The purpose of this document is to provide guidance and hyperlinks to FREE resources regarding building understanding and awareness of the [Framework for K-12 Science Education](http://www.nap.edu/catalog.php?record_id=13165) and [The Next Generation Science Standards](http://www.nextgenscience.org/) (NGSS).

**STEP ONE:** Get to know the [Framework for K-12 Science Education](http://www.nap.edu/catalog.php?record_id=13165). This document was the guide for the NGSS writing team. NSTA has a free [Reader’s Guide to A Framework for K-12 Science Education](http://www.nsta.org/store/product_detail.aspx?id=10.2505/9781936959778&lid=ngss) that is also helpful.



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| **Practices of Science and Engineering** | **Crosscutting Concepts** | **Disciplinary Core Ideas** |
| **Practice** | **Article** | **Webinar** | **Concept** | **Article** | **Webinar** | **Idea** | **Article** |
| *Overview of Practices* | [Link](http://www.nsta.org/about/standardsupdate/resources/201112_Framework-Bybee.pdf) |  | *Overview of Crosscutting*  | [Link](http://www.nsta.org/about/standardsupdate/resources/201202_Framework-Duschl.pdf) | [Link](http://www.nsta.org/about/standardsupdate/resources/2011Seattle_Pratt_Eberle.pdf) | Physical Science | [Link](http://www.nsta.org/about/standardsupdate/resources/201303_NGSS-Krajcik.pdf) |
| Asking Questions and Defining Problems |  | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar5.aspx) | Patterns |  | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar19.aspx) | Earth/Space Science | [Link](http://www.nsta.org/about/standardsupdate/resources/201304_NGSS-Wysession.pdf) |
| Developing and Using Models | [Link](http://www.nsta.org/about/standardsupdate/resources/201203_Framework-KrajcikAndMerritt.pdf) | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar6.aspx) | Cause and Effect |  | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar20.aspx) | Life Science | [Link](http://www.nsta.org/about/standardsupdate/resources/201302_NGSS-Bybee.pdf) |
| Planning and Carrying Out Investigations |  | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar7.aspx) | Scale, Proportion, and Quantity |  | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar21.aspx) | Engineering & Technology | [Link](http://www.nsta.org/about/standardsupdate/resources/201201_Framework-Sneider.pdf) |
| Analyzing and Interpreting Data | [Link](http://www.nsta.org/about/standardsupdate/resources/201212_Framework-MayesKoballa.pdf) | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar8.aspx) | Systems and Systems Models |  | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar22.aspx) |  |  |
| Using Mathematical and Computational Thinking | [Link](http://www.nsta.org/about/standardsupdate/resources/201212_Framework-MayesKoballa.pdf) | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar9.aspx) | Energy and Matter |  | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar23.aspx) |  |  |
| Construction Explanations and Designing Solutions | [Link](http://www.nsta.org/about/standardsupdate/resources/201204_Framework-ReiserBerlandKenyon.pdf) | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar10.aspx) | Structure and Function |  | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar24.aspx) |  |  |
| Engaging in Argument from Evidence | [Link](http://www.nsta.org/about/standardsupdate/resources/201204_Framework-ReiserBerlandKenyon.pdf) | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar11.aspx) | Stability and Change |  | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar25.aspx) |  |  |
| Obtaining, Evaluating, and Communicating Information | [Link](http://www.nsta.org/about/standardsupdate/resources/201211_Framework-BellBrickerTzouLeeVanHorne.pdf) | [Link](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar12.aspx) |  |  |  |  |  |

**STEP TWO:** Get to know the specifics of the Three Dimensions of the Framework and NGSS. The table below contains links to FREE NSTA articles and Web Seminars on the *Practices, Crosscutting Concepts, and Disciplinary Core Ideas.*

**STEP THREE**: Get to know the Next Generation Science Standards. Visit the [NGSS site](http://www.nextgenscience.org/next-generation-science-standards) to view the actual standards for your grade level and read the multiple support documents in the Appendices.

**STEP FOUR:** Plan for transition. You may be interested in the [NGSS Adoption and Implementation Workbook](http://achieve.org/files/NGSS_Workbook_PDF-3.1.13.pdf) from Achieve.