materials: Quadrilateral card deck. 2 players.

**Setup**: Sort the quads by type. Each player puts one quadrilateral of each type face up in front of them, and the others go face down in the middle. Each player draws a card from the middle and keeps it hidden from the other player.

**Gameplay**: On your turn you can ask one question about the other player's hidden quadrilateral. That player answers yes or no. Turn face down the quads you have that don't match.

Winner: first player to guess the other player's card.