

24 Game (Maths 24)

Interactive Learning Tool



An engaging mathematical game designed to enhance mental arithmetic, strategic thinking and problem-solving skills for students aged 9+

24 Game (Maths 24) Learning Tool



Product Description

24 Game is an interactive mathematics learning aid designed to enhance mental arithmetic, problem-solving skills and numerical fluency through engaging gameplay. The tool is specifically designed for the South African educational environment.



Format Options



Physical Card Game



Digital Application



Core Purpose

The 24 Game aims to enhance students' mental arithmetic, problem-solving abilities and numerical fluency through an engaging and interactive approach.

Mental Arithmetic

Problem Solving

Numerical Fluency

Strategic Thinking



Target Audience

The 24 Game is designed for:



9+ years old



4th Grade



5th Grade



6th Grade



7th Grade



Higher Education



Educators



Parents



The game is aligned with South African CAPS curriculum requirements for mathematics.

Educational Objectives

The 24 Game is designed to achieve the following educational objectives, aligned with South African CAPS curriculum requirements:



Strengthen Basic Arithmetic

Reinforce addition, subtraction, multiplication, and division facts through engaging gameplay



Develop Strategic Thinking

Enhance pattern recognition and problem-solving strategies



Support CAPS Requirements

Address mathematics curriculum standards for middle and high school grades



Improve Mental Calculation

Enhance computational fluency and mental arithmetic abilities



Encourage collaborative learning



Develop critical thinking skills



Build mathematical confidence

Benefits for Learners and Educators



Learners Benefits



Enhanced Mental Arithmetic

Strengthens basic arithmetic operations: addition, subtraction, multiplication, and division.



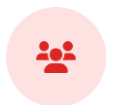
Strategic Thinking

Develops pattern recognition and strategic planning skills essential for complex problem-solving.



Numerical Fluency

Improves calculation speed and accuracy, building confidence in mathematical abilities.



Collaborative Learning

Encourages peer interaction and friendly competition, enhancing social skills while learning.



Educators Benefits



CAPS Alignment

Supports South African CAPS curriculum requirements for mathematics in middle and high grades.



Problem-Solving Strategies

Develops critical thinking and analytical skills that transfer to other subjects and real-world situations.



Classroom Engagement

Highly engaging and interactive, increasing participation and enthusiasm for mathematics.



Progress Monitoring

Provides clear indicators of student progress and mathematical improvement over time.

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Basic Game Rules

1 Card Distribution

Each player receives a card with four numbers and a central target number (typically 24).

2 Objective

Using the four numbers and basic arithmetic operations (addition, subtraction, multiplication, division), create an equation that equals the target number.

3 Solutions

Players can use each number only once per equation and must use all four numbers to reach the target.

4 Verification

Students explain their solution process to the group, using mathematical language to justify their steps.



Difficulty Levels

★ Level 1

Basic operations with positive results

★★ Level 2

Multiple operations with positive results

★★★ Level 3

Negative numbers & complex operations



Classroom Scoring



The 24 Game supports various classroom implementation models. Here are some effective scoring approaches:



Correct Solution

+5 points



Creative Approach

+3 points



Incorrect Solution

-2 points



Group Collaboration

+2 points per member

Implementation Strategies

Learning Formats



Individual

Students solve 24 Game challenges independently to develop mental math skills at their own pace.

💡 Perfect for homework or center activities



Group

Students work in small teams to solve 24 Game challenges, promoting collaborative problem-solving.

💡 Encourages communication and sharing strategies



Competitive

Students compete in 24 Game tournaments, fostering a spirit of friendly rivalry and achievement.

💡 Use in classroom competitions or math clubs

Curriculum Integration

The 24 Game can be integrated into existing mathematics curriculum to enhance:



Mental Math



Problem Solving



Strategic Thinking



Number Fluency



Aligns with South African CAPS curriculum requirements.

Implementation Steps

1

Introduce

Begin with a brief introduction to the 24 Game concept and objectives.

2

Demonstrate

Show how to play with example problems and solutions.

3

Practice

Allow students to practice in their chosen format.



Family Learning

The 24 Game can be used at home to reinforce math skills. Parents and guardians can play with children to demonstrate problem-solving.

Builds math confidence

Promotes bonding

Success Metrics & Assessment

Assessment Categories



Mental Arithmetic Skills

Assessment of addition, subtraction, multiplication and division facts



Problem-Solving Abilities

Evaluation of strategic thinking and pattern recognition



Numerical Fluency

Measurement of speed and accuracy in number manipulation



Collaborative Learning

Assessment of peer interaction and cooperative problem-solving

Assessment Methods



Performance-Based Assessment

Evaluate student performance during game play



Solution Path Analysis

Examine the strategies students use to solve problems



Timed Challenges

Measure speed of mental calculations

Key Assessment Tags

Addition Facts

Subtraction Facts

Multiplication Facts

Division Facts

Problem Solving

Strategic Thinking

Mental Fluency

CAPS Alignment



Initial Assessment



Game Play



Progress Tracking

Case Studies & Testimonials



Implementation Case Studies



Primary School



Johannesburg

Grade 5 Mathematics Program

Implementation of 24 Game in a 5th-grade mathematics curriculum to enhance mental arithmetic skills.



Increased student engagement



Secondary School



Cape Town

Grade 7 Mathematics Program

Used 24 Game to develop problem-solving skills and number fluency in 7th-grade mathematics class.



Improved strategic thinking



University



Durban

Education Support Program



Educator Testimonials



Primary School Teacher



"The 24 Game has transformed my mathematics classroom. Students are more engaged and confident when solving problems."



Secondary School Teacher



"I've seen significant improvement in my students' mental arithmetic abilities after using the 24 Game."



University Tutor



"The game-based approach makes mathematics more accessible and enjoyable for students who struggle with traditional methods."

Resources & Support Materials



Teacher Guides



Comprehensive Teaching Guide

Detailed instructions and strategies for classroom implementation.

Digital

Print



CAPS Alignment Guide

Shows how the 24 Game aligns with South African curriculum requirements.

Digital

Print



Student Materials

Game Rule Cards

Reference cards for different game variations.

Print



Strategy Guides

Helps students develop problem-solving approaches.

Digital

Print



Digital Resources



24 Game App

Mobile application with interactive gameplay.

Online



Online Learning Portal

Access to tutorials and additional learning resources.



Assessment Tools



Progress Tracking System

Monitor student progress through game performance.

Digital



Assessment Cards

Evaluate problem-solving strategies.

Next Steps & Implementation Timeline

Phase 1:
Training



Training Phase

- ✓ Teacher training sessions
- ✓ Administrator orientation

🕒 Duration: 1 month

Phase 2:
Procurement



Procurement Phase

- ✓ Order physical card sets
- ✓ Secure digital licenses

🕒 Duration: 2 months

Phase 3:
Integration



Integration Phase

- ✓ Classroom implementation
- ✓ Learning outcomes tracking

🕒 Duration: 3-6 months



Ready to implement the 24 Game in your institution?

Contact us to schedule training and procurement.