Polygon Capture

Materials
- ☐ 1 set of *Polygon Capture* Pieces (*Math Masters*, p. G22)
- ☐ 1 set of *Polygon Capture* Property Cards (*Math Masters*, pp. G23–G24)
- ☐ 1 *Polygon Capture* Record Sheet for each player (*Math Masters*, p. G25)

Players 2, or 2 teams of two

Skill Identifying properties of polygons

Object of the Game To collect more polygons.

Directions

1. Spread the *Polygon Capture* Pieces out on the table. Shuffle the *Polygon Capture* Property Cards and sort them property-side down into "Angles" and "Sides" piles. (The cards are labeled on the back.)

2. Players take turns. When it is your turn:
   - Draw the top card from each pile of property cards.
   - Take all of the polygons that have **both** of the properties shown on the property cards you drew.
   - If there are no polygons with both properties, draw one additional property card from either pile. Look for polygons that have this new property **and** one of the properties already drawn. Take these polygons.
   - At the end of your turn, record the properties, the letters of the polygons captured, and the number of polygons captured on your record sheet.
   - If you did not capture a polygon that you could have taken, the other player or team may name it, capture it, and add it to their score for the round.

There is only one right angle.	There are one or more right angles.	All angles are right angles.	There are no right angles.
There is at least one acute angle.	At least one angle is more than 90°.	All angles are right angles.	There are no right angles.
All opposite sides are parallel.	Only one pair of sides is parallel.	There are no parallel sides.	**Wild Card:** Pick your own side property.
At least two sides are perpendicular.	There are four perpendicular sides.	All the sides are the same length.	**Wild Card:** Pick your own side property.

Polygon Capture Property Cards (property-side up)

3. When all the property cards in either pile have been drawn, shuffle the used property cards back into the deck. Sort the cards into "Angles" and "Sides" piles. Continue play.

4. The game ends after 5 rounds or when there are fewer than 3 polygons left.

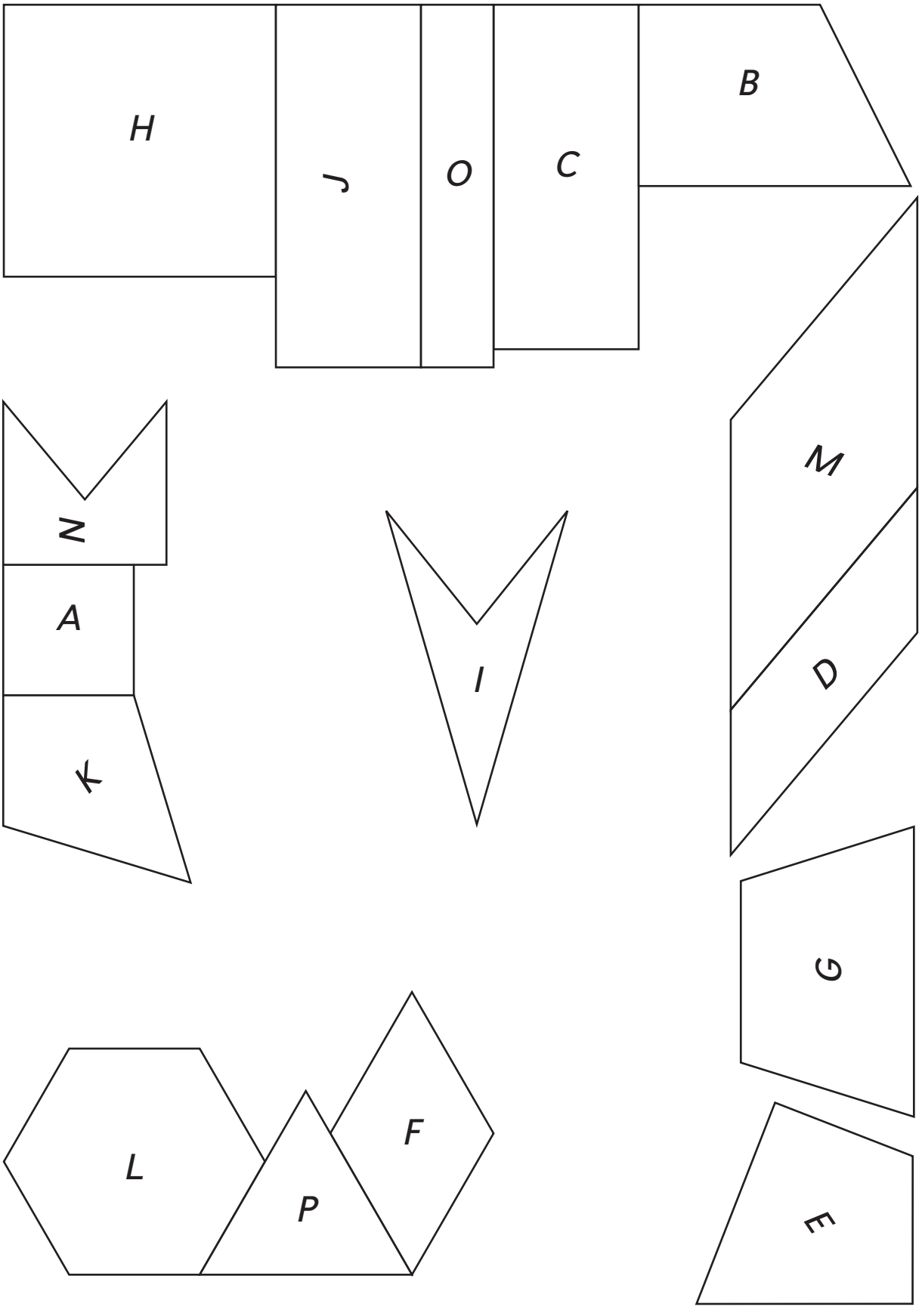
5. Players add the number of polygons captured in each round to find their total. The winner is the player or team who has captured more polygons.

Example

Liz has these Property Cards: "All angles are right angles" and "All sides are the same length." She takes all the squares (Polygons A and H). Liz has "captured" these polygons.

Polygon Capture Pieces

NAME DATE TIME



Polygon Capture
Property Cards

NAME DATE TIME

There is only one right angle.	There are one or more right angles.	All angles are right angles.	There are no right angles.
There is at least one acute angle.	At least one angle is more than 90°.	All angles are right angles.	There are no right angles.
All opposite sides are parallel.	Only one pair of sides is parallel.	There are no parallel sides.	**Wild Card:** Pick your own side property.
At least two sides are perpendicular.	There are four perpendicular sides.	All the sides are the same length.	**Wild Card:** Pick your own side property.

Polygon Capture
Property Cards (continued)

NAME DATE TIME

Angles	Angles	Angles	Angles
Angles	Angles	Angles	Angles
Sides	Sides	Sides	Sides
Sides	Sides	Sides	Sides

Polygon Capture Record Sheet

SRB 270

NAME DATE TIME

Round	Property (Properties)	List Polygon(s) Captured	Number of Polygons Captured
1			
2			
3			
4			
5			
		TOTAL	