Elements: The collaboration tool in the cloud to empower students and educators

Elements® is a zero-install, cloud-based electronic lab notebook delivered through a web browser that empowers students and professors to easily capture scientific data, collaborate with colleagues, and search results and observations effortlessly.

**Elements is:**
- **Intuitive and modern.** Easy to learn and navigate.
- **Cloud based.** No lengthy deployment or in-house hardware requirements.
- **Flexible.** The app-based approach allows scientists to define their own templates.
- **Cost-effective.** Academic pricing is competitive to accommodate professors who are conserving grant dollars and students on a limited budget.
- **Chemical Structure Drawing Intelligence.** ChemDraw® is embedded in Elements for drawing chemical structures and calculating stoichiometry.

The modular approach used in Elements provides educators with the ability to suggest set-up and workflows to their students, while allowing their students the flexibility to add “elements” to their workspace in a set-up that works for them. As with paper notebooks, students learn the approach they will someday implement in a real-world lab. Unlike paper notebooks, they can collaborate, learn from their mistakes, and accelerate their learning in a single collaborative platform.
Elements was created to help scientists easily organize their data so that researchers can focus on science and discovery. Elements is a web-based collaborative platform for scientific data management that seamlessly plugs into your workflow. With Elements, data is organized on a page, as seen in the examples to the right, and can be shared with collaborators by email. It's simple, configurable, and intuitive.

Electronic laboratory notebooks have been used in science for over twenty years, however most academic researchers still use paper or non-scientific solutions like Excel®, Word®, and EverNote® to document scientific information. These non-scientific solutions are not easily searchable, not easily sharable, lack a rigorous audit trail, and lack the ability to draw out chemical structures. Academic Researchers spend more time transferring or finding data, versus performing scientific discovery, collaborating with colleagues or submitting publications. Elements is the cloud-based, scientifically-focused collaboration tool developed specifically to fit the needs of academic researchers.

Learn more about Elements at elements.perkinelmer.com

ChemDraw is embedded in Elements, so that chemical compounds and reactions can be easily drawn. ChemDraw is linked to a dynamically updated stoichiometric table to help scientists automate the recording of their synthesis reactions. Various fields and calculations will auto-populate based on reaction drawing. IUPAC names, labels, molecular weights, and formulas are automatically generated from the chemical drawing and new rows are created in both the reactant and product stoichiometry sections. When adding numeric data, units are automatically added with the option to change afterwards.

A sample biology experiment highlights the social nature of Elements (the ability to add comments) and the modern user-friendly interface. Introduction, file list, annotatable image, and PDF elements are shown -- others are available including: ChemDraw®, spreadsheets, history and more.