LIFTING DREAMS

SERIOUSLY ADDICTIVE MATH
MATH INTERVENTION PROGRAMME

LIFTING DREAMS NPC IS A REGISTERED NON-PROFIT COMPANY COMMITTED TO UPLIFTING SOUTH AFRICAN COMMUNITIES THROUGH EDUCATIONAL SUPPORT. WE OFFER WEEKLY SATURDAY PROGRAMMES THAT FOCUS ON STRENGTHENING CORE MATHS AND ENGLISH SKILLS, REACHING LEARNERS ACROSS ENTIRE COMMUNITIES RATHER THAN INDIVIDUAL SCHOOLS. OUR CURRENT SITES INCLUDE SOWETO (GRADE R–4), MAMELODI (GRADE 8–11), EERSTERUST (GRADE 5–8), AND A SATELLITE PROGRAMME IN THE NORTH WEST PROVINCE SUPPORTED BY OUR RESOURCES. TO DATE, WE HAVE FACILITATED OVER 3,000 CLASSES, WITH A CUMULATIVE LEARNER ATTENDANCE OF MORE THAN 45,000. THE PROGRAMME IS DELIVERED BY A DEDICATED TEAM OF CONTRACT TUTORS AND VOLUNTEERS, WORKING TOGETHER TO CLOSE LEARNING GAPS AND BUILD LASTING ACADEMIC FOUNDATIONS.

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MATHS INTERVENTION PROGRAMME

LIFTING DREAMS NPC

TRANSFORMATIVE, PROVEN MATH INTERVENTION FOR AGES 4 TO 13

LIFTING DREAMS NPC

- Registered as an NPC in July 2018
- Campuses in Soweto, Mamelodi and Eersterust
- > 45,000 cumulative attendance count
- > 45,000 nutritional meals before teaching
- > 3,000 classes hosted
- > 15 part-time youth employment opportunities created
- SARS Public Benefit Organisation and BEE Level 1 contributor

SERIOUSLY ADDICTIVE MATHS

- Global Track Record: Based on top-ranking Singapore Math.
- First developed by Singapore Government when they were facing a maths crisis similar to what South Africa faces today
- Proven Method: Uses the Concrete-Pictorial-Abstract (CPA) approach and bar modelling
- CAPS-Aligned: Tailored to South Africa's curriculum.
- Personalised Learning: Individual plans based on assessments
- Scalable Model: Low-resource, ideal for under-resourced areas
- Measured Impact: Boosts maths marks and learner confidence

A VISION FOR IMPROVED NUMERICAL LITERACY

Lifting Dreams NPC is seeking funding to roll out the world-renowned Seriously Addictive Maths (SAM) programme across both existing and future campuses in academically struggling communities in South Africa. Over the past seven years, we have spent countless hours within these communities, reaching a cumulative attendance of more than 45,000 learners through over 3,000 classes.

Our key observations are twofold:

- The earlier the intervention begins, the more impactful the long-term outcomes.
- The nature of South African classrooms is such that each learner requires an individualised intervention programme. While group-based approaches offer some benefit, their impact is often limited.

Through our social franchising licence with SAM, we are now able to offer such a solution—one that is both scalable and sustainable.

THE MODEL

COMMUNITY LEARNING & ADMIN POD

Our pod units are secure, solar-powered spaces designed to support both learning and operational needs in each community we serve. Each pod is fully equipped with reliable Wi-Fi, a printer, desks, and teaching materials, creating an effective environment for:

- Small group instruction and tutoring sessions
- One-on-one learner support
- Administrative coordination
- Parent meetings and community engagement

Purpose-built for under-resourced areas, these self-contained units ensure uninterrupted teaching, efficient programme management, and stronger connections with families—regardless of local infrastructure limitations.

COMMUNITY-BASED DELIVERY & ALIGNMENT

Each site appoints and trains a Head Teacher and Assistant from the local community to lead the programme on the ground.

Key focus areas:

- Teacher Training: Local staff trained in SAM and learner support.
- School Collaboration: Align with school curriculum and maths teachers.
- In-School Opportunities: Support shared training within partner schools.
- Community Involvement: Engage parents, churches, and local leaders to build trust and support.

This model ensures sustainability, relevance, and true community ownership.

COMMUNITY LEARNING & ADMIN POD

- Enrolment: Learners are registered and placed via a diagnostic test (Grade 4+); Grades R–3 follow a set syllabus.
- Weekly Lessons: Minimum one two-hour session per learner per week, focused on deep, concrete understanding of maths.
- Parent Contact: Weekly updates ensure ongoing engagement.
- Long-Term Support: Learners are supported from early grades through Grade 7 and beyond.
- Global Benchmarking: SAM ranks among the top globally (TIMSS, PISA).
- Whole Child Approach: Each child receives a nutrient-rich food bar on arrival and departure. Classes feature story time and teaching of good values such as hard work, kindness, and generosity.

(SET-UP COST +/- R140,000 ONCE OFF + MAINTENANCE EVERY TWO YEARS)

RUNNING COSTS ESTIMATED @ +/-R35,000 PER MONTH FOR 60 LEARNERS

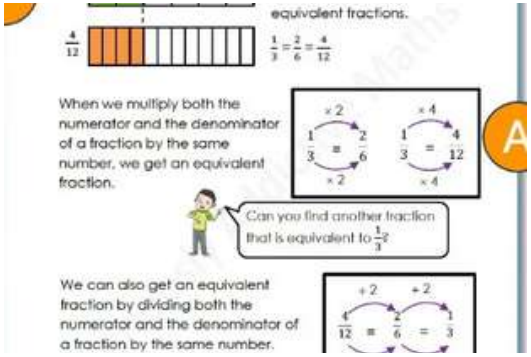
WHAT HAPPENS IN THE CLASSROOMS

CONCRETE LEARNING

Concrete Stage: This is the first stage, where learners use physical objects (manipulatives) to represent and explore mathematical ideas. It helps them see and touch the maths before moving on to drawings or symbols.

Example 1:
To teach 3 + 2, a learner might use five small blocks. They count out 3 blocks, then 2 more, and combine them to find the total. This builds a solid foundation for understanding addition.

Example 2:
To teach the concept of fractions, a learner might use a circular fraction disc. They place two 1/4 pieces side by side and discover that it makes 1/2—helping them visualise and grasp the relationship between parts and wholes.



PICTORIAL LEARNING

Pictorial Stage: In this second stage, learners move from using physical objects to drawing pictures, diagrams, or models to represent mathematical concepts. This visual step bridges the gap between hands-on experience and abstract thinking.

Example 1:
After using blocks to understand 3 + 2, a learner draws 3 circles and then 2 more. By counting the total, they reinforce the concept visually.

Example 2:
To understand fractions, a learner draws a circle and shades in two out of four equal parts to represent 2/4. This helps them visualise part-whole relationships without physical materials.

ABSTRACT LEARNING

Abstract Stage: In this final stage, learners work with numbers, symbols, and equations only—no physical objects or drawings. It reflects true mathematical fluency, built on earlier conceptual understanding.

Example 1:
After using blocks and drawings to understand 3 + 2, a learner now solves the sum as a number sentence:
3 + 2 = 5

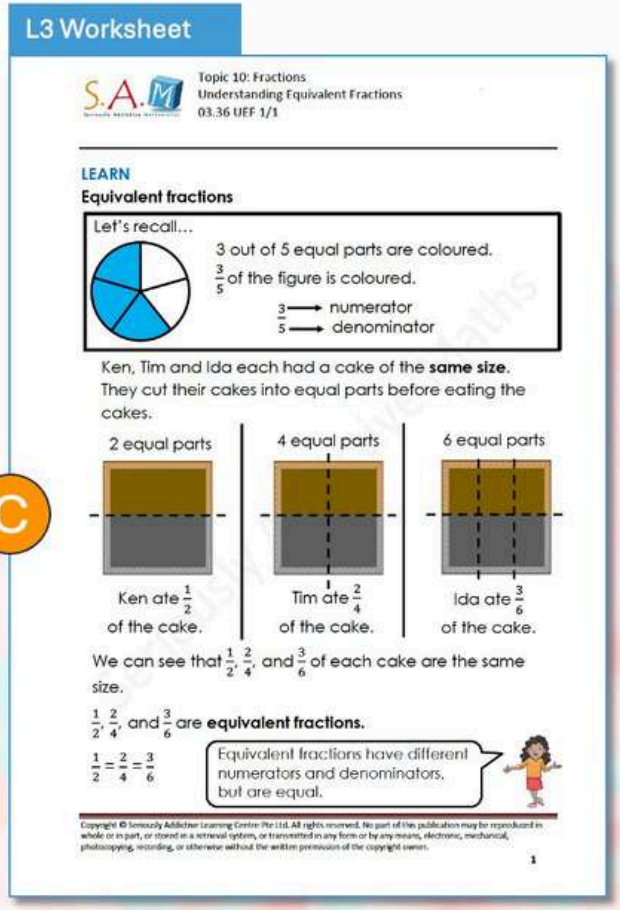
Example 2:
For fractions, a learner recognises that 2/4 = 1/2 by working with numbers and equations, without needing visual aids.

Concrete–Pictorial–Abstract (CPA) Approach

- **Concrete:**
  fold or cut a piece of paper
- **Pictorial:**
  draw the corresponding fraction bar
- **Abstract:**
  learn the procedure

C

L3 Worksheet



Topic 10: Fractions
Understanding Equivalent Fractions
03.36 UEF 1/1

LEARN

Equivalent fractions

Let's recall...

3 out of 5 equal parts are coloured.
$\frac{3}{5}$ of the figure is coloured.
3 → numerator
5 → denominator

Ken, Tim and Ida each had a cake of the **same size**. They cut their cakes into equal parts before eating the cakes.

We can see that $\frac{1}{2}$, $\frac{2}{4}$, and $\frac{3}{6}$ of each cake are the same size.

$\frac{1}{2}$, $\frac{2}{4}$, and $\frac{3}{6}$ are **equivalent fractions.**

$\frac{1}{2} = \frac{2}{4} = \frac{3}{6}$

Equivalent fractions have different numerators and denominators, but are equal.

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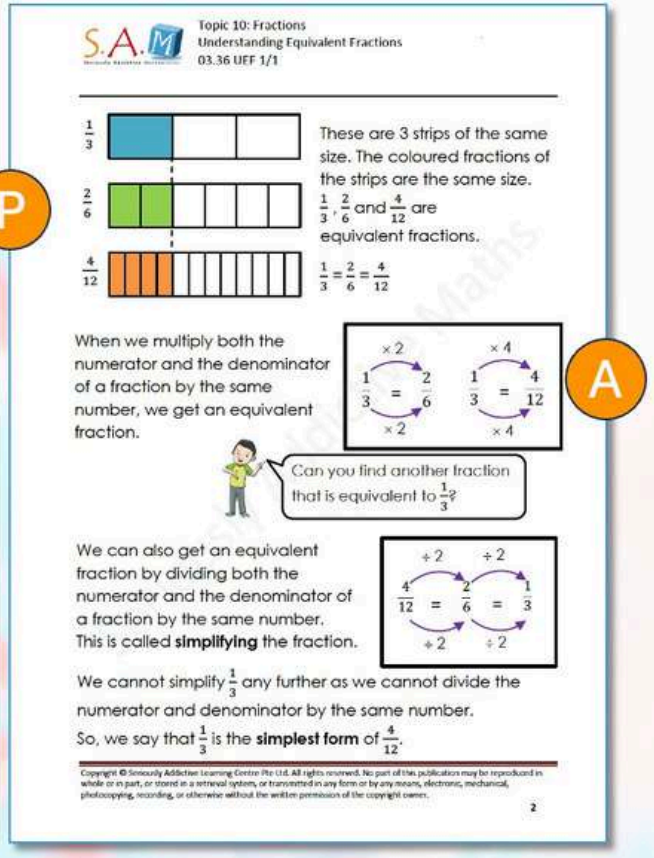

Topic 10: Fractions
Understanding Equivalent Fractions
03.36 UEF 1/1

These are 3 strips of the same size. The coloured fractions of the strips are the same size.
$\frac{1}{3}$, $\frac{2}{6}$ and $\frac{4}{12}$ are equivalent fractions.

$\frac{1}{3} = \frac{2}{6} = \frac{4}{12}$

A

When we multiply both the numerator and the denominator of a fraction by the same number, we get an equivalent fraction.

Can you find another fraction that is equivalent to $\frac{1}{3}$?

We can also get an equivalent fraction by dividing both the numerator and the denominator of a fraction by the same number. This is called **simplifying** the fraction.

We cannot simplify $\frac{1}{3}$ any further as we cannot divide the numerator and denominator by the same number.
So, we say that $\frac{1}{3}$ is the **simplest form** of $\frac{4}{12}$.

2

MORE ON THE SAM PROGRAMME

As of January 2025, Lifting Dreams NPC is a holder of a **social franchise agreement** with **Seriously Addictive Maths (S.A.M)** South Africa. This programme, which is being rolled out at our Eersterust Campus, allows for **individualised targeting of problem areas** for each child enrolled with us in 2025. We are currently seeking funding to implement the programme in Soweto, Mehlareng (Tembisa), as well as in Potchefstroom.

Seriously Addictive Mathematics (S.A.M) is a leading maths enrichment programme designed for children aged 4 to 12. Rooted in the globally acclaimed Singapore Math curriculum, S.A.M emphasises problem-solving and critical thinking skills, moving beyond traditional learning methods.

By adapting the Singapore Math methodology to align with South Africa's Curriculum and Assessment Policy Statement (CAPS), S.A.M ensures relevance to local educational standards. This adaptation makes the program particularly effective in under-resourced communities, offering structured maths interventions that build foundational skills and boost learner confidence.

The programme employs a dual approach:

- **Classroom Engagement:** Qualified trainers encourage students to discover solutions independently, fostering a deeper understanding of mathematical concepts.
- **Worksheet Reinforcement:** Customised worksheets allow students to practice at their own pace, gradually increasing in complexity to solidify their grasp of topics.

Through its innovative teaching methods, S.A.M addresses educational disparities, providing learners with the tools needed to excel in mathematics.

Tutorial: Seriously Addictive Maths programme - click here to play on YouTube

> ***What sets Lifting Dreams apart from other educational non-profits in South Africa is our use of the Seriously Addictive Maths Programme, which enables us to assess and track each learner's progress individually, ensuring targeted support and measurable improvement.***

Current Programme Structure – Eersterust Campus

- Over 40 bursaries awarded to learners in Grades 5–8
- Venue: Classes held in local community classrooms (pod not yet implemented)
- Frequency: One weekly contact session of two hours per learner
- Tutors: Sessions facilitated by contracted tutors from the University of Pretoria
- Parental Engagement: Weekly communication via parent and guardian WhatsApp groups

MORE ON THE SAM PROGRAMME

The Seriously Addictive Maths (SAM) programme is based on the Singapore Math methodology, which consistently ranks at the top in two major international benchmarking studies:

TIMSS – Trends in International Mathematics and Science Study

- Conducted by the International Association for the Evaluation of Educational Achievement (IEA).
- Measures maths and science achievement of Grade 4 and 8 learners across participating countries.

PISA – Programme for International Student Assessment

- Run by the Organisation for Economic Co-operation and Development (OECD).
- Assesses 15-year-olds' ability to use reading, mathematics, and science knowledge to meet real-life challenges.

Singapore consistently ranks #1 globally in both TIMSS and PISA mathematics scores—making its methodology (used in SAM) one of the most validated and effective in the world. The programme is currently taught in more than 20 countries globally. Lifting Dreams is one of two social franchise holders with SAM South Africa.

MORE ON THE SAM PROGRAMME

Catalytic Potential of the Seriously Addictive Maths Programme:

- **Innovation:**

-Uses a unique Concrete-Pictorial-Abstract (CPA) approach and bar modelling for deep understanding.
-Most educational NGOs in South Africa, along with the CAPS curriculum—and we have faced the same challenges—struggle to address root causes. With this innovative and individualised programme, real impactful intervention becomes achievable.
-Personalised worksheets address individual learner gaps while guiding tutors effectively.

- **Systemic Impact:**

-Employing and training community members for Grades R–3 uplifts families and creates jobs.
-For Grades 4 to 7, we employ tutors from South African universities, many of whom share similar backgrounds with our learners. These tutors serve as living proof that transformation and success are achievable, inspiring hope and ambition within our programme.
-Shifts from rote learning to problem-solving, building critical thinking and long-term skills.

- **Leveraging Resources:**

-A single, multi-use workbook reduces reliance on multiple textbooks, ideal for under-resourced schools.
-Trains local community members as facilitators, extending the curriculum's reach.

- **Scalability:**

-Easily adaptable to learners' needs with error-tracking systems and targeted worksheets.
-Comprehensive yet compact, ideal for quick deployment in diverse educational settings.

- **Sustainability:**

-Builds foundational skills that extend beyond school, preparing learners for life and work.
-Focuses on core gaps, fostering understanding over memorisation, reducing resource wastage.
-Consistent success in international assessments and its adoption in diverse educational contexts:

- **International Benchmarking:**

-Singapore students have ranked at the top in global assessments like the Trends in International Mathematics and Science Study (TIMSS) and the Programme for International Student Assessment (PISA), consistently outperforming peers worldwide in mathematics.

- **Research-Based Design:**

-Studies attribute its success to the Concrete-Pictorial-Abstract (CPA) approach, which builds deep conceptual understanding, and the bar modelling method, which enhances problem-solving skills.

- **Measurable Outcomes:**

Over 90% of students following or being aided by this curriculum consistently pass mathematics at primary levels, with many achieving high proficiency, reflecting the curriculum's effectiveness in building foundational skills.

Source: Seriously Addictive Mathematics (SAM) South Africa
**includes extensive discussion and formulation with the SAM group based on actual Lifting Dreams learners*

Thank you.

We thank you for your interest in our efforts to uplift South African education.

We would love to meet you in person or online to discuss collaboration and investment opportunities with us.

LIFTING DREAMS

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LIFTING DREAMS

THIS PRESENTATION PROVIDES AN OVERVIEW OF HOW A SAM CENTRE OPERATES IN-CLASS.

HOWEVER, THE TRUE IMPACT IS BEST UNDERSTOOD THROUGH EXPERIENCE.

WE INVITE YOU TO SCHEDULE A VISIT TO ONE OF OUR SAM CAMPUSES — WE'D LOVE TO SHOW YOU THE PROGRAMME IN ACTION.

LIFTING DREAMS IS ONE OF ONLY TWO SOCIAL FRANCHISE HOLDERS OF SERIOUSLY ADDICTIVE MATHS SOUTH AFRICA.

THIS EXCLUSIVE NON-PROFIT LICENCE EMPOWERS US TO DELIVER ONE OF THE WORLD'S MOST EFFECTIVE, EVIDENCE-BASED MATHEMATICS INTERVENTION PROGRAMMES TO SOUTH AFRICAN LEARNERS WHO NEED IT MOST.

LIFTING DREAMS