Graphical Editor & LaTeX

Last Modified on 07/27/2023 11:58 pm CDT
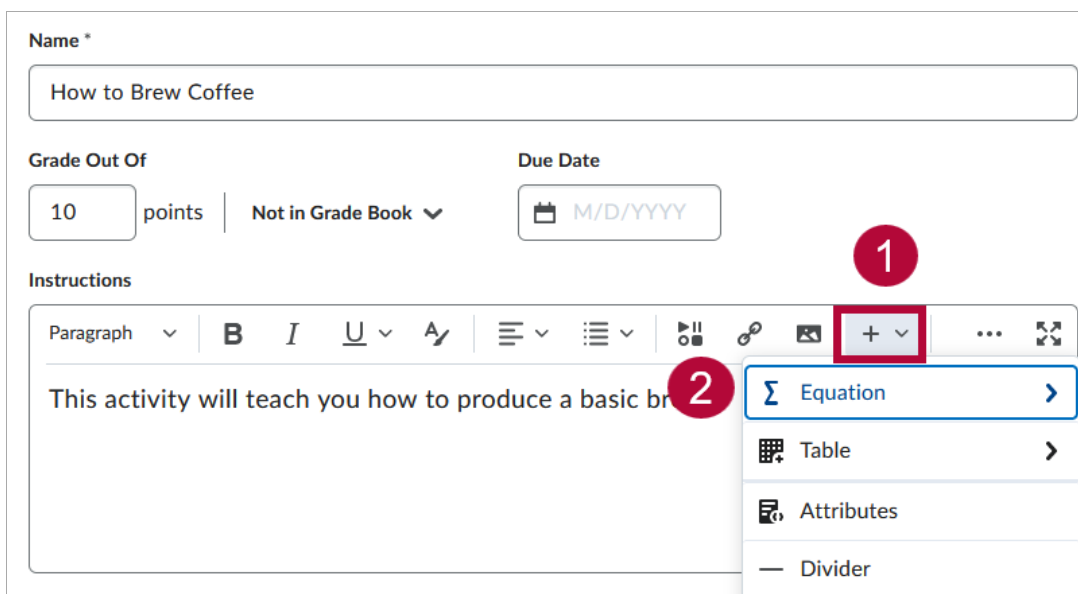
Inserting Formulas From HTML Equation Editor

From Assignments

To access the Equation Editor from the HTML Editor toolbar, click **[+]**, then click **[Equation]**.

You will then be presented with the list of **Equation Editors**, which enables users to insert equations within the HTML Editor. It supports the inputs from:

- **Graphical Editor**
- **LaTeX Editor**
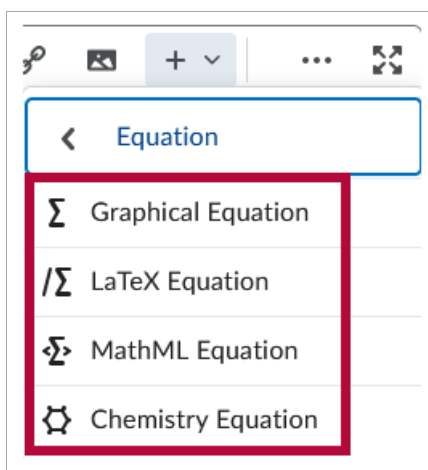- **MathML Editor**
- **Chemistry Equation Editor**
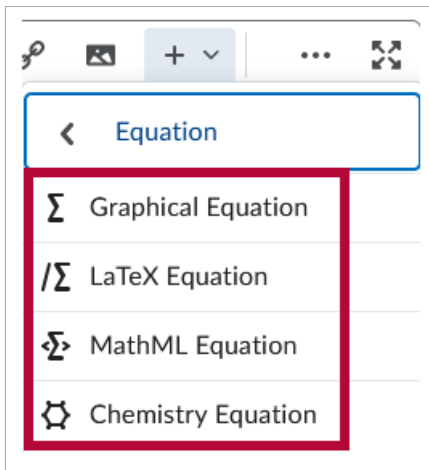
From Quizzes

From the **Edit Quiz** page, click anywhere in the **Description** box, a popup toolbar will then appear. From the toolbar, click on **[+]**, then click **[Equation]**.


From the dropdown menu select the appropriate Equation Editor:

Graphical Equation Editor

The **Graphical Equation Editor** features a toolbar equipped with a selection of buttons. This toolbar provides the necessary elements to construct the equation. Each button in the Equation Editor toolbar opens a palette of related mathematical symbols. The Graphical Equation Editor offers 10 tabs of symbols, arrows, Greek letters and numbers, matrices, scripts and layouts, decorations, big operators, calculus, and context for creating math equations.
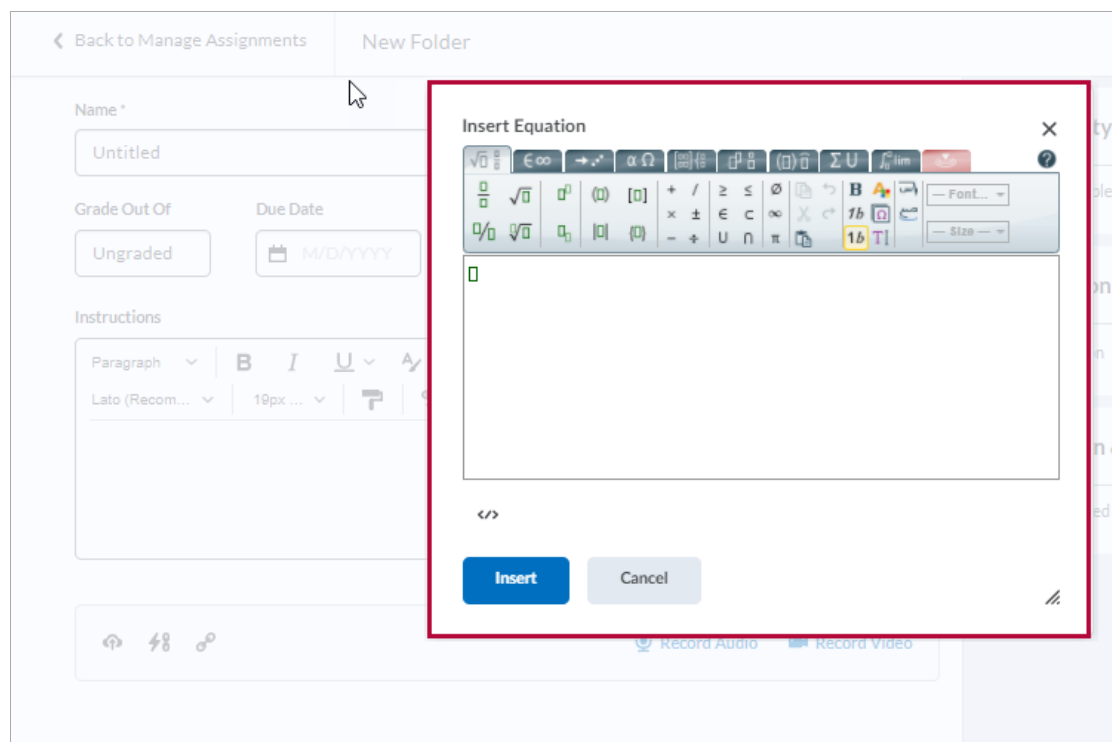
The following table displays the **Tabs** on the **Graphical Equation Editor**.

Icon	Name	Description
H₂O	Chemistry tab	Add specialized chemistry symbols for inorganic chemistry equations **Note**: This tab only appears when you select the Chemistry equation option
√☐ ᵈ/ᵇ	General tab	• Add a template for building equations. • Add and edit text in the equation using the Cut, Copy, Paste, Undo, Color, and other text editing function
∈∞	Symbols tab	Add mathematical symbols to equations
→∴	Arrows tab	Update or add arrows to equations
α Ω	Greek and letters tab	Update or add uppercase and lowercase Greek characters to equations
	Matrices tab	Update or add matrices to equations
	Scripts and layout tab	Add scripts or layouts to build equations
(☐)☐	Decorations tab	Add fences such as brackets and vertical bars around text fields
Σ∪	Big operators tab	Update or add big operators to equations
∫ lim	Calculus tab	Add a template for building Calculus equations

LaTeX Editor

LaTeX is a typesetting system based on TeX. There are two possible modes for LaTeX entry: text mode and math mode. D2L supports math mode only. If you add LaTeX using the Equation Editor:

- Most spaces and line breaks are not recognized and have to be specified with special commands.
  - Empty lines are ignored, only one paragraph per formula.
  - Each letter is considered to be the name of a variable and will be typeset as such. If you want normal text within a formula (normal upright font and normal spacing) then you have to enter the text using dedicated commands

Insert the LaTeX command on the LaTeX Editor and the preview of the formula will be automatically generated. The LaTeX commands available are displayed on the link "Which LaTeX commands are supported?"
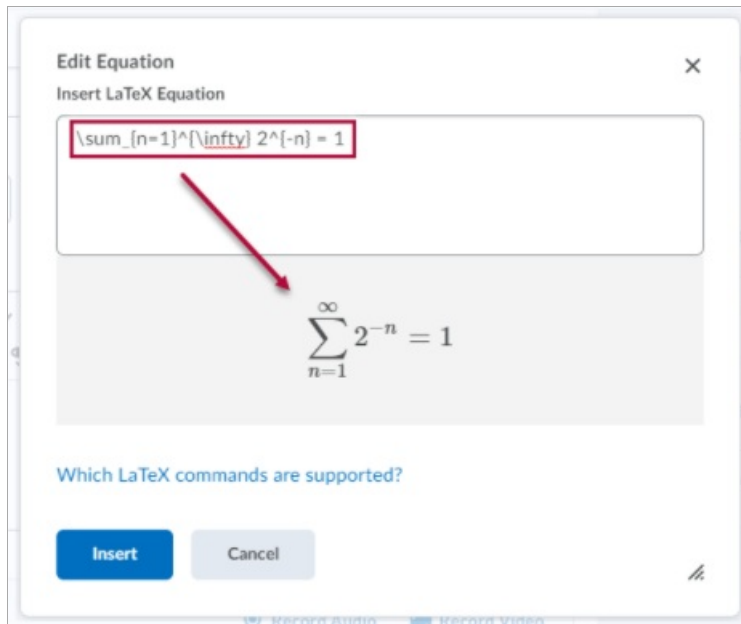

In the following table some examples of LaTeX commands are displayed:

	Symbol	LaTeX	Formula
Superscript	^	x^2	x^2
		^+H^2	$^+H^2$
Subscript	–	H_2	H_2
		_3H_2	$_3H_2$
Fraction	\frac	\frac12	$\dfrac{1}{2}$
		\frac{15}{20}	$\dfrac{15}{20}$
Square Root	\sqrt	\sqrt2	$\sqrt{2}$
		\sqrt[10]2	$\sqrt[10]{2}$
Sum	\sum_{}^{}	\sum_{n=1}^{\infty}2^{-n}=1	$\sum_{n=1}^{\infty} 2^{-n} = 1$
Integrals	\int_{}^{}	\int_{a}^{b}x^2 dx	$\int_{a}^{b} x^2 dx$
	\iint_{}^{}	\iint_{a}^{b}x^2 dx	$\iint_{a}^{b} x^2 dx$
Limit	\lim_{...\to...}	\lim_{x\to\infty} f(x)	$\lim_{x \to \infty} f(x)$
Text	\text	\text{Question1}	Question 1
Space	\		
Line break	\\		

MathML Editor

MathML is a standard adopted by the World Wide Web Consortium (W3C). It uses XML to describe mathematical notation by capturing both its structure and content. This enables MathML to support the visual display and assistive technology access. Its appearance is similar in structure to HTML. Unlike HTML, MathML is not designed to be hand-written. It is recommended that you compose equations in a visual editor and paste its MathML output into the Brightspace Equation Editor.
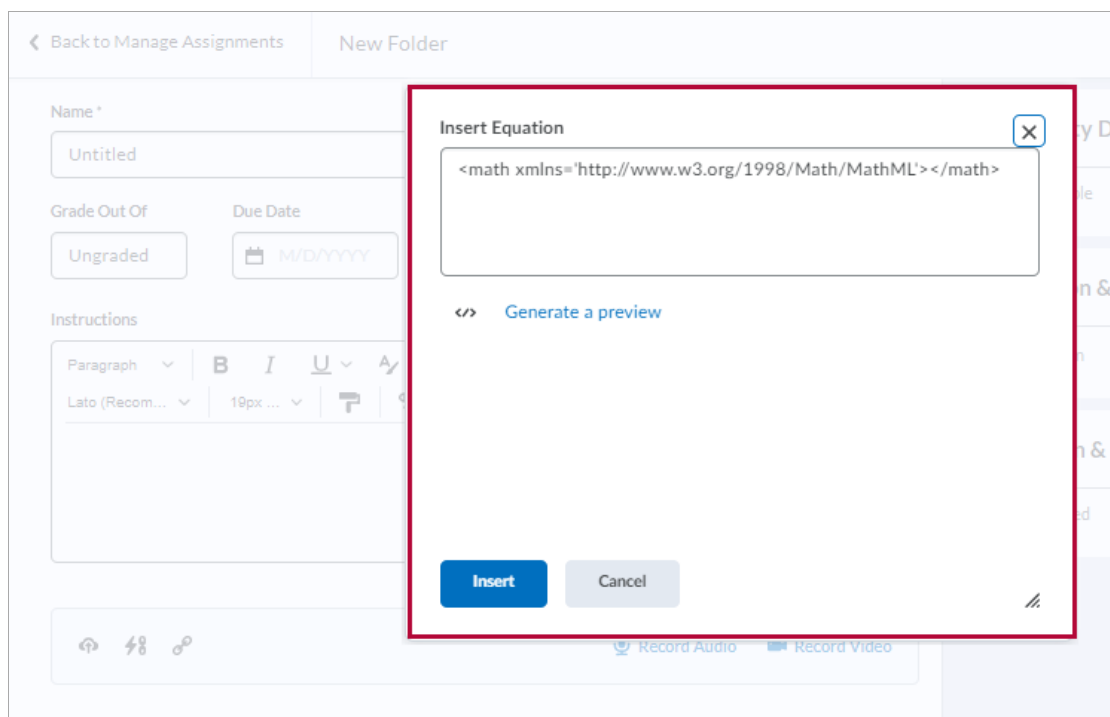
Chemistry Equation Editor

The Chemistry Equation Editor offers specialized chemistry symbols for inorganic chemistry formulas.