An Illustrated Book of Bad Arguments by Ali Almossawi

Hardcover: 64 pages
Publisher: The Experiment; ILL edition (September 23, 2014)
ISBN-10: 1615192255


The antidote to fuzzy thinking, with furry animals!

Have you read (or stumbled into) one too many irrational online debates? An Illustrated Book of Bad Arguments! is a handy guide to bring the internet age a much-needed dose of old-school logic.

Here are cogent explanations of the straw man fallacy, the slippery slope argument, the ad hominem attack, and other common attempts at reasoning that actually fall short—plus a beautifully drawn menagerie of animals who (adorably) commit every logical faux pas. Rabbit thinks a strange light in the sky must be a UFO because no one can prove otherwise (the appeal to ignorance). And Lion doesn’t believe that gas emissions harm the planet because, if that were true, he wouldn’t like the result (the argument from consequences).

Once you learn to recognize these abuses of reason, they start to crop up everywhere from congressional debate to YouTube comments—which makes this geek-chic book a must for anyone in the habit of holding opinions.

Decathletes should be familiar with the following argument fallacies:

- Slippery slope
- Appeal to hypocrisy
- Groupthink
- Faulty cause/Effect
- Appeal to fear
- Generalization
- Composition
- Appeal to ignorance

- Affirming the consequent
- Bandwagon
- Ad hominem
- False dilemma
- Two wrongs make a right
- Cherry-picking
- Division
- Guilt by association

In addition, there are a number of websites that provide excellent examples and descriptions for these argument fallacies.
Team Event: Logic Test

The Logic Test may contain, but is not limited to, any of the following types of problems:

- Sudoku
- Ken Ken
- Cryptograms
- Algebra word problems
- Anagrams
- Spatial reasoning
- Patterns & graphs
- Probability
- Lateral thinking
- Logic grids
- Venn diagrams
- Rebus puzzles
- True/False logic

The following websites provide excellent sample problems:

- [http://www.brainbashers.com](http://www.brainbashers.com)
- [http://www.mensaforkids.org](http://www.mensaforkids.org)
- [http://puzzlersparadise.com](http://puzzlersparadise.com)
- [http://www.sudoku.org.uk](http://www.sudoku.org.uk)
- [http://www.mathisfun.com/puzzles](http://www.mathisfun.com/puzzles)
- [http://www.allstarpuzzles.com](http://www.allstarpuzzles.com)
- [http://www.braingle.com/brainteasers](http://www.braingle.com/brainteasers)
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Team Event: Super Quiz

Fine Arts

*Leonardo da Vinci for Kids: His Life and Ideas*, by Janis Herbert

- **Paperback**: 104 pages
- **Publisher**: Chicago Review Press; 1st edition (October 1, 1998)
- **ISBN-10**: 1556522983
- **ISBN-13**: 978-1556522987

The marriage of art and science is celebrated in this beautifully illustrated four-color biography and activity book. Kids will begin to understand the important discoveries that da Vinci made through inspiring activities like determining the launch angle of a catapult, sketching birds and other animals, creating a map, learning to look at a painting, and much more. Includes a glossary, bibliography, listing of pertinent museums and Web sites, a timeline, and many interesting sidebars.

Literature

*The Five People You Meet in Heaven*, by Mitch Albom

- **Paperback**: 196 pages
- **Publisher**: Hachette Books; Reprint edition (April 7, 2003)
- **ISBN-10**: 1401308589
- **ISBN-13**: 978-1401308582

Available in Kindle, paperback, and hardcover versions.

Eddie is a grizzled war veteran who feels trapped in a meaningless life of fixing rides at a seaside amusement park. His days are a dull routine of work, loneliness, and regret.

Then, on his 83rd birthday, Eddie dies in a tragic accident. He awakens in the afterlife, where he learns that heaven is not a lush Garden of Eden, but a place where your earthly life is explained to you by five people who changed Eddie’s life path forever.

In *The Five People You Meet in Heaven*, Mitch Albom gives us an astoundingly original story that will change everything you've ever thought about the afterlife--and the meaning of our lives here on earth.
Team Event:  Super Quiz

Religion

*The Mark of a Giant: 7 People Who Changed the World* by Ted Stewart

**Introduction**

Chapter 1: Abraham of Ur  
Chapter 3: Paul – Apostle to the Gentiles  
Chapter 7: Mother Teresa

Hardcover: 320 pages  
Publisher: Shadow Mountain (May 13, 2013)  
ISBN-10: 1609071816  

Available in Kindle and hardcover versions.

Throughout the course of history, civilization has been blessed by strong-minded men and women who have impacted our world in extraordinary ways. Their imprint upon humanity is beyond dispute. And many would contend that they were no less than the result of Divine Providence a gift of God to the human race. Who are these individuals? What is it about these few that make them different? Were they merely in the right place at the right time? Or were they somehow chosen? The chapters in the book covering the lives of Abraham of Ur, Paul the Apostle, and Mother Teresa will be used for the religion section of the Super Quiz.

*The Holy Bible*

The biblical accounts of Abraham of Ur and Paul the Apostle are contained in the following passages from the Bible.

- Genesis 11:27-32, Genesis 12 - 18, Genesis 21-25  
- Hebrews 11:17-19  
**Team Event: Super Quiz**

**Science**

*The Mark of a Giant: 7 People Who Changed the World* by Ted Stewart

- **Introduction**
- **Chapter 4: The Incomparable Mr. Newton**
- **Chapter 5: Madame Marie Curie**

**Hardcover:** 320 pages  
**Publisher:** Shadow Mountain (May 13, 2013)  
**ISBN-10:** 1609071816  
**ISBN-13:** 978-1609071813

Available in Kindle and hardcover versions.

Throughout the course of history, civilization has been blessed by strong-minded men and women who have impacted our world in extraordinary ways. Their imprint upon humanity is beyond dispute. The chapters in the book covering the lives of Sir Isaac Newton and Madame Marie Curie will be used for the science section of the Super Quiz.


- **Paperback:** 512 pages  
- **Publisher:** DK ADULT; Reprint edition (September 19, 2011)  
- **Language:** English  
- **ISBN-10:** 0756689015  
- **ISBN-13:** 978-0756689018

Available in paperback and e-book versions.  
**Additional product site:** [www.us.dk.com](http://www.us.dk.com)

**Note:** This is the same resource that was used for the Academic Decathlon individual Science test in 2014 & 2015.

In addition, the decathletes should know the following:

- Newton’s three laws of motion, pgs. 104-105
- Newton’s idea of gravity, gravitational force, pgs. 106-109
- X-rays, pgs. 294-295
- Electromagnetic spectrum, pgs. 258-259
- Radiation and radioactivity, Einstein’s equation, $E = mc^2$, pgs. 298-300
Team Event: Super Quiz

Social Studies

*The Mark of a Giant: 7 People Who Changed the World* by Ted Stewart

**Introduction**

*Chapter 2: Pericles the Greek*
*Chapter 6: Dr. Martin Luther King, Jr.*

**Hardcover:** 320 pages  
**Publisher:** Shadow Mountain (May 13, 2013)  
**ISBN-10:** 1609071816  
**ISBN-13:** 978-1609071813

Available in Kindle and hardcover versions.

Throughout the course of history, civilization has been blessed by strong-minded men and women who have impacted our world in extraordinary ways. Their imprint upon humanity is beyond dispute. And many would contend that they were no less than the result of Divine Providence a gift of God to the human race. Who are these individuals? What is it about these few that make them different? Were they merely in the right place at the right time? Or were they somehow chosen? The chapters in the book covering the lives of Martin Luther King, Jr. and Pericles will be used for the social studies section of the Super Quiz.

In addition, the decathletes will need to know:

- **Pericles’s funeral oration**
- **Martin Luther King, Jr.’s “I Have a Dream” speech**
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Individual Subject Tests:

Religion

Radiate: More Stories of Daring Teen Saints, by Colleen Swain

Paperback: 160 pages
Publisher: Liguori Publications (November 1, 2012)
ISBN-10: 0764821474

Available in Kindle and paperback.

Radiate: More Stories of Daring Teen Saints will continue to set your heart on fire. Whether you are young or merely a youth at heart, you will be inspired by the heroism of these teenage saints. Young male and female teen saints from various places in the world are in this text; a total of ten stories in all. As you read these dynamic stories, remember that you too are called to life of joy and holiness. This sequel will continue to set your heart ablaze with vivid storytelling, saintly challenges, prayers, images, and more. Saints in Radiate include Saint Bernadette, Saint Rose of Viterbo, Saint Lucy, Blessed Laura Vicuña, Saint Agnes of Rome, Saint Aloysius Gonzaga, Saint Peter Yu Tae-chol, Blessed Ceferino Namuncurá, and the Japanese Martyrs, Saint Gabriel of Duisco, Saint Louis Ibaraki, St. Juan Soan of Goto, and St. Thomas Kozaki.

Literature

The Phantom Tollbooth, by Norton Juster

Paperback: 272 pages
Publisher: Bullseye Books; Reprint edition (October 12, 1988)
ISBN-10: 0394820371

Hailed as “a classic. . . . humorous, full of warmth and real invention” (The New Yorker), this beloved story--first published more than fifty ago--introduces readers to Milo and his adventures in the Lands Beyond.

For Milo, everything’s a bore. When a tollbooth mysteriously appears in his room, he drives through only because he’s got nothing better to do. But on the other side, things seem different. Milo visits the Island of Conclusions (you get there by jumping), learns about time from a ticking watchdog named Tock, and even embarks on a quest to rescue Rhyme and Reason! Somewhere along the way, Milo realizes something astonishing. Life is far from dull. In fact, it’s exciting beyond his wildest dreams.
Individual Subject Tests:

Science

*DK Eyewitness Books: Skeleton*, by Steve Parker

- Hardcover: 72 pages
- Publisher: DK Children (August 2, 2004)
- ISBN-10: 0756607272

The skeleton is the framework of the body. It supports, moves, and protects, allowing us to walk, run, jump, and swim. Eyewitness Skeleton brings its complexity and ingenuity of design vividly to life. Starting with the human skeleton, it explains how each set of bones functions. It examines in detail the construction of the skull, spine and rib cage, hands, arms, legs, and feet. Comparisons are drawn with the bones of birds, reptiles, amphibians, fish, insects, and mammals. See the 206 different bones in the human body, how your skull differs from a lion's or a chimp's, how teeth grow, and what each one is for, and what the inside of a bone looks like. Learn how bones mend themselves when they break, why half the bones in your body are in your hands and feet, how many toes a horse has and what has happened to the tail you once had. Discover the smallest bones in the human body, why some creatures wear their skeletons on the outside and what animal once owned the oldest bones ever found on Earth.

Fine Arts

*The Alchemy of Animation: Making an Animated Film in the Modern Age*, by Don Hahn

- Paperback: 144 pages
- Publisher: Disney Editions (October 7, 2008)
- ISBN-10: 1423104765

*The Alchemy of Animation: Making an Animated Film in the Modern Age* is a step-by-step introduction to animated filmmaking from one of the foremost producers of animated features. By drawing upon more than seven decades of Disney's classic and beloved animated films, this stunning book explores the role of the directors, story artists, songwriters, and animators who each play an integral role in the creation of an animated feature.

This book includes a special focus on the digital techniques of filmmaking and fresh, behind-the-scenes work from the most current Disney films, including *Chicken Little, Meet the Robinsons*, and *Bolt*, as well as showing other forms of animation such as the stop-motion of *Tim Burton's Nightmare before Christmas* and *James and the Giant Peach*. 

Individual Subject Tests:

Social Studies

The Signers: The 56 Stories behind the Declaration of Independence
by Dennis Brindell Fradin

Hardcover and paperback available:

Publisher: Walker Childrens (January 1, 2003)
ISBN-10: 0802788491

"We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the pursuit of Happiness."

For more than 225 years these words have inspired men and women in countries the world over to risk everything in pursuit of these lofty ideals. When they first appeared in our nation's birth certificate, the Declaration of Independence, they were a call to action for a colony on the brink of rebellion. The 56 men who dared to sign their names to this revolutionary document knew they were putting their reputations, their fortunes, and their very lives on the line by boldly and publicly declaring their support for liberty and freedom.

Who were these men who are the first heroes of our nation? Award-winning team of author Dennis Brindell Fradin and illustrator Michael McCurdy bring their considerable talents together to illuminate the lives of these valiant men, ranging from the poorest farmers to the wealthiest merchants, whose dauntless courage inspired thousands of colonists to risk all for freedom.
Individual Subject Tests:

Current Events

CNN Student News
from September 21, 2015 through January 29, 2016

http://www.cnn.com/studentnews/

What is CNN Student News?

CNN Student News is a ten-minute, commercial-free, daily news program designed for middle and high school classes. It is produced by the journalists at CNN. This award-winning show and its companion website are available free of charge throughout the school year.

Where can I find CNN Student News?

You can see it as a streamed video or download it as a free podcast, both available on the CNN Student News website or through iTunes. The show is available Monday through Friday during the school year. The program is free and accessible to anyone who wants to watch; there are no subscription charges, sign-ups, or contracts to complete.

What happens if I miss a day?

Daily news programs are archived on the CNN Student News website. Just click on the “Show Archive” button to see a list of shows, or use the following link:

**Grammar Girl Presents the Ultimate Writing Guide for Students,**
by Mignon Fogarty

- **Paperback:** 304 pages
- **Publisher:** St. Martin's Griffin; 1 edition (July 5, 2011)
- **ISBN-10:** 0805089446
- **ISBN-13:** 978-0805089448

Available in Kindle and paperback versions.


For beginners to more advanced students, this guide covers it all: the parts of speech, sentences, and punctuation are all explained clearly and concisely. Pop quizzes are scattered throughout to reinforce the explanations, as well as Grammar Girl's trademark Quick and Dirty Tips--easy and fun memory tricks to help with those challenging rules.

Complete with a writing style chapter and a guide to the different kinds of writing--everything from school papers to letter writing to e-mails--this guide is sure to become the one-stop, essential book on every student's desk.

**Conventions of Standard English:**

**CCSS.ELA-LITERACY.L.8.1**
Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.

- **CCSS.ELA-LITERACY.L.8.1.A**
  Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences.

- **CCSS.ELA-LITERACY.L.8.1.B**
  Form and use verbs in the active and passive voice.

- **CCSS.ELA-LITERACY.L.8.1.C**
  Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.

- **CCSS.ELA-LITERACY.L.8.1.D**
  Recognize and correct inappropriate shifts in verb voice and mood.
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**Individual Subject Tests:**

**English**

CCSS.ELA-LITERACY.L.8.2
Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.

- **CCSS.ELA-LITERACY.L.8.2.A**
  Use punctuation (comma, ellipsis, dash) to indicate a pause or break.

- **CCSS.ELA-LITERACY.L.8.2.B**
  Use an ellipsis to indicate an omission.

- **CCSS.ELA-LITERACY.L.8.2.C**
  Spell correctly.

**Knowledge of Language:**

CCSS.ELA-LITERACY.L.8.3
Use knowledge of language and its conventions when writing, speaking, reading, or listening.

- **CCSS.ELA-LITERACY.L.8.3.A**
  Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).

**Vocabulary Acquisition and Use:**

CCSS.ELA-LITERACY.L.8.4
Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.

- **CCSS.ELA-LITERACY.L.8.4.A**
  Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.

- **CCSS.ELA-LITERACY.L.8.4.B**
  Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *precede*, *recede*, *secede*).
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Individual Subject Tests:

Math

Expressions and Equations Work with radicals and integer exponents:

CCSS.MATH.CONTENT.8.EE.A.1
Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, \(3^2 \times 3^{-5} = 3^{3} = 1/3^3 = 1/27\).

CCSS.MATH.CONTENT.8.EE.A.2
Use square root and cube root symbols to represent solutions to equations of the form \(x^2 = p\) and \(x^3 = p\), where \(p\) is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that \(\sqrt{2}\) is irrational.

CCSS.MATH.CONTENT.8.EE.A.3
Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. For example, estimate the population of the United States as \(3 \times 10^8\) and the population of the world as \(7 \times 10^9\), and determine that the world population is more than 20 times larger.

CCSS.MATH.CONTENT.8.EE.A.4
Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.
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**Individual Subject Tests:**

**Math**

*Understand the connections between proportional relationships, lines, and linear equations.*

**CCSS.MATH.CONTENT.8.EE.B.5**

Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.

**CCSS.MATH.CONTENT.8.EE.B.6**

Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation \( y = mx \) for a line through the origin and the equation \( y = mx + b \) for a line intercepting the vertical axis.

*Analyze and solve linear equations and pairs of simultaneous linear equations.*

**CCSS.MATH.CONTENT.8.EE.C.7**

Solve linear equations in one variable.

**CCSS.MATH.CONTENT.8.EE.C.7.A**

Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form \( x = a \), \( a = a \), or \( a = b \) results (where \( a \) and \( b \) are different numbers).

**CCSS.MATH.CONTENT.8.EE.C.7.B**

Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.

**CCSS.MATH.CONTENT.8.EE.C.8**

Analyze and solve pairs of simultaneous linear equations.

**CCSS.MATH.CONTENT.8.EE.C.8.A**

Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.
**Individual Subject Tests:**

**Math**

CCSS.MATH.CONTENT.8.EE.C.8.B
Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. *For example, 3x + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6.*

CCSS.MATH.CONTENT.8.EE.C.8.C
Solve real-world and mathematical problems leading to two linear equations in two variables. *For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.*

**Define, evaluate, and compare functions.**

CCSS.MATH.CONTENT.8.F.A.1
Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.

CCSS.MATH.CONTENT.8.F.A.2
Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.*

CCSS.MATH.CONTENT.8.F.A.3
Interpret the equation *y = mx + b* as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. *For example, the function *A = s^2* giving the area of a square as a function of its side length is not linear because its graph contains the points (1, 1), (2, 4) and (3, 9), which are not on a straight line.*
**Individual Subject Tests:**

**Math**

*Use functions to model relationships between quantities.*

**CCSS.MATH.CONTENT.8.F.B.4**
Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two \((x, y)\) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.

**CCSS.MATH.CONTENT.8.F.B.5**
Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

**CCSS.MATH.CONTENT.8.G.B.6**
Explain a proof of the Pythagorean Theorem and its converse.

**CCSS.MATH.CONTENT.8.G.B.7**
Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.
Individual Subject Tests:

Writing

This year, the Academic Junior High Decathlon program is offering an individual writing test. The individual writing test is a timed-essay competition. Writers will be assessed based on the Common Core Standard for Literacy listed below. Awards will be given for first, second, and third place.

The individual writing test will be administered approximately two weeks before the diocesan Academic Decathlon competition. The date, time, and place for the individual writing test will be provided by the diocesan Academic Decathlon coordinator.

As this is the first year for the writing test, points awarded in the writing test competition will not be used to determine the overall team score for the Academic Junior High Decathlon.

Write Better Essays in 20 Minutes a Day, 3rd Edition

by Learning Express

Paperback: 188 pages
Publisher: LearningExpress, LLC; 3rd edition
ISBN-10: 1576857921

Whether you are applying to school, trying to pass an academic course, or drafting a business proposal, writing effectively can be challenging. This guide covers all essentials: how to understand essay questions, create a strong thesis, develop a captivating introduction, support your ideas, and revise your work. Included are many sample essays, strategies for planning and revising in-class essays, tips to overcome writer's block, and instruction on achieving high scores on essay exams.
**Individual Subject Tests:**

**Writing**

**CCSS.ELA-LITERACY.W.8.2**

Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

**CCSS.ELA-LITERACY.W.8.2.A**
Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.

**CCSS.ELA-LITERACY.W.8.2.B**
Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.

**CCSS.ELA-LITERACY.W.8.2.C**
Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.

**CCSS.ELA-LITERACY.W.8.2.D**
Use precise language and domain-specific vocabulary to inform about or explain the topic.

**CCSS.ELA-LITERACY.W.8.2.E**
Establish and maintain a formal style.

**CCSS.ELA-LITERACY.W.8.2.F**
Provide a concluding statement or section that follows from and supports the information or explanation presented.