

Specific Educational Benefits of Pattern Smart

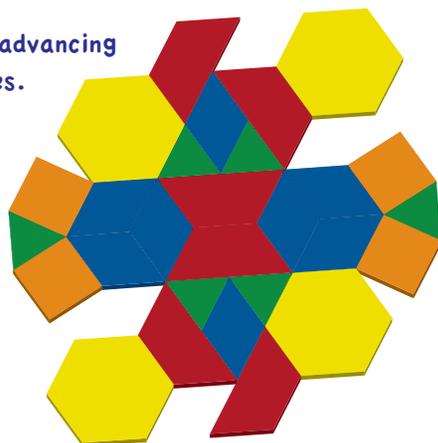
We at EduStic like to use the acronym “**SOAP**” to summarize the benefits of our products. **SOAP** stands for Speed, Organization, Accuracy, and Proficiency. All math subjects require the four skills of **SOAP** for success. Pattern Smart develops these skills in the following ways:

SPEED is important in all math problem solving. Pattern Smart helps children develop speed in a way that is engaging and fun, by competing against each other in a race with other players, or by playing independently to improve their own skills.

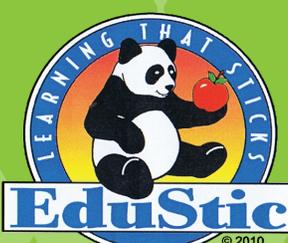
ORGANIZATION is crucial for success in mathematics. Players of Pattern Smart must be neat and organized in order to build each design. Players also easily manage and check that all pieces are put away by using the dual-purpose storage sheet-playing board. With each game, players will learn better organizational skills.

ACCURACY is essential in all aspects of mathematics. In Pattern Smart, players can easily self-check by comparing their solutions to the flipchart. Checking solutions for accuracy is a necessary skill in all branches of mathematics.

PROFICIENCY is vital in advancing to higher mathematical studies. Pattern Smart has three levels that not only challenge but also help develop mastery of the game. As players improve their Pattern Smart skills, they can advance to different levels to raise proficiency.



INSTRUCTIONS & EDUCATIONAL BENEFITS GUIDE

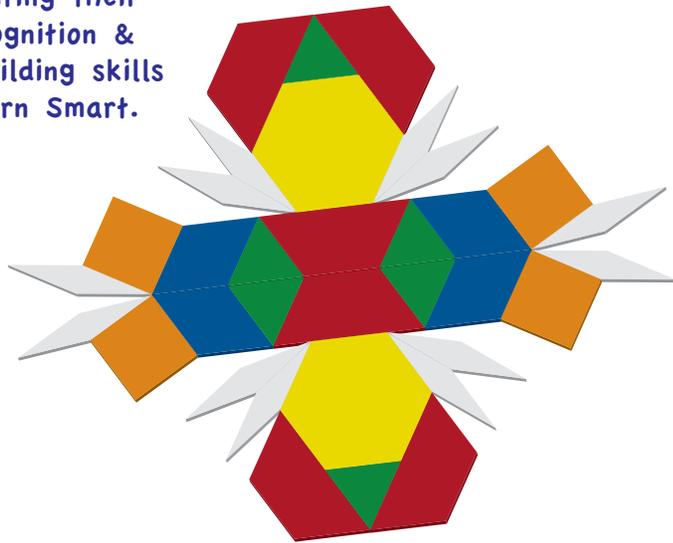


Ages 5 and up

Are You Pattern Smart?

Pattern Smart is a fast-paced pattern-recognition game that develops familiarity with patterns and shapes naturally. Players race against each other to create a pattern from a flipchart. The first player to finish yells, “Pattern Smart!” Other players check for accuracy and completeness. The first player to complete the pattern correctly wins the round and gets ten points. Losing players receive negative points based on the number of pieces short of the pattern.

Each Pattern Smart flipchart booklet has three levels—basic, intermediate, and advanced. The patterns become increasingly harder with each round of play. As players progress through the flipchart, they will increase math confidence, geometric aptitude, and critical thinking ability. With 45 challenging patterns, players will never tire of testing their shape recognition & pattern-building skills with Pattern Smart.



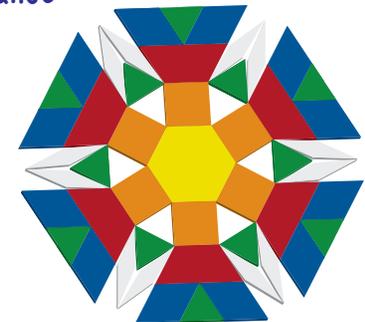
Introduction—Educational Benefits Supplement

Mathematics is defined as the recognition of connections between numbers and shapes, and the ability to express quantity in an abstract manner. Satisfactory progression in all math subject areas requires the development of visual perception skills. From the age of seven onward, children begin to use symbols to represent objects. Children learn to classify objects according to their features and connect them to the real world at this time.

Pattern Smart helps children develop recognition of important mathematical shapes—squares, hexagons, rhombuses, trapezoids, and triangles — in a fun, effortless manner. It also connects these shapes to interesting patterns, so that children can learn to recognize geometry all around them. The more exposure children have to such shapes and concepts, the better they will do in mathematics as a whole.

Other Educational Benefits of Pattern Smart:

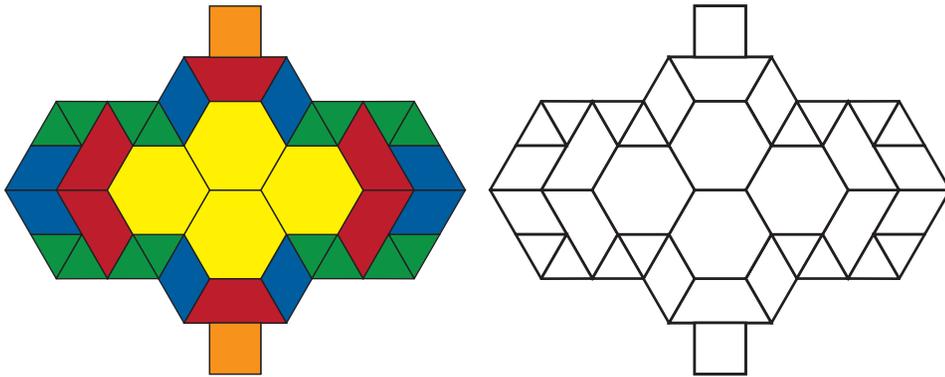
- Aptitude for mathematics
- Critical thinking skills
- Effortless enjoyment of mathematics
- Understanding positive and negative integers
- Pattern and shape recognition
- Patience and perseverance
- Good sportsmanship
- Humor and fun
- Use of logic



Game Variations

“Counting Shapes” Pattern Smart:

After winners yell “Pattern Smart!”, they have the opportunity to earn five extra points. To do so, winners must immediately identify the correct name and number of each shape within the pattern. (For example, the pattern pictured has two squares, four hexagons, six trapezoids, eight rhombuses, and sixteen triangles.) But watch out! If winners identify the incorrect name or number of any shape, five points are subtracted from their score.

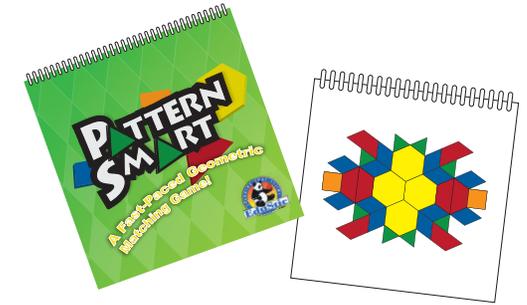


“Ratio Challenge” Pattern Smart:

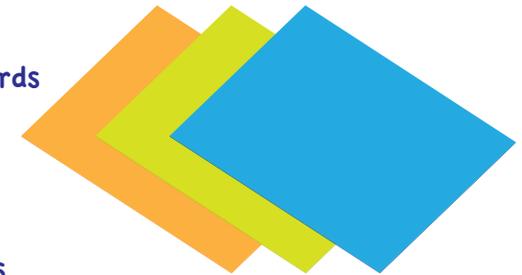
Winners of each round have the opportunity to steal up to six points from competitors. They can do this by asking competitors to identify the ratio each shape makes up of the total pattern (in reduced form, if possible). (For example, in the pattern pictured, squares make up $\frac{2}{36}$ th, or $\frac{1}{18}$ th of the total; hexagons $\frac{4}{36}$ th, or $\frac{1}{9}$ th of the total; trapezoids $\frac{6}{36}$ th, or $\frac{1}{6}$ th of the total; rhombuses $\frac{8}{36}$ th, or $\frac{2}{9}$ th of the total; and triangles $\frac{16}{36}$ th, or $\frac{4}{9}$ th of the total.) Each time competitors incorrectly identify or reduce a fraction, winners steal one point from them. But watch out! If competitors correctly identify a ratio, they steal one point from the winner and the challenge ends. The challenge can be made to one or two competitors, for as many shapes are in the pattern.

Pattern Smart Includes:

- 45-page Pattern Smart Flipchart Booklet



- 3 Laminated Storage Sheets and Playboards



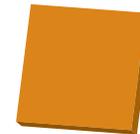
- 213 EduStic Pattern-Block Pieces



33 Trapezoids

57 Triangles

36 Small Rhombuses

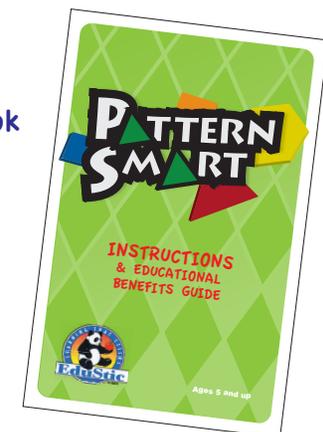


27 Squares

15 Hexagons

45 Large Rhombuses

- Parent and Teacher Handbook

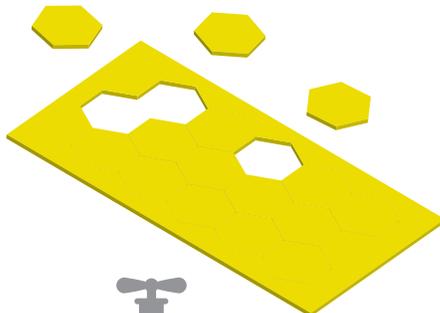


Pattern Smart Game Setup

1. Peel paper backing off EduStic tiles.



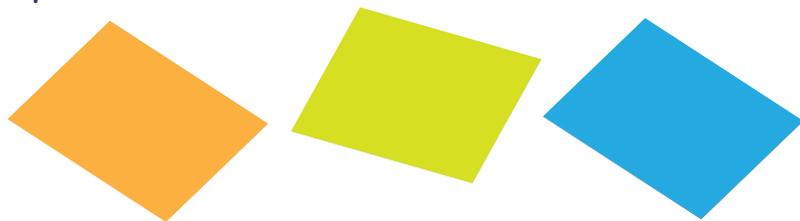
2. Separate EduStic tiles by pulling them apart.



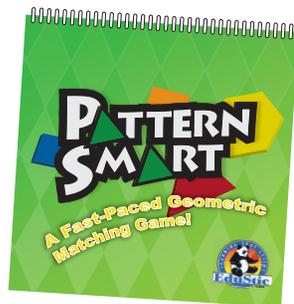
3. Clean the pattern-block pieces and playboard with water before playing.



4. Give each player a laminated playboard; flip to the blank side.



5. Put the flipchart in a location that all players can see.



How to Play

1. Divide the EduStic Pattern Block pieces equally among all players.
2. When players are ready, turn the flipchart to the first pattern.
3. Players now race to complete the pattern on the flipchart.
4. The first round ends when a player believes the pattern has been reproduced correctly and yells "Pattern Smart!"
5. If that player correctly reproduces the pattern, ten points are awarded. Other players receive one negative point per piece missing in the pattern. (For example, a player whose pattern is missing five pieces gets -5 points.)
6. If the player who yells "Pattern Smart!" has incorrectly completed the pattern, that player gets -10 points. Other players do not get negative points in this case.
7. Play continues for five rounds. At the end of five rounds, the player with the highest positive score wins.
8. Note: EduStic manipulatives must be pressed firmly to stick to clean glossy surfaces. Dust sometimes prevents EduStic manipulatives from sticking. Wipe away any dust with a moist towel before playing if necessary. Also, paper with printed ink sometimes bleeds onto EduStic manipulatives. Keep the two materials separated at all times.

