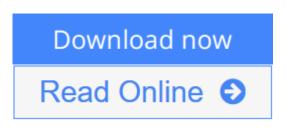


## **Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X**

By Thomas O'Brien



# Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X By Thomas O'Brien

Each of the 33 activities in this book is based on the science behind a discrepantevent activity. A discrepant event in science teaching is an experiment or demonstration in which the outcome is counterintuitive not what the students would expect. The discrepant event not only gets the students attention but also is a demonstration of a major science concept. In this book, the concept is discussed at length in each activity. What makes this book unique is that in addition to the extensive science content mostly physical science but some biology and chemistry each activity has a science education component, in which the discrepant event is shown to be analogous to a pedagogical principle. For example, in the Science Education Concept section of the activity on optical illusions, the author points out that just as visual observation is not a passive activity, neither should learning be passive. All learning should be of a minds-on, constructive nature. The author elaborates at length on this analogy and on similar analogies between the discrepant event and pedagogical principles in each activity. The book offers more than 200 up-to-date internet URLs on science content and science education concepts.

**<u>Download</u>** Brain-Powered Science: Teaching and Learning with ...pdf

**<u>Read Online Brain-Powered Science: Teaching and Learning wit ...pdf</u>** 

## Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X

By Thomas O'Brien

#### Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X By Thomas O'Brien

Each of the 33 activities in this book is based on the science behind a discrepant-event activity. A discrepant event in science teaching is an experiment or demonstration in which the outcome is counterintuitive not what the students would expect. The discrepant event not only gets the students attention but also is a demonstration of a major science concept. In this book, the concept is discussed at length in each activity. What makes this book unique is that in addition to the extensive science content mostly physical science but some biology and chemistry each activity has a science education component, in which the discrepant event is shown to be analogous to a pedagogical principle. For example, in the Science Education Concept section of the activity on optical illusions, the author points out that just as visual observation is not a passive activity, neither should learning be passive. All learning should be of a minds-on, constructive nature. The author elaborates at length on this analogy and on similar analogies between the discrepant event and pedagogical principles in each activity. The book offers more than 200 up-to-date internet URLs on science content and science education concepts.

## Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X By Thomas O'Brien Bibliography

- Rank: #857537 in Books
- Brand: Brand: National Science Teachers Association
- Published on: 2010-03-15
- Original language: English
- Number of items: 1
- Dimensions: 10.75" h x 8.25" w x 1.00" l, 2.55 pounds
- Binding: Paperback
- 382 pages

**<u>Download</u>** Brain-Powered Science: Teaching and Learning with ...pdf

**<u>Read Online Brain-Powered Science: Teaching and Learning wit ...pdf</u>** 

#### **Editorial Review**

#### **Users Review**

From reader reviews:

#### Joseph Braddock:

The e-book untitled Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X is the book that recommended to you to read. You can see the quality of the guide content that will be shown to an individual. The language that creator use to explained their ideas are easily to understand. The article writer was did a lot of analysis when write the book, so the information that they share to your account is absolutely accurate. You also will get the e-book of Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X from the publisher to make you considerably more enjoy free time.

#### **Florence Taylor:**

Playing with family within a park, coming to see the ocean world or hanging out with buddies is thing that usually you could have done when you have spare time, subsequently why you don't try factor that really opposite from that. 1 activity that make you not sensation tired but still relaxing, trilling like on roller coaster you have been ride on and with addition details. Even you love Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X, you may enjoy both. It is fine combination right, you still wish to miss it? What kind of hangout type is it? Oh can occur its mind hangout people. What? Still don't get it, oh come on its identified as reading friends.

#### Lou Whisenhunt:

The book untitled Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X contain a lot of information on this. The writer explains your girlfriend idea with easy means. The language is very clear to see all the people, so do certainly not worry, you can easy to read it. The book was compiled by famous author. The author provides you in the new period of literary works. You can actually read this book because you can continue reading your smart phone, or device, so you can read the book inside anywhere and anytime. In a situation you wish to purchase the e-book, you can open their official web-site as well as order it. Have a nice read.

#### Lee Erbe:

As a university student exactly feel bored in order to reading. If their teacher expected them to go to the library or to make summary for some publication, they are complained. Just tiny students that has reading's soul or real their hobby. They just do what the teacher want, like asked to go to the library. They go to generally there but nothing reading critically. Any students feel that studying is not important, boring and

also can't see colorful images on there. Yeah, it is for being complicated. Book is very important for you personally. As we know that on this period, many ways to get whatever we really wish for. Likewise word says, many ways to reach Chinese's country. Therefore this Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X can make you truly feel more interested to read.

## Download and Read Online Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X By Thomas O'Brien #ASNPDMB8F72

### **Read Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X By Thomas O'Brien for online ebook**

Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X By Thomas O'Brien Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, books reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X By Thomas O'Brien books to read online.

### **Online Brain-Powered Science: Teaching and Learning with Discrepant Events -PB271X By Thomas O'Brien ebook PDF download**

**Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X By Thomas O'Brien Doc** 

Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X By Thomas O'Brien Mobipocket

Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X By Thomas O'Brien EPub

ASNPDMB8F72: Brain-Powered Science: Teaching and Learning with Discrepant Events - PB271X By Thomas O'Brien