

science fact file 1 david coppock guide Full Version

science fact file 1 david coppock guide is an essential resource for anyone interested in understanding scientific concepts through a structured and accessible approach. This comprehensive guide offers valuable insights into key scientific facts, data, and explanations that are perfect for students, educators, and science enthusiasts alike. Whether you're seeking to deepen your knowledge of fundamental scientific principles or looking for reliable reference material, the Science Fact File 1 by David Coppock provides a robust foundation for learning and exploration.

Overview of Science Fact File 1 David Coppock Guide

The Science Fact File 1 by David Coppock is designed to serve as a concise yet detailed reference guide that covers a wide range of scientific topics. It aims to simplify complex concepts, making science approachable for readers at various levels of understanding. The guide is organized to facilitate quick access to facts, explanations, and diagrams that enhance comprehension.

Key Features of the Guide

- Clear and concise explanations of scientific principles
- Illustrations and diagrams to support learning
- Sections dedicated to different branches of science such as physics, chemistry, biology, and earth sciences
- Practical examples and real-world applications
- Useful for exam preparation and quick reference

Core Topics Covered in the Science Fact File 1

The guide systematically covers fundamental scientific topics, making it an excellent starting point for anyone new to science or looking to reinforce their existing knowledge.

Physics Essentials

Physics is at the heart of understanding how the universe operates. The guide covers concepts such as motion, forces, energy, and electricity.

- **Newton's Laws of Motion:** Explains the three laws formulated by Sir Isaac Newton that describe how objects move and interact.
- **Types of Energy:** Differentiates between kinetic, potential, thermal, chemical, and electrical energy, with real-world examples.
- **Electricity and Magnetism:** Details how electric currents are generated and how magnetic fields work, including practical applications like electromagnets and generators.

Chemistry Fundamentals

Chemistry in the guide emphasizes the building blocks of matter and how substances interact.

- **Atoms and Molecules:** Describes atomic structure, elements, and compound formation.
- **Periodic Table:** Provides an overview of the periodic classification of elements, highlighting key groups and periods.
- **Chemical Reactions:** Explains how atoms combine and separate, with examples of common reactions like oxidation and acid-base interactions.

Biology Basics

Biology sections focus on living organisms, their systems, and how they function.

- **Cell Structure:** Details the parts of a cell and their functions, including the nucleus, cytoplasm, and cell membrane.
- **Genetics:** Introduces DNA, genes, and heredity, explaining how traits are passed on.
- **Human Body Systems:** Covers major systems such as the circulatory, respiratory, digestive, and nervous systems.

Earth and Environmental Sciences

This section emphasizes our planet's features and environmental issues.

- **Earth's Layers:** Describes the crust, mantle, outer core, and inner core, explaining their roles.
- **Weather and Climate:** Explains atmospheric phenomena, weather patterns, and the difference between weather and climate.
- **Environmental Challenges:** Discusses topics like pollution, conservation, and sustainable development.

How to Use the Science Fact File 1 Effectively

The guide is designed to be user-friendly, making it easy to extract information quickly. Here are some tips on how to maximize its usefulness:

Organize Your Study Sessions

- Identify specific topics you need to review or learn about.
- Use the guide as a reference during revision to clarify doubts.
- Create summaries or flashcards based on the facts and diagrams for better retention.

Incorporate Visual Aids

- Pay close attention to diagrams and illustrations that accompany explanations.
- Recreate diagrams by hand to reinforce understanding of concepts like circuit diagrams or biological structures.

Apply Scientific Principles

- Relate facts from the guide to real-world situations or experiments.
- Use practical examples provided in the guide to deepen comprehension of abstract concepts.

Benefits of Using the Science Fact File 1 David Coppock Guide

Leveraging this guide offers numerous advantages for learners and educators:

- **Enhanced Understanding:** Breaks down complex ideas into simple language, making science accessible.
- **Time-Saving:** Quick access to facts and explanations reduces study time and increases efficiency.
- **Exam Preparation:** Provides a solid foundation for answering exam questions confidently.
- **Resource for Teachers:** A useful teaching aid with ready-to-use facts and diagrams to supplement lessons.
- **Encourages Curiosity:** Inspires further exploration of scientific topics through well-organized information.

Additional Resources and Tips for Science Learning

While the Science Fact File 1 by David Coppock is an invaluable resource, supplementing it with

other materials can enhance your learning experience.

Utilize Online Educational Platforms

- Interactive simulations and videos from platforms like Khan Academy, PhET, and National Geographic.
- Online quizzes to test your understanding of key concepts.

Engage in Hands-On Experiments

- Simple experiments at home or in the classroom to reinforce theoretical knowledge.
- Observing chemical reactions, biological processes, or physics phenomena firsthand.

Join Science Clubs and Communities

- Participate in science fairs, competitions, or local clubs to cultivate practical skills.
- Share knowledge and learn from peers to develop a deeper passion for science.

Conclusion

The **science fact file 1 david coppock guide** is a comprehensive and accessible resource that covers the essential areas of science. Its organized format, clear explanations, and illustrative diagrams make it an ideal study companion. Whether you're preparing for exams, seeking to expand your scientific knowledge, or teaching others, this guide provides a solid foundation. Remember to combine it with practical experiments, online resources, and active learning strategies to maximize your understanding and appreciation of science.

By utilizing this guide effectively, learners can develop a strong scientific literacy, critical thinking skills, and a curiosity-driven approach to exploring the natural world. Embrace the knowledge within the Science Fact File 1 by David Coppock, and take your science learning journey to new heights!

Science Fact File 1 David Coppock Guide: An In-Depth Exploration of Scientific Facts and Their Significance

In the realm of scientific education and dissemination, the Science Fact File 1 David Coppock Guide stands out as a comprehensive resource designed to simplify complex scientific concepts for learners and enthusiasts alike. Whether you're a student seeking clarity, a teacher aiming to enrich your curriculum, or an avid reader passionate about understanding the natural world, this guide

offers valuable insights into fundamental scientific facts presented in an accessible manner. This article provides a detailed breakdown of the guide's content, structure, and educational value, offering a professional analysis suited for anyone interested in scientific literacy.

What Is the Science Fact File 1 David Coppock Guide?

The Science Fact File 1 David Coppock Guide is a curated compilation of essential scientific facts, principles, and explanations aimed at fostering understanding of the natural sciences. It functions as both an educational tool and a reference resource, encapsulating key concepts across various scientific disciplines?biology, physics, chemistry, earth sciences, and more.

Developed by David Coppock, a noted science educator and author, the guide emphasizes clarity, accuracy, and engagement, making it particularly effective for beginners or those seeking to reinforce foundational knowledge. Its structured approach encourages learners to explore scientific phenomena systematically, building confidence and curiosity.

The Structure of the Guide

The guide is organized into several sections, each focusing on specific themes or scientific concepts. This modular approach makes navigation intuitive and allows users to focus on topics of interest. The main sections include:

- Basic Scientific Principles
- Living Organisms and Their Functions
- The Earth and Its Environment
- The Universe and Space
- Scientific Methods and Experiments

Each section contains detailed entries, often accompanied by diagrams, definitions, and real-world examples to facilitate understanding.

Key Features of the Science Fact File 1 David Coppock Guide

Clear and Concise Language

The guide uses straightforward language, avoiding unnecessary jargon, which makes complex ideas easier to grasp for learners at various levels.

Visual Aids

Diagrams, charts, and illustrations accompany many entries, helping to visualize abstract concepts and reinforce learning.

Real-World Applications

Practical examples link scientific facts to everyday life, illustrating their relevance and encouraging curiosity.

Summary and Review Sections

Each topic concludes with summaries or questions, aiding retention and self-assessment.

Deep Dive into the Content

- Basic Scientific Principles

This section covers foundational concepts such as:

- The Scientific Method: Steps including observation, hypothesis formation, experimentation, analysis, and conclusion.
- Units of Measurement: SI units, conversions, and significance.
- Matter and Its States: Solid, liquid, gas?properties and changes.
- Energy Forms: Kinetic, potential, thermal, chemical, nuclear.
- Forces and Motion: Newton's laws, gravity, friction.

Understanding these principles underpins all scientific inquiry and is essential for interpreting more complex topics.

- Living Organisms and Their Functions

Key topics include:

- Cell Structure and Function: Differences between plant and animal cells, organelles, cell division.
- Human Body Systems: Circulatory, respiratory, digestive, nervous systems.
- Reproduction and Genetics: Basic principles of heredity, DNA, and inheritance.
- Ecosystems and Biodiversity: Food chains, habitats, environmental impact.

The guide emphasizes the interconnectedness of biological systems and the importance of conservation.

- The Earth and Its Environment

Coverage includes:

- The Earth's Structure: Crust, mantle, core.
- Plate Tectonics: Earthquakes, volcanoes, continental drift.
- Weather and Climate: Atmospheric phenomena, climate change.
- Natural Resources and Sustainability: Conservation practices, renewable vs. non-renewable resources.

This section helps readers understand Earth's dynamic nature and environmental challenges.

- The Universe and Space

Topics explored are:

- The Solar System: Planets, moons, asteroids.
- Stars and Galaxies: Life cycle of stars, galaxy types.
- Cosmology: Big Bang theory, universe expansion.
- Space Exploration: Satellites, space missions, future possibilities.

Understanding space fosters appreciation of our place in the universe and technological advancements.

- Scientific Methods and Experiments

This section guides readers through:

- Designing experiments.
- Collecting and analyzing data.
- Drawing conclusions.
- Communicating findings.

It encourages critical thinking and scientific literacy.

Educational Value and Practical Applications

The Science Fact File 1 David Coppock Guide is more than a repository of facts; it promotes scientific literacy by teaching learners how to think scientifically. Its practical applications include:

- Supporting classroom instruction.
- Preparing students for exams.
- Facilitating science projects and research.
- Enhancing public understanding of science issues.

By connecting scientific facts to real-world contexts, the guide fosters an appreciation for science's role in society and everyday life.

Tips for Using the Guide Effectively

- Start with Basic Principles: Build a solid foundation before exploring complex topics.
- Use Visual Aids: Refer to diagrams to enhance comprehension.
- Engage with Review Questions: Test understanding and reinforce learning.
- Relate Content to Everyday Life: Find examples around you to make concepts more tangible.
- Supplement with Experiments: Apply knowledge through simple experiments or observations.

Final Thoughts

The Science Fact File 1 David Coppock Guide serves as an invaluable resource for demystifying the wonders of science. Its structured layout, clear explanations, and practical focus make it suitable for learners at various levels. By exploring the core principles and diverse scientific phenomena presented in this guide, readers can develop a deeper appreciation for the natural world, hone their scientific thinking skills, and foster a lifelong curiosity about the universe.

Whether used as a classroom resource, a self-study tool, or a reference manual, the guide exemplifies effective science communication. Embracing its content can empower individuals to understand scientific facts critically and confidently engage with ongoing scientific debates and innovations shaping our future.

In summary, the Science Fact File 1 David Coppock Guide is a thoughtfully designed educational resource that bridges the gap between complex scientific knowledge and accessible understanding, making it an essential tool for anyone committed to exploring the fascinating world of science.

Question What is the main focus of the 'Science Fact File 1' by David Coppock Guide? The 'Science Fact File 1' by David Coppock Guide primarily focuses on key scientific concepts, facts, and information suitable for students to build their understanding of basic science topics. How can students effectively use the 'Science Fact File 1' for exam preparation? Students can use the fact file as a quick revision tool, reviewing key facts and concepts regularly, and testing themselves to reinforce their understanding before exams. Are there any visual aids or diagrams included in the 'Science Fact File 1' by David Coppock Guide? Yes, the fact file includes diagrams and visual aids to help explain scientific concepts more clearly and enhance understanding. What age group is the 'Science Fact File 1' by David Coppock Guide suitable for? It is suitable for middle school students, typically ages 11 to 14, who are studying foundational science topics. Does the 'Science Fact File 1' cover recent scientific discoveries or is it more focused on established facts? The guide primarily focuses on established scientific facts and concepts, providing a solid foundation for students rather than covering the latest discoveries. Where can students access or purchase the 'Science Fact File 1' by David Coppock Guide? Students can access or purchase the guide through educational bookstores, online retailers, or school resources that carry David Coppock's science materials.

Related keywords: science facts, David Coppock, fact file, science guide, educational resource, science curriculum, classroom activities, science experiments, student guide, science teaching

isaac asimov great science writers

Isaac Asimov Great Science Writers: A Legacy of Scientific Literacy and Imagination

Isaac Asimov is widely recognized as one of the most influential and prolific science writers of the 20th century. His contributions to popular science, science fiction, and education have left an indelible mark on both the scientific community and the general public. As a towering figure among great science writers, Asimov's ability to communicate complex scientific ideas with clarity, enthusiasm, and wit has inspired countless readers and shaped public understanding of science. This article explores the life, works, and enduring legacy of Isaac Asimov as a great science writer, highlighting his influence on science communication and his contributions to science literature.

Early Life and Background

Born on January 2, 1920, in Petrovichi, Russia, Isaac Asimov emigrated with his family to the United States at a young age. Settling in Brooklyn, New York, Asimov developed an early fascination with reading and learning. His passion for science and literature grew rapidly, leading him to pursue biochemistry at Columbia University, where he earned his Ph.D. in 1948. This scientific background

provided the foundation for his later writings, allowing him to interpret and communicate scientific principles with authority and insight.

Isaac Asimov as a Great Science Writer

Bridging Science and the Public

One of Asimov's greatest strengths was his ability to bridge the gap between complex scientific research and everyday understanding. He believed that science should be accessible and enjoyable, and he dedicated much of his career to making science comprehensible to the general public. His writing style combined clarity with enthusiasm, often infusing humor and storytelling to captivate readers.

Prolific Output and Range of Topics

Isaac Asimov authored over 500 books and numerous essays, covering a vast array of subjects beyond science, including history, religion, literature, and philosophy. His extensive bibliography demonstrates his versatility and commitment to education. Among his most notable works are science books such as *The Intelligent Man's Guide to Science*, *Asimov's New Guide to Science*, and *Understanding Physics*.

Key Qualities of Asimov's Science Writing

- **Clarity:** Simplifying complex ideas without losing essential details.
- **Engagement:** Using storytelling, anecdotes, and humor to draw readers in.
- **Accuracy:** Maintaining scientific integrity and rigor in explanations.
- **Inspiration:** Encouraging curiosity and critical thinking about science.

Major Works and Contributions

Popular Science Books

Isaac Asimov's popular science books are considered classics in science communication. Some of his most influential titles include:

- **The Intelligent Man's Guide to Science (1960):** An extensive overview of scientific principles and discoveries, designed for the layperson.
- **Asimov's New Guide to Science (1984):** An updated, comprehensive survey of scientific knowledge spanning physics, chemistry, biology, and astronomy.

- **Understanding Physics (1966):** An accessible introduction to the fundamental principles of physics, written in a clear and engaging style.
- **Understanding Chemistry (1977):** Simplifies complex chemical concepts for general readers.

Science Fiction and Its Role in Science Communication

While best known for his science fiction, Asimov's stories often reflected his scientific knowledge and curiosity. His Foundation series and Robot series not only entertained but also explored themes like robotics, artificial intelligence, and societal evolution?topics that continue to be relevant today. His fiction served as a vehicle to stimulate interest in science and technology among readers worldwide.

Educational and Reference Works

In addition to books for general audiences, Asimov authored textbooks and reference materials used in academic settings. His clear explanations and systematic approach have made his works valuable educational resources.

Impact and Legacy

Influence on Science Communication

Isaac Asimov revolutionized the way science is communicated. His ability to translate scientific jargon into engaging narratives inspired future generations of science writers, educators, and communicators. His works helped foster scientific literacy and skepticism, encouraging society to value evidence-based reasoning.

Inspiration for Future Writers

Many contemporary science writers cite Asimov as a primary influence. His success demonstrated that scientific topics could be made accessible and fascinating, paving the way for authors like Carl Sagan, Stephen Jay Gould, and Bill Bryson.

Recognition and Honors

Throughout his life, Asimov received numerous awards, including the Hugo, Nebula, and Bram Stoker Awards, as well as the Presidential Award for Science Writing. His prolific output and dedication to education have cemented his reputation as a great science writer.

Why Isaac Asimov Remains a Model for Science Writers Today

- **Passion for Science:** His genuine curiosity and enthusiasm are contagious.
- **Clarity of Explanation:** His ability to break down complex ideas remains a benchmark.
- **Versatility:** His writings span many disciplines, demonstrating the interconnectedness of knowledge.
- **Humor and Storytelling:** Making learning enjoyable and memorable.

Conclusion

Isaac Asimov's legacy as a great science writer endures because of his exceptional talent for communicating science in a way that is accessible, engaging, and inspiring. His works continue to educate and entertain, fostering curiosity and understanding about the universe we live in. As we look to the future of science communication, Asimov's example serves as a reminder that effective storytelling, clarity, and passion are essential tools for making science accessible to all. His contributions have not only shaped scientific literacy but also ignited the imaginations of countless readers, ensuring his place among the greatest science writers of all time.

Isaac Asimov: Great Science Writers and the Legacy of a Scientific Luminary

When contemplating the pantheon of science writers who have profoundly influenced both scientific literacy and popular understanding of complex concepts, Isaac Asimov stands out as a towering figure. His prolific output, clarity of explanation, and ability to intertwine scientific rigor with engaging storytelling cement his place among the greatest science writers of all time. Asimov's work not only demystified the intricacies of science but also inspired countless individuals to pursue scientific inquiry, making him an enduring figure in both literature and science communication.

Early Life and Intellectual Foundations

Understanding Asimov's contributions begins with an appreciation of his background. Born in 1920 in Russia and emigrating to the United States as a child, Asimov grew up in Brooklyn, New York. His early fascination with science and reading, fostered by a childhood immersed in science fiction magazines and books, laid the groundwork for his later pursuits. Self-educated through voracious reading, he developed a broad knowledge base that would underpin his extensive writing career.

His academic pursuits culminated in a Ph.D. in biochemistry from Columbia University. This scientific training provided him with a solid foundation in the scientific method, critical thinking, and the ability to communicate complex ideas with precision and clarity—traits that defined his writing style.

Asimov's Approach to Science Communication

Clarity and Accessibility

One of Asimov's defining characteristics as a science writer was his unparalleled ability to explain complex scientific concepts in simple, accessible language. Unlike technical journals or dense textbooks, his writings aimed to reach the general reader without sacrificing accuracy. This approach made science appealing and comprehensible, fostering curiosity among a broad audience.

He believed that science literacy was crucial for an informed society and dedicated much of his career to this cause. His explanations often employed analogies, step-by-step logical progression, and engaging narratives that bridged the gap between specialists and laypeople.

Scientific Accuracy and Rigor

While striving for accessibility, Asimov maintained rigorous scientific accuracy. His background in biochemistry and extensive research ensured that his writings reflected the current state of scientific knowledge. He was meticulous in citing sources and grounding his explanations in established science, which earned him respect from both scientists and readers.

Engagement Through Storytelling

Asimov's talent extended beyond mere explanation; he was a master storyteller. His use of anecdotes, historical context, and hypothetical scenarios made his science writing lively and memorable. This narrative style not only clarified concepts but also kept readers engaged, turning abstract ideas into compelling stories.

Major Works and Contributions

Popular Science Books

Asimov authored numerous books aimed at general audiences, making science approachable and enjoyable. Some of his most notable titles include:

- "The Intelligent Man's Guide to Science" (1960): A comprehensive overview of scientific principles, history, and developments, serving as a foundational text for general science enthusiasts.
- "Asimov's New Guide to Science" (1984): An updated and expanded version that covers advancements in physics, biology, astronomy, and more.
- "The Universe: From Flat Earth to Quasar" (1966): An accessible exploration of astronomy and cosmology, illustrating the evolution of our understanding of the universe.

These works exemplify his ability to synthesize vast amounts of scientific knowledge into coherent narratives that educate and inspire.

Science Fiction and Its Influence

While primarily celebrated as a science communicator, Asimov's science fiction writing also contributed heavily to his status as a great science writer. His stories, especially the "Foundation" series and "Robot" series, explored themes of robotics, artificial intelligence, and societal evolution. These narratives not only entertained but also prompted philosophical and scientific debates about the future of technology.

His fiction often incorporated scientific principles, making complex ideas about robotics, ethics, and space exploration accessible and thought-provoking. This blending of storytelling with scientific speculation enhanced public interest in science and technology.

Histories and Essays

Asimov's essays and historical writings further showcase his depth as a science communicator. His series of essays covered topics like the history of science, mathematics, and medicine, highlighting the human stories behind scientific discoveries. His historical analyses, such as "The Human Brain," provided insights into how scientific understanding has evolved over centuries.

Impact and Legacy in Science Communication

Influence on Public Understanding of Science

Asimov's writings significantly contributed to the democratization of scientific knowledge. His ability to translate complex ideas into engaging narratives helped demystify science for millions. Many readers credit him with sparking their interest in science, leading some to pursue careers in the field.

His books have remained in print for decades, testament to their enduring relevance and popularity. Educational institutions often cite his works as supplementary materials for teaching science concepts.

Mentorship and Inspiration

Beyond his writings, Asimov served as a mentor and role model for aspiring science writers. His prolific output demonstrated that scientific communication could be both intellectually rigorous and widely accessible. He set a standard for clarity, enthusiasm, and integrity in science writing.

Recognition and Honors

Throughout his career, Asimov received numerous awards, including the Hugo, Nebula, and Bram Stoker Awards for his fiction, as well as accolades recognizing his contributions to science education.

and literature. His influence extends beyond the literary realm into science policy and education.

Critical Evaluation of Asimov's Style and Methodology

Strengths

- Clarity and Simplicity: His straightforward language made science understandable.
- Breadth of Knowledge: His multidisciplinary background allowed him to cover diverse scientific fields.
- Engagement: His storytelling kept readers invested in scientific concepts.
- Humility and Honesty: He acknowledged the limits of current knowledge and avoided sensationalism.

Limitations and Criticisms

- Some critics argue that Asimov's explanations, while clear, occasionally oversimplified nuanced scientific debates.
- His focus on established science sometimes limited his exploration of speculative or controversial ideas.
- Asimov's style, while accessible, was sometimes viewed as dry or lacking in emotional depth compared to other writers.

Despite these criticisms, his overall contribution remains monumental, and his impact on science communication is undeniable.

Conclusion: The Enduring Legacy of Isaac Asimov as a Great Science Writer

Isaac Asimov's towering legacy as a great science writer stems from his unparalleled ability to communicate scientific ideas with clarity, enthusiasm, and integrity. His writings have educated generations, inspired scientific curiosity, and bridged the gap between the scientific community and the public. Asimov demonstrated that science is not solely the domain of specialists but a vital part of human culture and understanding.

In an era where misinformation can spread rapidly, Asimov's model of clear, honest, and engaging science communication remains a guiding light. His work not only enriched our knowledge of the universe but also exemplified the importance of science literacy in building a better, more informed society. As science continues to advance at an unprecedented pace, the influence of Isaac Asimov as a pioneer of science writing endures, inspiring new generations to explore, question, and

understand the world through the lens of science.

QuestionAnswer Who was Isaac Asimov and why is he considered a great science writer? Isaac Asimov was a prolific American science fiction writer and biochemist known for his clear, engaging writing style and influential works that popularized science concepts. His ability to explain complex ideas to the general public has cemented his reputation as a great science communicator. What are some of Isaac Asimov's most famous science books? Some of Isaac Asimov's most famous science books include 'The Intelligent Man's Guide to Science,' 'Asimov's New Guide to Science,' and his numerous essays and popular science articles that cover a wide range of scientific topics. How did Isaac Asimov influence science education and popular science writing? Isaac Asimov revolutionized science education by making complex scientific ideas accessible and engaging to a broad audience through his clear explanations, humor, and storytelling, inspiring countless readers and aspiring scientists. What distinguishes Isaac Asimov's science writing from other science writers? Asimov's writing is distinguished by its clarity, logical structure, and ability to simplify complex topics without sacrificing accuracy, making science approachable and enjoyable for readers of all backgrounds. In what ways did Isaac Asimov contribute to science fiction and science fact? While renowned for his science fiction, Asimov also contributed significantly to science fact through his essays, books, and articles that explained real scientific principles, bridging the gap between science fiction imagination and scientific reality. What awards and recognitions did Isaac Asimov receive for his science writing? Isaac Asimov received numerous awards including the Hugo, Nebula, and Bram Stoker Awards, as well as the Presidential Award for Excellence in Science and Engineering Communication, recognizing his outstanding contributions to science literature. Why is Isaac Asimov still relevant in the field of science writing today? Asimov's ability to communicate science clearly and engagingly remains influential, inspiring modern science writers and educators, and his works continue to serve as foundational texts for science enthusiasts and students worldwide.

Related keywords: Isaac Asimov, science fiction, science writer, futurism, robotics, astrophysics, popular science, science literature, science essays, visionary authors

Read the full article online: [Isaac asimov great science writers](#)