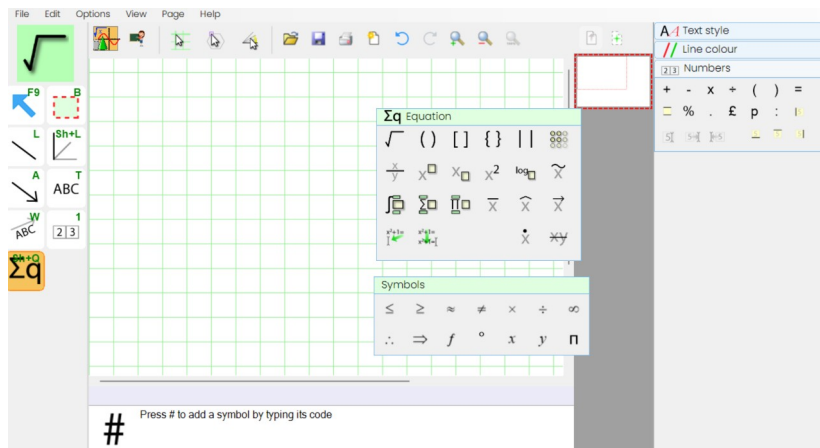Splash! Simple Equations lets you set out and solve algebraic, chemical and physics equations as a keyboard, mouse and pointer user. From the KS2 Homepage, select the Simple Equations activity.

The Maths Equation Student Activity Workspace has tools on the left panel and equation functions in the right palettes. The palettes can be undocked from the right sidebar by holding down left click and moving to a different place on the screen. They also can be resized by hovering over the bottom right corner of the box until the ↔ arrow appears then hold down left click and move the mouse to resize:

The Equation Tool (Sh+Q)

Select the Equation Tool and click in the work space at the point where you what to start your equation. Use the on-screen palettes or the keyboard to enter your equation. Pointer only users will need an on-screen keyboard to input some of the numbers.

When this is selected the symbolic text entry functionality is enabled. Click in the work space at the point where you what to start your equation and use the on-screen palettes or the keyboard to enter your equation.

Writing an equation: $\left(x^2+5\right)$

Keyboard users → Type: open bracket, x, up arrow, 2, down arrow, +, 5.

Pointer and Touch users → Select: () x $x^{\square}$ 2 → + 5   *(the red arrow indicates the right cursor - either right or down can be used to navigate out of the power)*

Remember to open an on-screen keyboard if you need pointer or touch access

Writing an equation using shortcuts

For keyboard users an alternative to using the palettes to write an equation is to use shortcuts to search the symbol you want. To do this select the equation tool and click on the screen where you want to start your equation. Then type '#', this will appear in a blue text colour, then type the equation element you wish to search.

For example, to select the symbol for "greater than" type "#g". Then arrow down to "Greater than" and press "Enter" to select.

#g

ga	Lower case Greek gamma
gt	Greater than
gtae	Greater than or approx equal
gte	Greater than or equal

Keep typing the letters of the function you want until it appears – you will need to do this for upper case Greek letters.
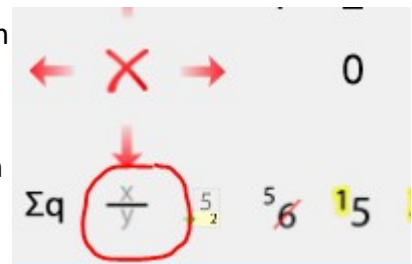
The codes on the left of the pop-up can be used to type an item more quickly for things used frequently - just type the code and press enter (eg "#gte" and Enter will type the greater-than-or-equal symbol)

Writing Fractions

It is possible to write both horizontal and vertical fractions in Splash. These can be added within either the numbers tool or the equations tool. For a fraction laid out vertically, such as:

$$\frac{2}{3}$$

- In the Numbers tool, keyboard users can press Control + "/". Pointer users need the advanced version of the Number keypad pop-up on which there is a button for this.

- In the equations tool keyboard users can do #div, and pointer users can use the button on the equations palette (which also looks like the one on the right)

$$\frac{3}{5}$$

Fractions can also be written horizontally, such as:

This uses the equations functionality. Keyboard users can use #divh to start a horizontal fraction, and there is a button on the main equation palette for pointer-based users.

This can also be done when working within the Numbers tool. In v3 it is possible to insert content from the equations tool within Numbers by either pressing Control + #; or using the bottom-left button in the Numbers pop-up. Then add the fraction itself as described above. Once done, step the cursor right to step out of the equation and return to working with the Numbers tool