

RETEACHING FRACTIONS FOR UNDERSTANDING¹

Hanlie Murray, Alwyn Olivier and Therine de Beer
University of Stellenbosch, South Africa

This paper reports on the viability of a programme aimed at encouraging sixth grade students who have already been exposed to teaching practices leading to entrenched limiting constructions, to construct the concept of a fraction anew and to invent solution strategies for realistic problems involving fractions, in a school and classroom environment with serious practical and organisational problems.

Introduction

Much research has been done on the problems elementary school students experience with common fractions and on the design of teaching programmes for fractions at different grade levels (see Pitkethly and Hunting, 1996, for a review of the research).

An important issue is the effect that limiting constructions (D'Ambrosio & Mewborn, 1994) has on students' attempts to make sense of fractions. These include, for example, the influence of whole number schemes, which encourage the student to interpret the fraction symbol as two separate whole numbers, and limited part-whole contexts, where the student has had no or not sufficient experience of fractions as parts of collections of objects. Another issue is the possible adverse effect of rote procedures on students' attempts to construct meaningful algorithms for operations on fractions (Mack, 1990).

The above problems can be *prevented* by appropriate programmes for learning fractions in the lower elementary grades (e.g. Empson, 1995; Murray, Olivier & Human, 1996). However, when these limiting constructions are already firmly entrenched, it is to be expected that the task of encouraging students to develop strong and error-free conceptual and procedural knowledge about fractions will be much more difficult. Such attempts have already been made successfully (e.g. Bell, 1993; Kamii & Clark, 1995; Mack, 1990) in what we believe to be favourable learning environments.

In this paper we explore the possibility of implementing a programme for common fractions for Grade 6 students in less than favourable learning environments.

Theoretical framework

In line with our approach to the teaching and learning of whole number arithmetic (e.g. Murray, Olivier & Human, 1994, 1998), we believe that the teaching and learning of fractions should be based on eliciting and clarifying students' intuitions about fractions through posing realistic problems for which students have to invent their own solution strategies (cf. Empson, 1995; Kamii & Clark, 1995).

¹ Murray, H., Olivier, A. & De Beer, T. (1999). Reteaching fractions for understanding. In O. Zaslavsky (Ed.), *Proceedings of the Twenty-third International Conference for the Psychology of Mathematics Education: Vol. 3*, (pp. 305-312). Haifa, Israel.

Reteaching Fractions For Understanding

**New York (N.Y.). Board of Education.
Bureau of Reference, Research and
Statistics**

Reteaching Fractions For Understanding:

Classroom Motivation from A to Z Barbara R. Blackburn, 2013-07-23 This book focuses on basic strategies you can integrate into everyday instruction in every subject area and across grade levels It shows teachers how to motivate and engage students The practical examples in this book make it easy for you to apply these strategies in your own classroom It presents lively stories about how teachers help their students succeed You ll meet teachers of all types from preschool to high school and you ll hear the voices of real students Companion Study Guide Available **Mine the Gap for Mathematical Understanding, Grades 3-5** John SanGiovanni, 2016-09-16 Being an effective math educator is one part based on the quality of the tasks we give one part how we diagnose what we see and one part what we do with what we find Yet with so many students and big concepts to cover it can be hard to slow down enough to look for those moments when students responses tell us what we need to know about next best steps In this remarkable book John SanGiovanni helps us value our students misconceptions and incomplete understandings as much as their correct ones because it s the gap in their understanding today that holds the secrets to planning tomorrow s best teaching SanGiovanni lays out 180 high quality tasks aligned to the standards and big ideas of Grades 3 5 mathematics including addition and subtraction of multi digit whole numbers multiplication and division of single and multi digit whole numbers foundational fraction concepts foundational decimal concepts and operations with fractions and decimals The tasks are all downloadable so you can use or modify them for instruction and assessment Each big idea offers a starting task followed by what makes it a high quality task what you might anticipate before students work with the task 4 student examples of the completed task showcasing a distinct gap commentary on what precisely counts for mathematical understanding and the next instructional steps commentary on the misconception or incomplete understanding so you learn why the student veered off course three additional tasks aligned to the mathematics topic and ideas about what students might do with these additional tasks It s time to break our habit of rushing into re teaching for correctness and instead get curious about the space between right and wrong answers Mine the Gap for Mathematical Understanding is a book you will return to again and again to get better at selecting tasks that will uncover students reasoning better at discerning the quality and clarity of students understanding and better at planning teaching based on the gaps you see [Educational Measurements for the Class Teacher ...](#) New York (N.Y.). Board of education, Bureau of reference, research and statistics, 1930 **Opening the Common Core** Carol Corbett Burris, Delia T. Garrity, 2012-03-13 The CCSS open the door to success Do you wish you could leverage the Common Core State Standards CCSS to equip all students not just high achievers with the higher level thinking skills they need You can and this book will show you how The authors helped lead their district Rockville Centre in Long Island New York in closing achievement gaps and increasing the number of students who completed four year college programs The results of their efforts show a remarkable increase in both excellence and equity in English language arts math and science This book outlines the authors

research based ACES framework for instructional improvement to help achieve similar results Acceleration rather than remediation Critical thinking Equity in education for all students Support Educators will find practical strategies that are applied and developed in model lessons linked to the CCSS and KSUS Knowledge and Skills for University Success standards Understanding why we need to prepare all children to be college and career ready is easy Making it happen is not Learn from those who have succeeded and your students will reap the rewards *Bulletin* Indiana. Department of Public Instruction,1950 **Teaching Children Arithmetic** Robert Lee Morton,1953 **Diagnostic and Remedial Work in Arithmetic Fundamentals for for [!] Intermediate Grades** May Lazar,1928 **Teaching Arithmetic We Need** Guy Thomas Buswell,1955 **Publication** ,1928 *Semi-annual Report* New York (N.Y.). Board of Education. Division of Reference and Research,1928 *Bulletin* New York (N.Y.). Board of Education. Bureau of Reference, Research and Statistics,1928 *The Authentic Standards-Based Environment* Eileen Depka,2022-09-06 Why are standards so important and how do they improve student learning In *The Authentic Standards Based Environment A Systematic Approach to Learning Targets Assessment and Data* Eileen Depka dives into standards based student learning with a simple easy to use approach to unpacking standards developing learning targets and designing rubrics and assessments Using data driven methods and clear examples this book makes a standards based process manageable K 12 teachers and administrators will Learn to unpack standards and understand the components and expectations rooted in them Understand how to design standards based learning targets that directly connect to each component of the standard Design individual and common assessments that link with the rigor and expectations of the standard Report data and design a scope and sequence that will guide next steps Discover how to implement a standards based system school or districtwide Contents Introduction Part 1 The Foundation Chapter 1 Unpacking Standards Why and How Chapter 2 Designing Standards Based Learning Targets Part 2 Tools and Analysis Chapter 3 Creating Standards Based Assessments Chapter 4 Creating Standards Based Rubrics Chapter 5 Implementing Common Assessments to Ensure Comparable Data Chapter 6 Using Unpacked Standards to Report Data and Create a Scope and Sequence Part 3 Embedding the Process Chapter 7 Implementing the Process School or Districtwide References and Resources Index **Chicago Schools Journal** ,1960 **Publication** New York (N.Y.). Bureau of Educational Research,1928 *Understanding Arithmetic* Eldridge Tracy McSwain,1956 *Mathematics Handbook, Grades Five and Six[-grades Seven and Eight].* Denver Public Schools,1954 **Modern Mathematics Through Discovery** Myron Frederick Roskopf,1964 *Math Explorations and Applications* Stephen S. Willoughby,Carl Bereiter,Peter Hilton,Joseph H. Rubinstein,WrightGroup/McGraw-Hill Staff,2002-07 [The Durell and Gillet New York State Arithmetics](#) Thomas Jackson Durell,1926 **Math Advantage** Grace M. Burton,Harcourt Brace,1998-05-22

The Top Books of the Year Reteaching Fractions For Understanding The year 2023 has witnessed a remarkable surge in literary brilliance, with numerous compelling novels captivating the hearts of readers worldwide. Lets delve into the realm of popular books, exploring the fascinating narratives that have captivated audiences this year. The Must-Read : Colleen Hoover "It Ends with Us" This touching tale of love, loss, and resilience has gripped readers with its raw and emotional exploration of domestic abuse. Hoover skillfully weaves a story of hope and healing, reminding us that even in the darkest of times, the human spirit can succeed. Reteaching Fractions For Understanding : Taylor Jenkins Reids "The Seven Husbands of Evelyn Hugo" This spellbinding historical fiction novel unravels the life of Evelyn Hugo, a Hollywood icon who defies expectations and societal norms to pursue her dreams. Reids absorbing storytelling and compelling characters transport readers to a bygone era, immersing them in a world of glamour, ambition, and self-discovery. Discover the Magic : Delia Owens "Where the Crawdads Sing" This captivating coming-of-age story follows Kya Clark, a young woman who grows up alone in the marshes of North Carolina. Owens crafts a tale of resilience, survival, and the transformative power of nature, captivating readers with its evocative prose and mesmerizing setting. These bestselling novels represent just a fraction of the literary treasures that have emerged in 2023. Whether you seek tales of romance, adventure, or personal growth, the world of literature offers an abundance of captivating stories waiting to be discovered. The novel begins with Richard Pape, a bright but troubled young man, arriving at Hampden College. Richard is immediately drawn to the group of students who call themselves the Classics Club. The club is led by Henry Winter, a brilliant and charismatic young man. Henry is obsessed with Greek mythology and philosophy, and he quickly draws Richard into his world. The other members of the Classics Club are equally as fascinating. Bunny Corcoran is a wealthy and spoiled young man who is always looking for a good time. Charles Tavis is a quiet and reserved young man who is deeply in love with Henry. Camilla Macaulay is a beautiful and intelligent young woman who is drawn to the power and danger of the Classics Club. The students are all deeply in love with Morrow, and they are willing to do anything to please him. Morrow is a complex and mysterious figure, and he seems to be manipulating the students for his own purposes. As the students become more involved with Morrow, they begin to commit increasingly dangerous acts. The Secret History is a masterful and suspenseful novel that will keep you guessing until the very end. The novel is a cautionary tale about the dangers of obsession and the power of evil.

https://py.bijouxmedusa.com/public/book-search/index.jsp/Career_Growth_Checklist_For_Entrepreneurs_22_1888_Career_Growth.pdf

Table of Contents Reteaching Fractions For Understanding

1. Understanding the eBook Reteaching Fractions For Understanding
 - The Rise of Digital Reading Reteaching Fractions For Understanding
 - Advantages of eBooks Over Traditional Books
2. Identifying Reteaching Fractions For Understanding
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Reteaching Fractions For Understanding
 - User-Friendly Interface
4. Exploring eBook Recommendations from Reteaching Fractions For Understanding
 - Personalized Recommendations
 - Reteaching Fractions For Understanding User Reviews and Ratings
 - Reteaching Fractions For Understanding and Bestseller Lists
5. Accessing Reteaching Fractions For Understanding Free and Paid eBooks
 - Reteaching Fractions For Understanding Public Domain eBooks
 - Reteaching Fractions For Understanding eBook Subscription Services
 - Reteaching Fractions For Understanding Budget-Friendly Options
6. Navigating Reteaching Fractions For Understanding eBook Formats
 - ePub, PDF, MOBI, and More
 - Reteaching Fractions For Understanding Compatibility with Devices
 - Reteaching Fractions For Understanding Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Reteaching Fractions For Understanding
 - Highlighting and Note-Taking Reteaching Fractions For Understanding
 - Interactive Elements Reteaching Fractions For Understanding
8. Staying Engaged with Reteaching Fractions For Understanding

- Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Reteaching Fractions For Understanding
9. Balancing eBooks and Physical Books Reteaching Fractions For Understanding
- Benefits of a Digital Library
 - Creating a Diverse Reading Collection Reteaching Fractions For Understanding
10. Overcoming Reading Challenges
- Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Reteaching Fractions For Understanding
- Setting Reading Goals Reteaching Fractions For Understanding
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Reteaching Fractions For Understanding
- Fact-Checking eBook Content of Reteaching Fractions For Understanding
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning
- Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
14. Embracing eBook Trends
- Integration of Multimedia Elements
 - Interactive and Gamified eBooks

Reteaching Fractions For Understanding Introduction

In the digital age, access to information has become easier than ever before. The ability to download Reteaching Fractions For Understanding has revolutionized the way we consume written content. Whether you are a student looking for course material, an avid reader searching for your next favorite book, or a professional seeking research papers, the option to download Reteaching Fractions For Understanding has opened up a world of possibilities. Downloading Reteaching Fractions For Understanding provides numerous advantages over physical copies of books and documents. Firstly, it is incredibly convenient. Gone are the days of carrying around heavy textbooks or bulky folders filled with papers. With the click of a

button, you can gain immediate access to valuable resources on any device. This convenience allows for efficient studying, researching, and reading on the go. Moreover, the cost-effective nature of downloading Reteaching Fractions For Understanding has democratized knowledge. Traditional books and academic journals can be expensive, making it difficult for individuals with limited financial resources to access information. By offering free PDF downloads, publishers and authors are enabling a wider audience to benefit from their work. This inclusivity promotes equal opportunities for learning and personal growth. There are numerous websites and platforms where individuals can download Reteaching Fractions For Understanding. These websites range from academic databases offering research papers and journals to online libraries with an expansive collection of books from various genres. Many authors and publishers also upload their work to specific websites, granting readers access to their content without any charge. These platforms not only provide access to existing literature but also serve as an excellent platform for undiscovered authors to share their work with the world. However, it is essential to be cautious while downloading Reteaching Fractions For Understanding. Some websites may offer pirated or illegally obtained copies of copyrighted material. Engaging in such activities not only violates copyright laws but also undermines the efforts of authors, publishers, and researchers. To ensure ethical downloading, it is advisable to utilize reputable websites that prioritize the legal distribution of content. When downloading Reteaching Fractions For Understanding, users should also consider the potential security risks associated with online platforms. Malicious actors may exploit vulnerabilities in unprotected websites to distribute malware or steal personal information. To protect themselves, individuals should ensure their devices have reliable antivirus software installed and validate the legitimacy of the websites they are downloading from. In conclusion, the ability to download Reteaching Fractions For Understanding has transformed the way we access information. With the convenience, cost-effectiveness, and accessibility it offers, free PDF downloads have become a popular choice for students, researchers, and book lovers worldwide. However, it is crucial to engage in ethical downloading practices and prioritize personal security when utilizing online platforms. By doing so, individuals can make the most of the vast array of free PDF resources available and embark on a journey of continuous learning and intellectual growth.

FAQs About Reteaching Fractions For Understanding Books

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read

eBooks without an eReader? Absolutely! Most eBook platforms offer web-based readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Reteaching Fractions For Understanding is one of the best book in our library for free trial. We provide copy of Reteaching Fractions For Understanding in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Reteaching Fractions For Understanding. Where to download Reteaching Fractions For Understanding online for free? Are you looking for Reteaching Fractions For Understanding PDF? This is definitely going to save you time and cash in something you should think about.

Find Reteaching Fractions For Understanding :

career growth checklist for entrepreneurs 22-1888 career growth for entrepreneurs 22-2853 NFT marketplace ideas for creators 22-2133 NFT sustainable living for beginners United States 22-814 sustainable living growth strategies America 22-1333 Instagram growth tips for creators online best practices for creators 22-1325 freelancing online blueprint startups 22-1725 Instagram growth roadmap for creators 22-1226 Instagram computing explained for entrepreneurs 22-2425 cloud computing for
22-349 resume writing review for small business 22-604 resume writing entrepreneurs 22-1114 data science careers tutorial for small business study for small business 22-457 wearable technology case study for small smart home tech checklist United States 22-1712 smart home tech 22-530 remote work explained for creators 22-788 remote work for entrepreneurs 22-2676 mobile app ideas strategies America 22-1342 mobile marketing explained for creators 22-1897 content marketing explained for development step by step United States 22-2205 blockchain development

Reteaching Fractions For Understanding :

JANOME DC6030 INSTRUCTION BOOK Pdf Download View and Download Janome DC6030 instruction book online. DC6030 sewing machine pdf manual download. Download 2030QDC-B Manual This sewing machine is designed and manufactured for household use only. Read all instructions before using this sewing machine. Please note that on disposal, ... Janome DC6030 Manuals Manuals and User Guides for Janome DC6030. We have 2 Janome DC6030 manuals available for free PDF download: Instruction Book, Service Manual · Important Safety ... Janome DC6030 Sewing Machine Instruction Manual Janome DC6030 Sewing Machine Instruction Manual ; Quantity. More than 10 available ; Item Number. 223314571598 ; Brand. Manual ; MPN. 245679 ; Accurate description. PARTS LIST DC 6030 Top cover thread guide (unit). Setscrew 2.6x5. Thread guide (unit). Snap ring CS-8. Spool pin. Arm leg rear. Setscrew 4x14 (B). Bed rubber cushion. Carrying ... Janome DC6030 Manual (Box 3) Janome DC6030 Manual (Box 3) ; Price: \$20.00 CAD ; KTR Sewing Centre 650 King Edward Street ; Loc: 1-204-942-0035 ; TF: 1-888-526-6631. Janome Dc6030 Sewing Machine Instruction Manual in 2023 Janome Dc6030 Sewing Machine Instruction Manual. New Comb-Bound COPY of ... Janome Dc6030 Sewing Machine Instruction Manual. \$16.95 · In stock. Janome Spare Part DC6030 Sewing Machine Instruction ... This is an OWNERS INSTRUCTION MANUAL ONLY! No machine included! REPRINT of the manual listed in title. This is NOT an original as originals are out of print, ... Updated Proficiency in Advanced Fire Fighting course notes This Advanced Fire Fighting course is intended for those who have completed the STCW Fire Prevention & Fire Fighting course which is part of the mandatory. comdtchangenote 16721 nvic 9-14 - dco.uscg.mil Sep 18, 2019 — 1 Seafarers designated to control fire-fighting operations shall have successfully completed advanced training in techniques for fighting fire, ... STCW VI/3 - Advanced Fire Fighting Aug 11, 2021 — Seafarers designated to control fire-fighting operations shall have successfully completed advanced training in techniques for fighting fire ... ADVANCED FIRE FIGHTING Archives USCG approved Advanced Fire Fighting course meets the current STCW standards and examines Fire Fighting techniques and control of Fire Fighting operations ... STCW Advanced Fire Fighting A-VI/3 The training programme is aimed to deliver competence based training of advanced firefighting techniques. Delegates will refresh there basic fire skills and ... STCW Advanced Fire Fighting | PDF | Firefighting | Learning a better learning experience. STCW Advanced Fire Fighting. PURPOSE This course is designed to provide advanced fire fighting training in Fire Fighting Combined Basic & Advanced Looking to gain fire fighting training? Our course will help you learn how to develop and implement fire plans. Learn more and sign up today! Advanced Fire Fighting Renewal/Refresher (STCW) \$445.00 QUALMI-697: Advanced Fire Fighting Renewal/Refresher STCW Code 2011 Edition Approved! COURSE LENGTH: 16 HOURS (2 DAYS). Course Description:. REFRESHER COURSE ON ADVANCED FIRE FIGHTING This Refresher Course on Advanced Fire Fighting aims to meet the requirement in paragraph 5 of Section A-VI/3 of the STCW Code which states. 1. Course Title: Advanced Fire Fighting (AFF) The objective of this course is to train the personnel to make them capable of

demonstrating the required minimum standard of competence set out in Table A-VI/3 ... Study Guide for Understanding Medical-Surgical Nursing Here's the perfect companion to Understanding Medical-Surgical Nursing, 6th Edition. It offers the practice nursing students need to hone their critical- ... Study Guide for Understanding Medical-Surgical Nursing Here's the perfect companion to Understanding Medical-Surgical Nursing, 6th Edition. It offers the practice nursing students need to hone their critical- ... Understanding Medical-Surgical Nursing Understanding Medical-Surgical Nursing, 6th Edition, Online Resources, and Davis Edge work together to create an interactive learning experience that teaches ... Understanding Medical-Surgical Nursing: 9780803668980 Understanding Medical-Surgical Nursing, 6th Edition, Online Resources, and Davis Edge work together to create an interactive learning experience that ... Study Guide for Medical-Surgical Nursing: 11th edition Oct 31, 2023 — Corresponding to the chapters in the Ignatavicius textbook, this thoroughly updated study guide is a practical tool to help you review, practice ... Med Surg 2 Study Guide Answer Key 1. Answers. CHAPTER 1. CRITICAL THINKING AND. THE NURSING PROCESS. AUDIO CASE STUDY. Jane and the Nursing Process. Assessment/data collection, diagnosis, ... Study Guide for Understanding Medical Surgical Nursing ... Jul 15, 2020 — Study Guide for Understanding Medical Surgical Nursing 7th Edition is written by Linda S. Williams; Paula D. Hopper and published by F.A. Davis. Study Guide for Understanding Medical Surgical Nursing ... Feb 1, 2019 — Here's the perfect companion to Understanding Medical-Surgical Nursing, 6th Edition. It offers the practice nursing students need to hone their ... Study Guide for Understanding Medical-Surgical Nursing Study Guide for Understanding Medical-Surgical Nursing · Paperback(Seventh Edition) · \$41.95.