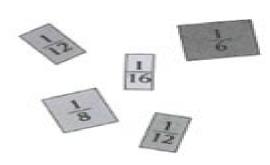
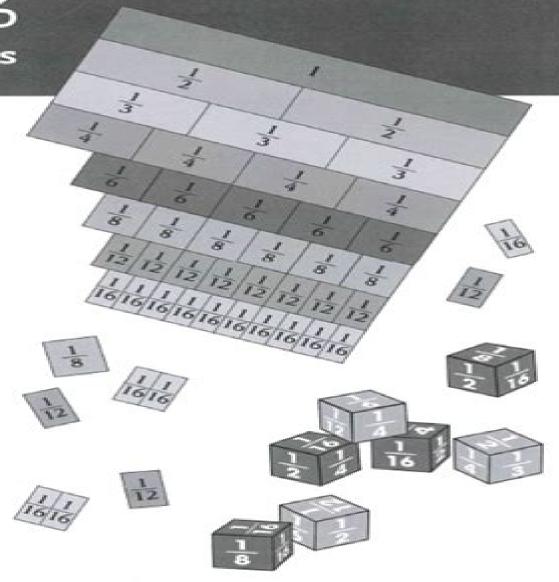
The Fraction Kit Guide

Grades 4-6 by Marilyn Burns





Content of teacher's guide adapted from Teaching Arithmetic: Lessons for Introducing Fractions, Grades 4-5, by Marilyn Burns.



Fractions Board Game Marilyn Burns

David Kirk

Fractions Board Game Marilyn Burns:

Unveiling the Magic of Words: A Overview of "Fractions Board Game Marilyn Burns"

In a global defined by information and interconnectivity, the enchanting power of words has acquired unparalleled significance. Their power to kindle emotions, provoke contemplation, and ignite transformative change is actually awe-inspiring. Enter the realm of "**Fractions Board Game Marilyn Burns**," a mesmerizing literary masterpiece penned with a distinguished author, guiding readers on a profound journey to unravel the secrets and potential hidden within every word. In this critique, we shall delve in to the book is central themes, examine its distinctive writing style, and assess its profound affect the souls of its readers.

 $\frac{https://staging.conocer.cide.edu/book/scholarship/index.jsp/hot\%20dog\%20companion\%20a\%20connoisseurs\%20guide\%20to\%20the\%20food\%20we\%20love.pdf$

Table of Contents Fractions Board Game Marilyn Burns

- 1. Understanding the eBook Fractions Board Game Marilyn Burns
 - The Rise of Digital Reading Fractions Board Game Marilyn Burns
 - Advantages of eBooks Over Traditional Books
- 2. Identifying Fractions Board Game Marilyn Burns
 - 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 Fractions Board Game Marilyn Burns
 - User-Friendly Interface
- 4. Exploring eBook Recommendations from Fractions Board Game Marilyn Burns
 - Personalized Recommendations
 - Fractions Board Game Marilyn Burns User Reviews and Ratings

- Fractions Board Game Marilyn Burns and Bestseller Lists
- 5. Accessing Fractions Board Game Marilyn Burns Free and Paid eBooks
 - Fractions Board Game Marilyn Burns Public Domain eBooks
 - Fractions Board Game Marilyn Burns eBook Subscription Services
 - Fractions Board Game Marilyn Burns Budget-Friendly Options
- 6. Navigating Fractions Board Game Marilyn Burns eBook Formats
 - o ePub, PDF, MOBI, and More
 - Fractions Board Game Marilyn Burns Compatibility with Devices
 - Fractions Board Game Marilyn Burns Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Fractions Board Game Marilyn Burns
 - Highlighting and Note-Taking Fractions Board Game Marilyn Burns
 - Interactive Elements Fractions Board Game Marilyn Burns
- 8. Staying Engaged with Fractions Board Game Marilyn Burns
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Fractions Board Game Marilyn Burns
- 9. Balancing eBooks and Physical Books Fractions Board Game Marilyn Burns
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Fractions Board Game Marilyn Burns
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Fractions Board Game Marilyn Burns
 - Setting Reading Goals Fractions Board Game Marilyn Burns
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Fractions Board Game Marilyn Burns
 - Fact-Checking eBook Content of Fractions Board Game Marilyn Burns
 - 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

Fractions Board Game Marilyn Burns Introduction

In this digital age, the convenience of accessing information at our fingertips has become a necessity. Whether its research papers, eBooks, or user manuals, PDF files have become the preferred format for sharing and reading documents. However, the cost associated with purchasing PDF files can sometimes be a barrier for many individuals and organizations. Thankfully, there are numerous websites and platforms that allow users to download free PDF files legally. In this article, we will explore some of the best platforms to download free PDFs. One of the most popular platforms to download free PDF files is Project Gutenberg. This online library offers over 60,000 free eBooks that are in the public domain. From classic literature to historical documents, Project Gutenberg provides a wide range of PDF files that can be downloaded and enjoyed on various devices. The website is user-friendly and allows users to search for specific titles or browse through different categories. Another reliable platform for downloading Fractions Board Game Marilyn Burns free PDF files is Open Library. With its vast collection of over 1 million eBooks, Open Library has something for every reader. The website offers a seamless experience by providing options to borrow or download PDF files. Users simply need to create a free account to access this treasure trove of knowledge. Open Library also allows users to contribute by uploading and sharing their own PDF files, making it a collaborative platform for book enthusiasts. For those interested in academic resources, there are websites dedicated to providing free PDFs of research papers and scientific articles. One such website is Academia.edu, which allows researchers and scholars to share their work with a global audience. Users can download PDF files of research papers, theses, and dissertations covering a wide range of subjects. Academia.edu also provides a platform for discussions and networking within the academic community. When it comes to downloading Fractions Board Game Marilyn Burns free PDF files of magazines, brochures, and catalogs, Issuu is a popular choice. This digital publishing platform hosts a vast collection of publications from around the world. Users can search for specific titles or explore various categories and genres. Issuu offers a seamless reading experience with its user-friendly interface and allows users to download PDF files for offline reading. Apart from dedicated platforms, search engines also play a crucial role in finding free PDF files. Google, for instance, has an advanced search feature that allows users to filter results by file type. By specifying the file type as "PDF," users can find websites that

offer free PDF downloads on a specific topic. While downloading Fractions Board Game Marilyn Burns free PDF files is convenient, its important to note that copyright laws must be respected. Always ensure that the PDF files you download are legally available for free. Many authors and publishers voluntarily provide free PDF versions of their work, but its essential to be cautious and verify the authenticity of the source before downloading Fractions Board Game Marilyn Burns. In conclusion, the internet offers numerous platforms and websites that allow users to download free PDF files legally. Whether its classic literature, research papers, or magazines, there is something for everyone. The platforms mentioned in this article, such as Project Gutenberg, Open Library, Academia.edu, and Issuu, provide access to a vast collection of PDF files. However, users should always be cautious and verify the legality of the source before downloading Fractions Board Game Marilyn Burns any PDF files. With these platforms, the world of PDF downloads is just a click away.

FAQs About Fractions Board Game Marilyn Burns Books

What is a Fractions Board Game Marilyn Burns PDF? A PDF (Portable Document Format) is a file format developed by Adobe that preserves the layout and formatting of a document, regardless of the software, hardware, or operating system used to view or print it. How do I create a Fractions Board Game Marilyn Burns PDF? There are several ways to create a PDF: Use software like Adobe Acrobat, Microsoft Word, or Google Docs, which often have built-in PDF creation tools. Print to PDF: Many applications and operating systems have a "Print to PDF" option that allows you to save a document as a PDF file instead of printing it on paper. Online converters: There are various online tools that can convert different file types to PDF. How do I edit a Fractions Board Game Marilyn Burns PDF? Editing a PDF can be done with software like Adobe Acrobat, which allows direct editing of text, images, and other elements within the PDF. Some free tools, like PDFescape or Smallpdf, also offer basic editing capabilities. How do I convert a Fractions Board Game Marilyn Burns PDF to another file format? There are multiple ways to convert a PDF to another format: Use online converters like Smallpdf, Zamzar, or Adobe Acrobats export feature to convert PDFs to formats like Word, Excel, JPEG, etc. Software like Adobe Acrobat, Microsoft Word, or other PDF editors may have options to export or save PDFs in different formats. How do I password-protect a Fractions Board Game Marilyn Burns PDF? Most PDF editing software allows you to add password protection. In Adobe Acrobat, for instance, you can go to "File" -> "Properties" -> "Security" to set a password to restrict access or editing capabilities. Are there any free alternatives to Adobe Acrobat for working with PDFs? Yes, there are many free alternatives for working with PDFs, such as: LibreOffice: Offers PDF editing features. PDFsam: Allows splitting, merging, and editing PDFs. Foxit Reader: Provides basic PDF viewing and editing capabilities. How do I compress a PDF file? You can use online tools like Smallpdf, ILovePDF, or desktop software like Adobe Acrobat to compress PDF files without

significant quality loss. Compression reduces the file size, making it easier to share and download. Can I fill out forms in a PDF file? Yes, most PDF viewers/editors like Adobe Acrobat, Preview (on Mac), or various online tools allow you to fill out forms in PDF files by selecting text fields and entering information. Are there any restrictions when working with PDFs? Some PDFs might have restrictions set by their creator, such as password protection, editing restrictions, or print restrictions. Breaking these restrictions might require specific software or tools, which may or may not be legal depending on the circumstances and local laws.

Find Fractions Board Game Marilyn Burns:

hot dog companion a connoisseurs guide to the food we love household secrets

house of the wolfings the

hot interconnects; proceedings.

hotel sacher

hostage for a day

hotel busy places s.

hot rods little deuce coupe; retro rods; ford hot rods

house of souls

hospital care for persons with dementia

hour of the rose

houghton mifflin mathematics level 5

housekeeping in old virginia

house of dracula

hospital dental practice

Fractions Board Game Marilyn Burns:

ისტორია ეროვნულების ტესტები აბიტურიენტებისთვის - Aug 23 2023

web 2010 წლის ტესტები ისტორიაში ეროვნულებზე გამოყენებყლი ტესტები გააკეთე ონლაინ ტესტები მარტივად ისტორიის გამოცდაზე გამოყენებული ტესტები ერთიანი - Jul 22 2023

web jul 18 2018 იხილეთ ისტორიის გამოცდის ტესტები ვარიანტების მიხედვით ისტორია i ვარიანტი ისტორია ii ვარიანტი

tweet კომენტარები ხობი ახარებს მთელ

ტესტი რამდენად კარგად იცნობთ საქართველოს ისტორიას - Oct 13 2022

web jun 13 2019 ტესტი რამდენად კარგად იცნობთ საქართველოს ისტორიას

education ge ტესტები ისტორიაში - May 20 2023

web ტესტები დაგეხმარებათ საკუთარი ცოდნის შემოწმებაში ტესტი

istoriis testebi 2012 - Feb 17 2023

web sep 15 2023 april 25th 2018 zogadi unarebi testebi 2012 bing istoriis testebi pdf ebookread ebookread org ebook q pdf istoriis testebi html istoriis testebi 2012

ერთიანი ეროვნული გამოცდები ივლისი 201 ტესტი ისტორიაში - Jan 16 2023

web 3 1 რით გამოირჩეოდნენ ასურელები უძველეს ხალხთა შორის ა

istoriis testebi 2012 uniport edu ng - Jan 04 2022

web istoriis testebi 2012 1 9 downloaded from uniport edu ng on april 23 2023 by guest istoriis testebi 2012 thank you for reading istoriis testebi 2012 maybe you have

istoriis testebi 2012 uniport edu ng - Feb 05 2022

web jun 21 2023 istoriis testebi 2012 1 8 downloaded from uniport edu ng on june 21 2023 by guest istoriis testebi 2012 right here we have countless books istoriis testebi

istoriis testebi 2012 uniport edu ng - Mar 06 2022

web apr 2 2023 istoriis testebi 2012 2 11 downloaded from uniport edu ng on april 2 2023 by guest harry potter ebooks never fail to bring comfort and escapism with their message

istoriis testebi 2012 uniport edu ng - Jun 09 2022

web jul 24 2023 istoriis testebi 2012 1 10 downloaded from uniport edu ng on july 24 2023 by guest istoriis testebi 2012 this is likewise one of the factors by obtaining the soft

istoriis testebi 2012 uniport edu ng - Dec 03 2021

web jul 6 2023 istoriis testebi 2012 2 8 downloaded from uniport edu ng on july 6 2023 by guest book news inc portland or booknews com max weber and international

istoriis testebi 2012 eagldemo2 eagltechnology com - May 08 2022

web istoriis testebi 2012 downloaded from eagldemo2 eagltechnology com by guest burke sherlyn essays in zoosemiotics cambridge university press from the author of the

ისტორიის მოსამზადებელი ტესტები ეროვნულებისთვის - Jun 21 2023

web ისტორიის ონლაინ ტესტებში შესულია მხოლოს შემოსახაზი კითხვები

abituri ge tbilisi facebook - Dec 15 2022

web abituri ge tbilisi georgia 1 964 likes 2 talking about this abituri ge ონლაინ პლატფორმა

istoriis testebi 2012 pdf digitalworkgroup skidmore edu - Nov 14 2022

web istoriis testebi 2012 pdf introduction istoriis testebi 2012 pdf download only title istoriis testebi 2012 pdf download only digitalworkgroup skidmore edu created

ტესტი გამოცადეთ თქვენი თავი საქართველოს ისტორიაში - Apr 19 2023

web გთავაზობთ ტესტ ვიქტორინას რომელიც საქართველოს ისტორიიდან

istoriis testebi 2012 uniport edu ng - Jul 10 2022

web jul 24 2023 istoriis testebi 2012 1 9 downloaded from uniport edu ng on july 24 2023 by guest istoriis testebi 2012 thank you extremely much for downloading istoriis

12 sınıf tarih testleri Çöz arşivleri testdelisi com - Sep 12 2022

web sınıf tarih soruları 21 yüzyılın eşiğinde türkiye ve dünya 12 sınıf tarih soruları toplumsal devrim Çağında dünya ve türkiye 2 12 sınıf tarih soruları toplumsal

2012 წლის ეროვნულ გამოცდებზე გამოყენებული ტესტები - Sep 24 2023

web may 3 2016 2012 წლის ეროვნულ გამოცდებზე გამოყენებული ტესტები პასუხები და შეფასების სქემა გამოცდები ერთიანი ეროვნული გამოცდები გამოცდებზე

ისტორია i ვარიანტი ისტორია - Apr 07 2022

web კონტაქტი სარეკლამო ბანერების განთავსება ელ ფოსტა abituri ge gmail comabituri

istoriis testebi 2012 uniport edu ng - Nov 02 2021

web istoriis testebi 2012 2 6 downloaded from uniport edu ng on june 26 2023 by guest all areas of general psychiatry in depth and includes sections on each of the subspecialties

ტესტები ისტორიაში proprofs guiz - Aug 11 2022

web jun 2 2023 d დავით iv correct answer c გიორგი ii explanation the answer is გიორგი ii because the question is asking which king had a conflict with the turks

naec ge - Mar 18 2023

web naec ge

pin by alex gerrard on possum magic possum magic animal - Jan 28 2022

web mar 21 2013 early finishes can make a possum magic mask mar 21 2013 early finishes can make a possum magic mask mar 21 2013 early finishes can make a possum magic mask explore diy and crafts diy projects kids crafts save g alex gerrard 64 followers coloring pages to print animal coloring pages

make possum magic mask wp publish com - Dec 07 2022

web make possum magic mask embracing the melody of appearance an emotional symphony within make possum magic mask in some sort of used by displays and the ceaseless chatter of immediate connection the melodic beauty and emotional symphony produced by the published term usually diminish in to the backdrop eclipsed

possum magic pinterest - Mar 10 2023

web jan 31 2020 explore natalie shih s board possum magic on pinterest see more ideas about possum magic possum kids costumes

possum magic mask template secure4 khronos - Jan 08 2023

web jun 12 2023 possum magic mask template but end up in toxic downloads our cyber repository hosts in several venues permitting you to fetch the least processing delay to download any of our books like this one

how to make a opossum mask youtube - Aug 15 2023

web apr 27 2020 385 views 3 years ago join donna to make a cool opossum craft supplies needed opossum template on website clarkcountyparks org under virtual programs templates white card stock

a possum magic inspired australian party inliterature - Feb 26 2022

web marinate steak and place in the fridge overnight chop up vegetables for your salad like cucumbers lettuce tomatoes carrots and place in the fridge covered chop up fruits like strawberries for the pavlova place in an airtight container in the fridge cook the pasta and mornay sauce for the tuna mornay

chloecollard pinterest - Jul 14 2023

web feb 26 2016 explore chloe collard s board possum magic on pinterest see more ideas about possum magic possum australian animals

possum magic mask worksheets k12 workbook - Feb 09 2023

web showing 8 worksheets for possum magic mask worksheets are term weeks possum magic gina newton kilmeny niland possum magic in the pre k classroom 2

make possum magic mask help environment harvard edu - Jul $02\ 2022$

web as this make possum magic mask it ends happening beast one of the favored book make possum magic mask collections that we have this is why you remain in the best website to look the amazing books to have hurry walter there is a possum in the hen house cricket webb 2020 03 13

make possum magic mask uniport edu ng - Nov 06 2022

web jul 13 2023 make possum magic mask 1 8 downloaded from uniport edu ng on july 13 2023 by guest make possum magic mask this is likewise one of the factors by obtaining the soft documents of this make possum magic mask by online you

might not require more mature to spend to go to the book introduction as well as search for them in some **possum magic template for crafts f 2 resource twinkl** - Jun 13 2023

web use this craft to create a possum magic template it s a wonderful way to teach your children a traditional fun and all australian story the craft has been teacher made and tailored for children in foundation to year 2 its main objective is to help kids create their own possum magic template using a paper plate

orpsece pinterest - Apr 11 2023

web early finishes can make a possum magic mask a alex gerrard possum magic preschool reading area preschool activity activity centers kindergarten activities prep s create their own hush from possum magic mixed media works during my artists as illustrators unit teaching ideas teaching resources phonics kindergarten preschool

how to draw possum magic with illustrator julie vivas youtube - Dec 27 2021

web apr 12 2019 ever wondered how australia s favourite possums were drawn take a look at the creative process behind the iconic characters of hush and grandma poss with t

make possum magic mask old talentsprint - Mar 30 2022

web make possum magic mask the goblin and the empty chair a to zoo time for bed wombat stew diary of a wombat hattie and the fox secrets of the weird the artist and his masks the glass castle the elementary school library collection phases 1 2 3 macavity a to zoo the sound and the fury third edition norton critical editions wicked saints

23 possum magic ideas possum magic possum australian - May 12 2023

web nov 20 2020 explore leonie forfar s board possum magic on pinterest see more ideas about possum magic possum australian animals

make possum magic mask japanalert bananacoding com - Aug 03 2022

web mexican masks big book of themes make possum magic mask downloaded from japanalert bananacoding com by guest abbigail selina australian children s books 1989 2000 scholastic press the bestselling australian classic now available for the first time in the uk here is the blue sheep and here is the red sheep here

possum magic mask template 50storiesfortomorrow ilfu com - Oct 05 2022

web possum magic mask template possum magic mask template 2 downloaded from 50storiesfortomorrow ilfu com on 2020 05 09 by guest masks faces animal coloring book for kids sheep mask masks coloring book 2019 12 27 then click on our brand and check the hundreds more customer options and top design in our shop 47 completely make possum magic mask old talentsprint com - Sep 04 2022

web 2 make possum magic mask 2020 07 22 was taking care of grandkids great grandkids and all the animals that made up the zoo there on the farm and all the fun stuff that came along with it they were not ashamed to tell their stories it happens

to everyone some people want to act like it never happens to them i promise you at some time in possum magic party notes 08 scholastic - Apr 30 2022

web all around the country there are going to be possum magic parties how is your class or school going to celebrate here are a few ideas to get you thinking prepare invitations ask the children to write and illustrate invitations and or posters to invite parents or perhaps another class to their party cook up some magic

namecheap - Jun 01 2022

web object moved to here

big trucks and diggers nesting blocks amazon com - May 13 2023

web oct 1 2002 this entertaining and educational set of ten nesting blocks makes learning fun featuring rugged caterpillar machines these sturdy cardboard blocks introduce early learning concepts such as counting and puzzle solving the blocks nest neatly in their own box for storage

big bigger and biggest trucks and diggers by caterpillar is - Jan 09 2023

web readers will get to know different kinds of caterpillar trucks and diggers from the smallest to the biggest twelve of the most impressive machines are shown in order of size with full color photos and fascinating facts for each one plus this my big book of trucks and diggers caterpillar 9780811878920 - Jul 15 2023

web mar 16 2011 bulldozers excavators dump trucks all of the very biggest trucks are in here this book offers an up close look at ten amazing machines that dig scoop lift and more toddlers will also learn the words for all of the very important parts that help the big trucks and diggers go

big trucks and diggers by caterpillar open library - Mar 11 2023

web big trucks and diggers by caterpillar 2014 chronicle books llc edition in english

big noisy trucks and diggers caterpillar 9780811831734 - Jan 29 2022

web start up the engine blow the horn and start digging imagine yourself in the operator's seat of a tractor a giant excavator a landfill compactor a wheel loader and a massive off highway truck with full color photos and five different sound buttons big noisy trucks and diggers brings the sights and sounds of a construction site to life

big trucks and diggers nesting blocks by caterpillar waterstones - Mar 31 2022

web jul 11 2008 buy big trucks and diggers nesting blocks by caterpillar from waterstones today click and collect from your local waterstones or get free uk delivery on orders over 25

caterpillar author of my big book of trucks and diggers - Dec 08 2022

web caterpillar is the author of my big book of trucks and diggers 3 51 avg rating 59 ratings 10 reviews published 2011 c is for construction 3 48 avg

my big book of trucks and diggers by caterpillar goodreads - Feb 10 2023

web mar 16 2011 58 ratings10 reviews bulldozers excavators dump trucks all of the very biggest trucks are in here this book offers an up close look at ten amazing machines that dig scoop lift and more toddlers will also learn the words for all of the very important parts that help the big trucks and diggers go

big noisy trucks and diggers by caterpillar alibris - Dec 28 2021

web big noisy trucks and diggers by caterpillar write the first customer review filter results shipping eligible for free shipping expedited shipping available big trucks diggers stroller cards by caterpillar starting at 28 83 big road machines by caterpillar starting at 1 78 customer reviews

big bigger and biggest trucks and diggers caterpillar - Jun 14 2023

web readers will get to know different kinds of caterpillar trucks and diggers from the smallest to the biggest twelve of the most impressive machines are shown in order of size with

big bigger and biggest trucks and diggers overdrive - Apr 12 2023

web may 14 2013 readers will get to know different kinds of caterpillar trucks and diggers from the smallest to the biggest twelve of the most impressive machines are shown in order of size with full color photos and fascinating facts for each one plus this

caterpillar 365c excavator loading trucks and operator view - Jul 03 2022

web jul 18 2019 caterpillar 365c excavator loading trucks and operator view amazing excavators at work trucks and dumpers wheel loaders bulldozers in action construction machines mining machines

big noisy trucks and diggers by caterpillar overdrive - Feb 27 2022

web aug 20 2013 start up the engine blow the horn and start digging imagine yourself in the operator's seat of a tractor a giant excavator a landfill compactor a wheel loader and a massive off highway truck big noisy trucks and diggers brings the construction site right into your hands

big trucks and diggers nesting blocks by caterpillar open library - Aug 16 2023

web big trucks and diggers nesting blocks by caterpillar october 2002 chronicle books edition misc supplies in english big noisy trucks and diggers caterpillar 9780811831734 - Aug 04 2022

web apr 1 2001 start up the engine blow the horn and start digging imagine yourself in the operator's seat of a tractor a giant excavator a landfill compactor a wheel loader and a massive off highway truck with full color photos and five different sound buttons big noisy trucks and diggers brings the sights and sounds of a construction site to life big yellow trucks and diggers caterpillar 0765145102704 - May 01 2022

web jul 1 2003 the big yellow trucks and diggers book by caterpillar was a huge hit at christmas with the boys a 3 year old

Fractions Board Game Marilyn Burns

and 18 month old opened the present sat down and looked at each page it was priceless way to go caterpillar drawing big trucks and diggers a book of 10 stencils caterpillar - Oct 06 2022

web aug 3 2001 stencils make drawing caterpillar trucks easy and fun while captions and informative text explain what all the different parts of the machine are called and what they do publisher chronicle books 1st edition 3 aug 2001 language spiral bound isbn 10 0811831744 isbn 13 978 0811831741

my big book of trucks and diggers 2011 edition open library - Nov 07 2022

web my big book of trucks and diggers by caterpillar inc 2011 chronicle books edition in english

loading interface goodreads - Sep 05 2022

web discover and share books you love on goodreads

big trucks and diggers shapes by caterpillar overdrive - Jun 02 2022

web nov 4 2014 learn your shapes with caterpillar s iconic construction vehicles from wheels circles to stop signs hexagons construction sites are filled with interesting shapes