3.6 FLEXIBILITY

3.6.1 Quad PUSE – Winning Quarters

Brief description, and rules of the game

Players place PUSE tiles on the table to recreate the patterns shown on their secret task cards. Action cards can be used to influence the course of the game. The goal is to complete as many task cards as possible within the set time or before all tiles are used.

Skill focus

- **Primary Skill Focus**
  - Flexibility
- **Complementary/Secondary Skill Focus**
  - Creativity
  - Problem-solving
  - Curiosity, sense of wonder and openness
  - Resilience

Age group	Student number	Duration
6 +	3-4 students / group class size	15-20 minutes, depending on the number of tiles and task cards

How to play - brief game rules

1. Preparation: Place the PUSE tiles in two stacks at the edge of the table. A third stack consists of face-down task and action cards. Each player receives three tiles and draws from the third stack until they have exactly two task cards. (They may also receive multiple action cards.) Tiles are visible to everyone; cards remain secret.
2. The first player places one PUSE tile in the centre of the table, then draws a new tile to replace it. (Each player should always have three tiles and two task cards and may also hold action cards.)
3. Then, taking turns in clockwise order, players add one tile at a time to the shared layout, aligning full edges and making sure the size of the connecting squares matches. The goal is to complete the patterns shown on their task cards, in any scale.
4. If a player completes a task card—by placing the fourth tile in a 2×2 square so that the pattern is formed in the centre—they draw a new task card.
5. Action cards can be used to influence the game. They may be played only during the player's turn. These cards can drastically change the current situation, and it is not always easy for players to accept the new conditions.
6. If a player does not wish to place a tile during their turn, they may choose to pass.

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7. The game ends when the PUSE tiles run out or the agreed game time is over. The winner is the player who has completed the most task cards.

Indoor/Outdoor Classroom layout notes

It is primarily an indoor game. A large table is required to build continuous patterns with the tiles.

How does this game develop the primary skill?

In this game, children must continuously adapt to a changing game board and evolving situations: the shared patterns being built do not always develop according to their plans, and action cards can suddenly disrupt even well-established progress. The dynamic nature of the game requires quick rethinking and flexible thinking – especially when a task card is almost completed, but another player's move changes the course unexpectedly.

During the game, children:

- Experience what it means to adapt to a shared game space where others' decisions directly impact their own possibilities.
- Learn to develop new strategies when their original ideas can no longer be carried out.
- Practice emotional flexibility when an action card completely alters the structure they have been working on.
- Develop problem-solving skills by finding creative solutions with limited tools.
- Recognize that failure or a setback is not the end of the game, but an opportunity to rethink and move forward.

The game supports the development of both cognitive and emotional flexibility by presenting unpredictable challenges in a playful, supportive environment. It helps build children's self-confidence and perseverance, while encouraging open-minded and adaptive responses to unexpected changes—not only in the game, but also in everyday life.

What do we want to achieve regarding primary skill development (student understanding and/or behaviour)?

As a result of the activity, students:

- become more capable of flexibly adapting to unexpected situations – for example, when the shared game space does not unfold according to their plans.
- Improve in letting go of rigid original strategies and instead develop new ones that fit changing conditions.
- Learn to manage frustration and emotional ups and downs when carefully built opportunities fall through.
- Gain practical experience in viewing setbacks or limitations not as dead ends, but as opportunities for growth and progress.
- Develop cooperative skills, as the shared playing area requires constant awareness of others' moves and intentions.
- Strengthen their self-regulation and decision-making: for instance, learning when to take risks, when to wait, and how their choices impact others.

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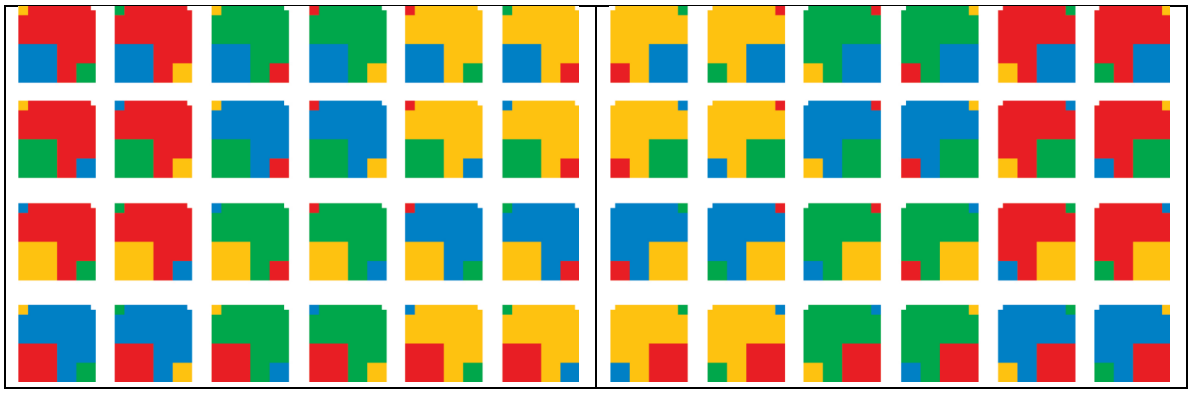
Suggested use, and practical examples

- Mathematics: The game is an excellent tool for deepening students' understanding of geometry. By combining PUSE tiles of various shapes and sizes, learners engage visually and experientially with concepts such as plane figures, area, and perimeter. As an extension activity, students can calculate the size of the completed patterns. Fulfilling the task cards also develops logical thinking, especially when time limits or additional rules are introduced.
- Combinatorics and creative thinking: Colouring the black-and-white PUSE tiles in different ways (either individually or in groups) supports understanding of pattern design, permutations, and variations. These student-created tiles can later serve as the basis for designing custom task cards.
- Visual arts: Discussing and analysing the shapes, colours, and patterns used in the game makes it suitable for visual education purposes as well. Students explore repeating patterns, colour contrasts, and proportions, and can also design their own tiles in a personal visual style.
- Cooperation and social skills development: When played in pairs or small groups, the game is particularly effective for practicing cooperation. Players make joint decisions, develop strategies together, and pay attention to one another, which helps strengthen communication, compromise, and teamwork.
- Project-based learning and creative extensions: Students can be involved in creatively expanding the game—designing new task or action cards, testing each other's versions, and giving peer feedback. This process supports the development of design thinking and reflective skills.
- As a closing classroom activity, students may invent their own game rules or variations and present them to their peers as a mini project.
- Differentiated instruction and talent development: The game is well suited for mixed-ability groups, as it allows for multiple difficulty levels: easier and more complex task cards, timed challenges, or creative tile-placement rules. This flexibility supports both inclusive classroom practice and talent development.

Materials and tools needed for implementation

- Two sets of square PUSE tiles (can be printed on paper and laminated)



- Task cards (two to three times as many as the PUSE tiles)
- Action cards
- Large table

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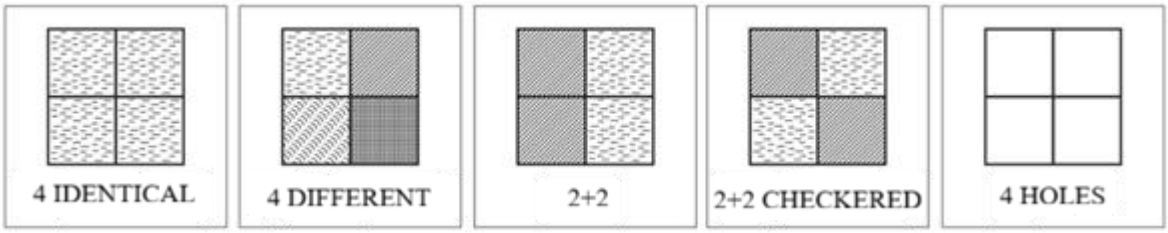
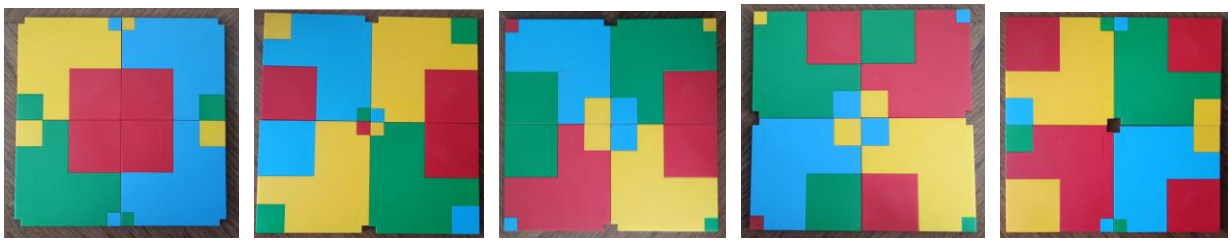
Task cards:

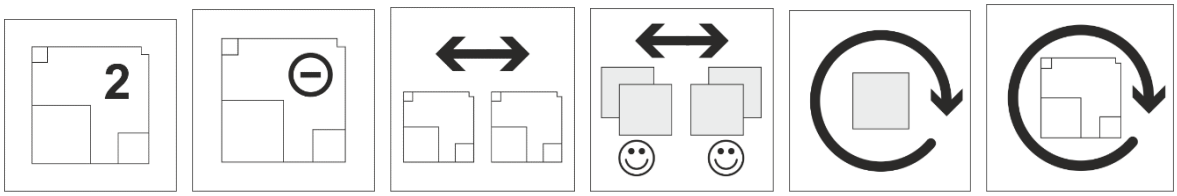
f1 f2 f3 f4 f5





f1/ Four squares of the same colour;
f2/ Four squares of different colours;
f3/ Two pairs of adjacent squares with matching colours;
f4/ Two pairs of diagonally positioned squares with matching colours;
f5/ The four PUSE squares connected by their hollow sides, colour not considered here.

a1 a2 a3 a4 a5 a6



a1/ The player using this action card may place two tiles instead of one during their turn (then draws two new tiles from the top of the decks);
a2/ The card holder can remove any tile from the shared layout and place it at the bottom of one of the draw decks (it can be reused later);
a3/ Two arbitrarily chosen tiles within the connected layout can be swapped (size-accurate matching must still be observed);
a4/ The player may exchange all their tiles, task cards, and action cards with another player of their choice;
a5/ Starting from the active player, everyone takes one task card from the player to their left, so everyone receives a new one but also gives up one;
a6/ Starting from the player who played this card, everyone passes one chosen tile clockwise to the next player, so everyone receives a new tile

Guiding questions

- Which task card is more worthwhile to complete right now?
- How can you prevent another player from completing their task card?

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- Why did you decide to pass or use an action card?
- What changed in your plan after the other players' moves?
- Have you ever thought of multiple strategies at once in case another player disrupts your current layout or an action card changes the conditions?

Tips and Tricks for dealing with challenges

- **Challenge:** Gradual introduction of action cards.
  Tip: In the initial phase of the game, it is advisable to play using only task cards, allowing students to safely master the basic mechanics. Introducing action cards is recommended once they confidently apply the core rules and are ready for more complex gameplay.
- **Challenge:** Simplified version for beginners.
  Tip: To reduce initial frustration, it is beneficial to use fewer or no action cards during the first few game sessions. This approach is especially helpful for younger or socially sensitive players.
- **Challenge:** Tile exchange option in case of stalemate.
  Tip: If a player gets stuck, allowing them to exchange one tile can be helpful. This supports flexible thinking and can reduce feelings of helplessness during the game.
- **Challenge:** Positive reinforcement of flexible thinking.
  Tip: Special attention should be given to decisions that reflect replanning and adaptation. Positive feedback should focus on the process—such as openness and creative problem-solving—rather than solely on task completion or winning the game.

Difficulty level tailoring

Beginners (6-7 years old): At the beginner level, flexibility is supported by simpler task cards and easier PUSE tile patterns. Children can play at a calm pace, practicing adaptation to the game and experiencing that plans may change without it being a problem. Action cards are introduced sparingly or gradually. In paired or small-group play, students make decisions together, promoting communication, cooperation, and initial levels of flexible thinking.

Advanced learners (8-9 years old): At the advanced level, flexibility is challenged by more complex task cards, varied PUSE tile patterns, and more frequent use of action cards. Children must quickly adapt when the game situation changes unexpectedly and develops new strategies when their original plans are no longer feasible. Group decision-making helps them enhance attention, communication, and the ability to adjust to the shared game space.

Experts (9–10 years old): At the expert level, flexibility is highly developed. Difficult task cards, complex PUSE tile patterns, and active action cards require continuous rethinking and adaptation. Children need to plan ahead, consider the moves of others, and react quickly to unexpected changes. Throughout these challenges, they learn to manage uncertainty, generate alternative solutions, and maintain motivation during the game.

Debriefing and reflection questions

- Which task card was the most difficult to complete and why?
- What was your strategy, and was it successful?
- Was there a situation where you had to change your plan? What did you do then?
- What was the biggest challenge in the game, and how did you solve it?

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- Was there a moment when you felt a bit disappointed? What helped you keep going?
- What new idea came to you during the game that you hadn't thought of at the beginning?
- If you played again next time, what would you do differently and why?

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