

Shape Party!



Strand:

Number & Quantity	
Algebra	
Functions	
Geometry	X
Statistics & Probability	

In Shape Party, use your social skills and mathematical understanding to weasel your way into being invited to the party! Just don't let anyone know if you're a party animal or a party pooper...

Object of the Activity: Use logical reasoning and develop understanding for properties shared by shapes as well as properties that distinguish shapes from each other.

Overview: Shape Party has 5 rounds, called parties. Each party has a specific attribute, or geometric characteristic. You will have a set of secret role cards, all with the same geometric shape on them. You will also have a team card, which says if you are a party animal or a party pooper. If you are a party animal, you want to make sure that shapes that have the attribute for a party go to that party. If you are a party pooper, you want to make sure shapes that don't have that attribute go to the party. At least 2 shapes that have the characteristic of the party need to be invited for the party to be a success; otherwise, it is a flop. The game ends when there have been 3 parties that were successes or 3 parties that were flops.

Materials

Needed:

- Shape Party Gameboards
- Shape Party Role Cards, 5 cards of each role
- 3 Green Tokens
- 3 Red Tokens
- 3 Party Invitations
- Scrap Paper and Pencils

Set-Up:

- Choose a gameboard and the role cards that match the gameboard. Pick as many role card decks as the number of players. Read all roles aloud.
- Each role card deck contains 5 cards. Mix up the decks and pass out one deck to each player randomly. Keep your role a secret.
- You need one team card for each player, with half being party animals and half party poopers. If there are an odd number of players, use one more party pooper than party animal cards. Shuffle the team cards and give one to each player. Keep your team card a secret.
- Each gameboard has 5 parties. Each party has a required attribute. Play starts with the leftmost party.
- Place the tokens next to the board. A green token represents a successful party, and a red token represents a flop.
- Set out three invitations.
- The oldest player goes first.

On Your Turn as the Party Planner:

1. Read aloud the required attribute for your party. Without revealing your team alliance, make certain the party is a success if you are a party animal or a flop if you are a party pooper. Listen to what players say and decide if a player should be invited to the party.
2. Invite three people to your party by placing a party invitation in front of them. You may change who is invited until the party starts.
3. To start the party, say "Party Time!" Each player invited to the party places a role card face down in the center of the playing surface. Mix up the cards then reveal the role cards to all players.
4. With other players, decide if each shape satisfies the required attribute for the party. Also discuss who might have each role.
5. The party is a success if at least two role cards fit the required attribute. In the last party, all three role cards must have the required attribute for a successful party.
6. If the party is a success, place a green success token on your party. If the party is a flop, place a red flop token on your party. Your party ends. The role of party planner passes to the left.
7. Continue discussing, reasoning with, potentially lying, and working towards your team's goal to make parties successes or flops. The game ends when there are either 3 successful parties or 3 parties that are flops.

Where:

Outside	
Inside	X
On-line	
On-site	

**When You Are Not the Party Planner:**

1. Keep your role card secret throughout the game. Your role card lists a shape name. A required attribute is a property of all shapes in the category on your role card. For example, if your role is a rhombus and the required category lists right angles, your category does not satisfy the required attribute because not all rhombi have right angles (a square is a rhombus, but not all rhombi are squares). You may lie about your role card as much as you wish.
2. Use your role card and your team card (party animal or party pooper) to determine whether or not you want to be invited to a party. Party animals with the required attribute want to be invited. Party poopers without the required attribute want to convince the party planner to invite them.
3. Reason with other players about whether or not you should be invited to the party to accomplish your goal to make the party a success or a flop.
4. If you are invited to the party, put one of your role cards face down on the table for the party planner to mix up. Once all role cards are revealed, discuss whether or not each role fits the required category.
5. Hand your party invitation to the next party planner.

Winning the Game:

Party animals win if 3 or more parties were successes. Party poopers win if 3 or more parties were flops.

Think About It:

- How did you figure out what role each player had?
- When you were the party planner, how did you choose whom to invite to the party?
- How did you decide whether or not you wanted to be invited to the party?
- What attributes made it difficult to tell who had what role?
- What attributes made it easier to tell who had what role?
- Did you pretend to be a different shape? Why did you choose the shape you pretended to be? How did it work out?

Variations:

- Play with different sets of cards, boards, and numbers of players.
- For players with more geometry experience, use more attributes of shapes than listed on the gameboards. Create your own rounds!
- The party planner chooses the required attribute instead of planning the parties in the order they are listed on the board.
- To play with fewer players, give each player a deck with different shape cards to choose from if they are invited to the party.

Helpful Hint:

Pretend to be a shape not on your role card to get invited (or not!) to more parties. Record who goes to which parties and which role cards were revealed.