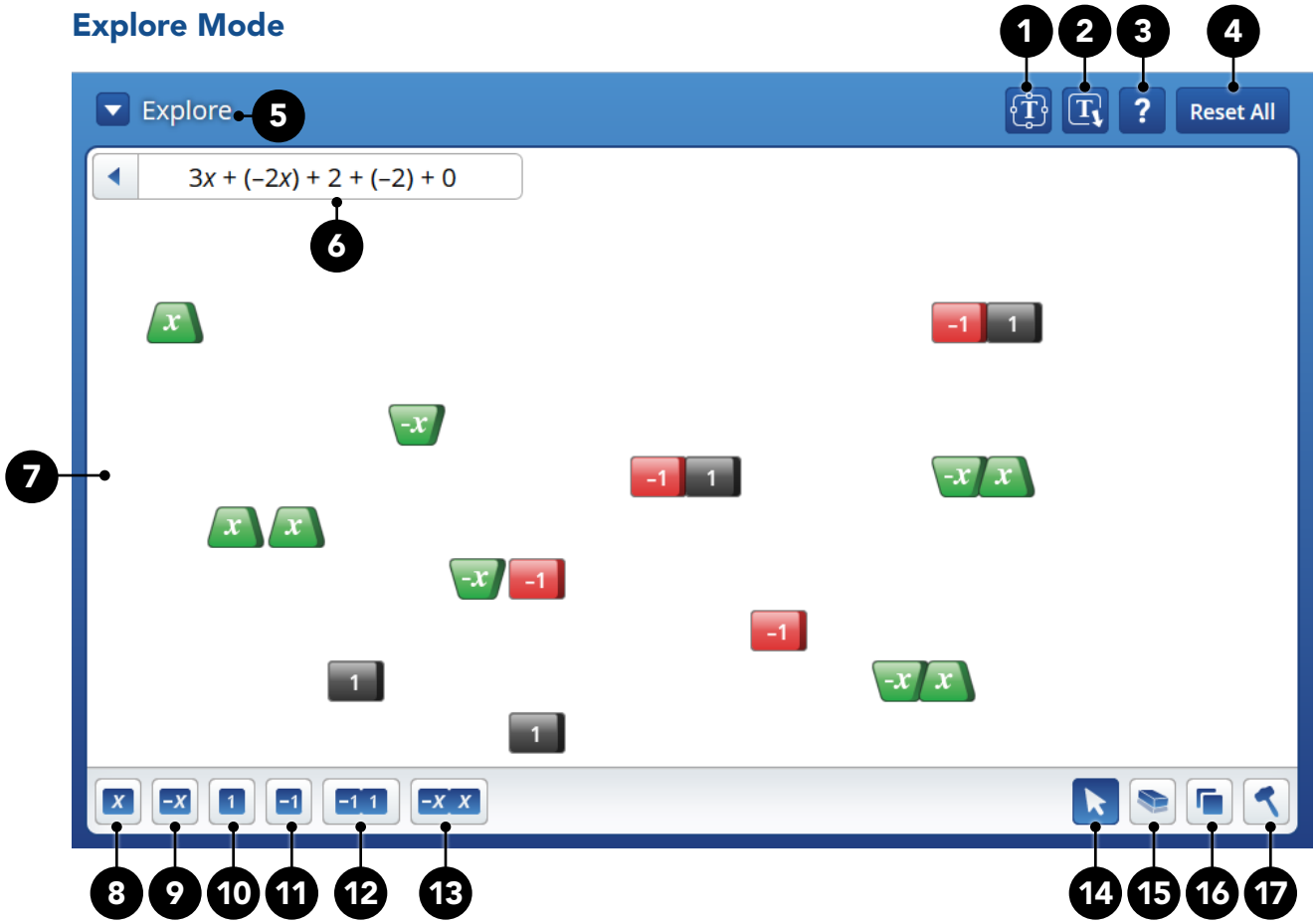
In this tool, you can model and manipulate one-variable algebraic expressions and equations using algebra tiles.

Explore Mode



1. **Textbox** Add comments to the activity area.
2. **Textbox with Arrow** Add comments to the activity area, using the arrow to focus attention on a particular area.
3. **Help** Launch a help file PDF for the tool.
4. **Reset All** Reset all current work in the activity area for the tool back to the default settings.
5. **Mode Drop-down** Shows all the available modes of the Algebra Tiles tool. Selecting a mode will open the tool to that mode, and save any current work in the mode you were previously working in. There are two modes in the Algebra Tiles tool: Explore and Equation.
6. **Expression Display** Shows the collective value of each tile type in an expression. The sum of any zero pair(s) present will always show a value of "0" in the display area.
7. ***x*-tile** When selected, each press in the activity area will add an *x*-tile.

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8. **–*x*-tile** When selected, each press in the activity area will add a –*x*-tile.
9. **1-tile** When selected, each press in the activity area will add a 1-tile.
10. **–1-tile** When selected, each press in the activity area will add a –1-tile.
11. **–1/1 zero pair** When selected, each press in the activity area will add a –1-tile/1-tile zero pair.
12. **–*x*/*x* zero pair** When selected, each press in the activity area will add a –*x*-tile/*x*-tile zero pair.
13. **Pointer** Use the pointer to select and move tiles within the activity area. When the pointer is selected, you can create a selection rectangle to select more than one tile to manipulate. When selected, a tile will have a blue outline around it. You can also use the pointer to create a zero pair by dragging a tile next to its opposite.
14. **Eraser** Using the eraser, you can select any tile(s) to remove them from the activity area.
15. **Clone** Using the clone button, you can click on any selected tile(s) to create duplicates of the selected tile(s). You can use the clone feature until the tile limit is achieved within the activity area.
16. **Hammer** Using the hammer button, you can break zero pairs apart. When the hammer button is selected, you can only manipulate the zero pairs remaining in the activity area. If there are no zero pairs remaining in the activity area, the hammer button is disabled.
17. **Activity Area** The area of the tool where tiles can be added and manipulated. A maximum of 64 tiles of any combination can be added to activity area.

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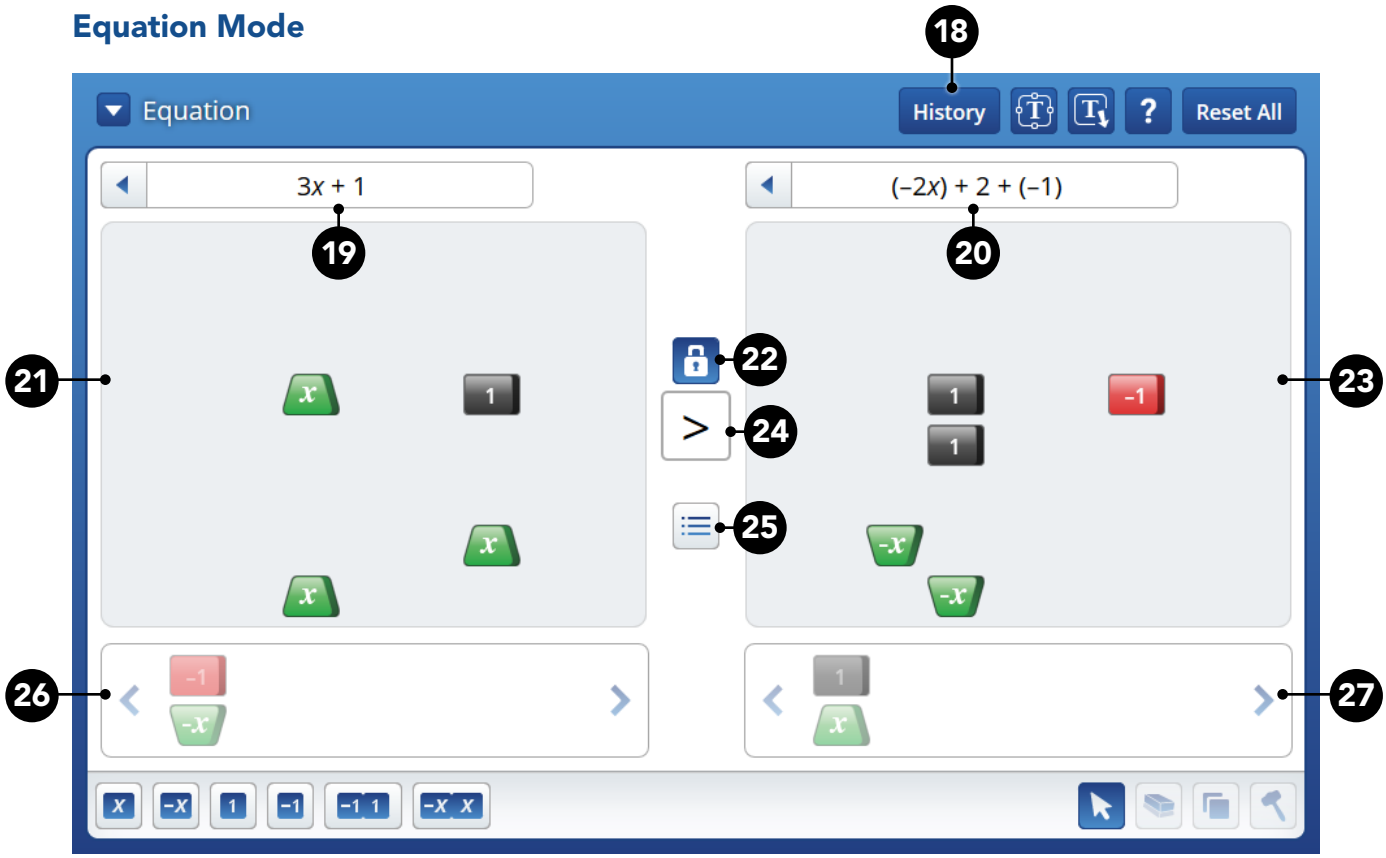
Equation Mode



18. History Maintains a list of each state of equality as you solve your equation. The original equation and the current equation always appear in the list. Selecting an equation in the list restores the bins to that prior state. Once you manipulate the tiles in the bin(s) and a new state of equality is established, the history list will reflect only the states of equality from just prior and after the place where you selected the state of equality.

19. Left Expression Bin Display Shows the collective value of each tile type in the left expression bin as an expression. The sum of any zero pair(s) present will always show a value of "0" in the display area.

20. Right Expression Bin Display Shows the collective value of each tile type in the right expression bin as an expression. The sum of any zero pair(s) present will always show a value of "0" in the display area.

21. Left Expression Bin You can add tiles to the bin to model an expression.

22. Lock Button Once you've created an expression in each bin that can produce a positive integer when the bins are set equal, the lock button becomes active. Hitting the lock button will lock the expressions on each side and set the equation. Clicking the lock again will allow you to unlock.

23. Right Expression Bin You can add tiles to the right bin to model an expression.

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24. **Equality Symbol** Once you set an equation with the two expression bins, the symbol will appear. As you add/remove tiles to solve the equation, the equality symbol will update to reflect whether the left expression bin is greater than, less than, or equal to the right expression bin.
25. **Partitions Button** Allows you to split each bin into up to five parts. The partition lines are for visual purposes only.
26. **Left Holding Bin** Will hold any tiles you erased from the left expression bin. Once each holding bin contains the same tiles, the holding bin empties its contents.
27. **Right Holding Bin** Will hold any tiles you erased from the right expression bin. Once each holding bin contains the same tiles, the holding bin empties its contents.