



# Pattern Predictor

## Strands:

Number & Quantity	X
Algebra	X
Functions	
Geometry	X
Statistics & Probability	

## Materials:

- Pattern Predictor Patterns
- Pattern Predictor Paper or scrap paper
- Pencils
- Pattern strips
- Pattern sleeve



## Where:

Outside	
Inside	X
On-line	
On-site	

Observe and be the first pair to predict the first 10 figures in a pattern in this game for 4 to 8 players.

### Set-Up:

- Arrange pairs of players around a table. Pairs sit together.
- Give each pair a stack of *Pattern Predictor Paper* to use to draw the patterns.
- Cut apart and set the pattern strips upside down on the table.
- Insert the first pattern in the pattern sleeve.

**Object of the Activity:** Predict the first 10 figures of a pattern.

### Playing the Game:

1. Reveal the first three figures of the pattern. Give each pair time to predict the pattern and write a complete 10 figure prediction.
2. Reveal the fourth figure. If the fourth figure matches a pair's prediction and they are confident in their pattern, they may submit their answer.
3. If pairs cannot predict the pattern after being shown a figure in a pattern, they may ask for the next figure. If all pairs agree that they want to see the next figure, reveal the next figure of the pattern strip. Repeat this step until all teams can submit a pattern prediction.
4. Once each pair has submitted a pattern prediction, reveal the full pattern strip.
5. Scoring the round: The first pair to accurately predict and describe the pattern earns 3 points, the second pair earns 2 points, and each additional successful pair earns one point. Each pair to submit an incorrect pattern loses 1 point. Ask pairs to share how they thought about the pattern.

**To Win:** The first pair to earn 10 points wins!

### Think About It:

1. How did you discover the patterns? What strategies did you use?
2. Which pattern was the most difficult to predict? What made this pattern hard to discover?

### Variations:

**Name That Pattern:** Pairs bet points that they can name the pattern in a minimum number of figures. Points are added or deducted from the pair's score.

**Create My Pattern:** Before the game, players create patterns to use in the game.

**Individual Game:** If an adult facilitator is available, challenge students by playing individually to help them work on their problem solving skills.

### Helpful Hints:

- Patterns exist everywhere! Can you think about where you see patterns every day?
- What did you see being repeated in the different shape patterns? What was being repeated in the number patterns?