**POLYGON RUMMY**

**Object:** to create geometric figures

**Materials needed:** one set of *Polygon Rummy* cards for each group; Paper and pencils.

**Number of players:** 2–4

**Teacher Preparation**

Print out and copy one set of *Polygon Rummy* cards for each group of 2–4 students.

**Game Play**

**• Playing the game**

Written on each card in the deck is a property of a geometric figure.

For two players, each player receives 10 cards. For three or four players, each player

receives 7 cards. The remainder of the deck is placed face down in the middle of the

group for all to reach. A face-up discard pile is formed next to it during play. The player

to the dealer’s left goes first. The players then take turns, going clockwise.

Player 1 draws one card from the deck or the top card of the discard pile. If it is possible

to create a figure, player 1 may do so at this time. Then player 1 discards one card,

ending the turn. A player who has fewer than 3 cards can choose not to discard. If all

of the cards from the deck are used, the top card is left face up and the rest of the

discard pile is shuffled and turned over.

To create a figure, a player draws a polygon that matches at least three different cards.

For example, a player who has the cards "quadrilateral," "a pair of parallel sides," and "a

right angle" could draw a rectangle. The cards used to create the figure are set aside.

A figure that uses 3 cards is worth 10 points, and 5 points are earned for each additional

card (4 cards = 15 points, 5 cards = 20 points, and so on). The other players verify the

correctness of the figure. If a figure is incorrect, another player may challenge and either

draw a correct figure or prove that it is impossible to draw a figure that matches all of

the cards. If the challenge is successful, the points are awarded to the challenger.

**• Winning the game**

The round ends when one player uses all of his or her cards. At this point, the other

players count the number of cards remaining in their hands, and 5 points for each card

are awarded to the player who finished first. The points for all of the figures are totaled,

and the deal shifts to the left. The first player to get 100 points wins the game.

|  |  |  |
| --- | --- | --- |
| Two Angles that add to 90° | Two Angles that add to 90° | Two Angles that add to 90° |
| Two Angles that add to 180° | Two Angles that add to 180° | Two Angles that add to 180° |

|  |  |  |
| --- | --- | --- |
| A pair of equal angles | A pair of equal angles | A pair of equal angles |
| A pair of equal sides | A pair of equal sides | A pair of equal sides |

|  |  |  |
| --- | --- | --- |
| A pair of parallel sides | A pair of parallel sides | A pair of parallel sides |
| A right angle | A right angle | A right angle |

|  |  |  |
| --- | --- | --- |
| All sides equal | All sides equal | All sides equal |
| All sides equal | All sides equal | All sides equal |

|  |  |  |
| --- | --- | --- |
| Triangle | Triangle | Triangle |
| Triangle | Triangle | Triangle |

|  |  |  |
| --- | --- | --- |
| Quadrilateral | Quadrilateral | Quadrilateral |
| Quadrilateral | Quadrilateral | Quadrilateral |

|  |  |  |
| --- | --- | --- |
| An obtuse angle | An obtuse angle | An obtuse angle |
| All acute angles | All acute angles | All acute angles |

|  |  |  |
| --- | --- | --- |
| No sides equal | No sides equal | No sides equal |
| No angles equal | No angles equal | No angles equal |

|  |  |  |
| --- | --- | --- |
| Diagonals bisect | Diagonals bisect | Diagonals bisect |
| Diagonals perpendicular | Diagonals perpendicular | Diagonals perpendicular |