Tables and Charts

Auto-generated captions, merged into complete sentences with timestamps

0:00:00–0:00:02	Hello and welcome to the video about tables and charts.
0:00:03–0:00:05	Both of these are great ways to present information for your learners.
0:00:06–0:00:10	Charts draw data from tables, so we'll dive into tables first.
0:00:11–0:00:13	To create a table, click the Add Table button.
0:00:14–0:00:17	To name the table, enter text in the Table Title text field.
0:00:19–0:00:24	To align the table to the left, right, or center of the display area, click the table alignment box.
0:00:25–0:00:29	To delete the table, click on the trash can button, which is the Delete Table button.
0:00:30–0:00:33	To rename columns, click in a column's column name field.
0:00:34–0:00:37	To rename rows, click in a row's row name field.
0:00:38–0:00:48	To add a new column, click the Add Column button or on one of the green circles with a plus in it. To add a new row, click the Add Row button or on one of the green circles with a plus in it.
0:00:49–0:00:54	To delete a row or column, click on the red trash can to the right or below it.
0:00:54–0:01:33	When adding content to a cell, you can add numbers, reference other cells in the table, use variables, or add actual mathematical formulas, but not LaTeX expressions. One important thing to note is that cells can't contain a mix of these content types. Cells that can be resolved to valid expressions are automatically tokenized, meaning they can be used as a value later in the activity, such as being used in other cells, evaluated against conditional branching, or used to fill in the blank valuations. If you are adding numbers to cells, be sure not to include commas, as commas can be read as new values within the cell and only the number to the right or left may be displayed.
0:01:34–0:01:37	Using variables in tables can be a useful tool.
0:01:37–0:01:40	Variables are listed in the tokens table shown here.

0:01:40–0:01:47	To help you correctly format them, you can copy and paste the text from the variables section, including the brackets, into cells.
0:01:47–0:01:59	The values of these variables will update live as the student proceeds through the activity, so the tables can change based on the student's answers to questions or inputs into editable cells. Variables are covered in depth in a separate video.
0:01:59–0:02:01	To edit or format a cell, click on it.
0:02:02–0:02:06	This will let you edit the content within the cell, and it will open the cell format box.
0:02:08–0:02:13	In the cell format box, you can make the values of the cell editable to the learner by clicking the Editable checkbox.
0:02:13–0:02:30	For example, if you wanted a learner to be able to see how much money they would accrue depending on how long they left it in an investment account, you can make the cell designated as the number of years editable and then have other cells reference the cell's value to perform a compound interest calculation based on the number of years the student entered.
0:02:32–0:02:37	You can adjust how many decimal places a value in a cell can have by entering a number in the decimal places field.
0:02:38–0:02:43	Note that if a value goes out to more decimal places than the formatting allows, decimal values will appear rounded.
0:02:44–0:02:57	If you're using the production assistant and you notice that numbers and text are not in sync with materials, or the notation seems off, edit the table and check the decimals. Make sure to set decimal places, because it will round by default.
0:02:57–0:03:06	Values within a cell can be labeled with either a percent or a dollar sign by clicking the label buttons. You can also adjust the width of each column.
0:03:06–0:03:13	This is one of the first things you can consider doing to improve the look of your table. The width is relative to the other columns.
0:03:13–0:03:21	So for example, if you want one column to be double the width of another, you can enter the widths as 15 and 30 or 10 and 20.
0:03:22–0:03:26	Start with any value and see how it looks, and adjust accordingly.
0:03:26–0:03:30	Change the alignment of the text within its cell by clicking the cell alignment buttons.

0:03:32–0:03:37	If you change the format of one cell and want to apply it to others, click this paint roller button to copy that format.
0:03:38–0:03:40	You can select which parts of the format you want to copy.
0:03:40–0:03:42	Now, you can paste it in other cells.
0:03:44–0:03:58	One tip is that if you plan to apply a change to the entire table and you are using a PC, you can select the first cell, hold down the Shift key, and select the bottom right cell to select the whole table. If you are using a Mac, you can do the same.
0:03:58–0:04:03	Just use Command and Shift at the same time when selecting the bottom right cell.
0:04:03–0:04:21	You can adjust the borders of each cell or group of cells when selected by clicking on the borders of the sample table or by using the pre-selected cells on the right side. Once you select at least one border, you are able to change the style, thickness, and color. Here are the controls to change the text style.
0:04:21–0:04:26	You can change the font, size, colors, and other text formatting controls.
0:04:26–0:04:37	You can create a new table by uploading a CSV as well by clicking on the button to the left of the percent width. You will be prompted to browse to your CSV location, select your file, and confirm.
0:04:41–0:04:45	Let's move on to charts. All charts are created from an existing table within the activity.
0:04:47–0:04:55	For charts not displayed with their table in the same material area, we suggest you set up a hidden table reference material area for all tables that will only be seen as charts.
0:04:57–0:05:00	Choose a table from the pull-down menu that you wish to make a chart for.
0:05:00–0:05:08	You can create multiple charts from the same table, and as the table data updates, the charts will update in real-time.
0:05:08–0:05:11	Enter your title for your chart or leave it blank.
0:05:11–0:05:14	The title will appear in a large font centered above the table.
0:05:16–0:05:27	To delete the chart, click on the Delete Chart button represented by this trash can icon. To change the alignment of the chart on your materials page, use the align control outside of the chart, near font controls.

0:05:28–0:05:32	To set the width of the chart relative to the available display area, use the width controls.
0:05:34–0:05:42	There are several chart types to choose from, and you may want to experiment with different table formats combined with different chart types for maximum impact.
0:05:42–0:05:45	To experiment, click on the pull-down menu to the right of chart type.
0:05:47–0:05:53	The labels of the X-axis of the chart comes from column zero of your table, while the legend comes from the headers of row zero.
0:05:54–0:05:58	You have the option to hide the legend or show the legend in any chart type.
0:05:58–0:06:01	If the legend is highlighted in blue, it means it is shown.
0:06:02–0:06:07	To hide it, click on it and it will no longer be highlighted, meaning it is hidden.
0:06:07–0:06:11	The same rules apply for hiding and showing the labels.
0:06:12–0:06:20	You may want to adjust the domain or pad the width of data points as the edge of the tables can be hard to see. Controls for both exist for both axes.
0:06:21–0:06:27	When you click on one of the axes, you will see an option to change the domain or range, interval, and padding.
0:06:29–0:06:31	You can also move the label position.
0:06:33–0:06:36	If you click on the labels button, you can change the units of the label.
0:06:37–0:06:56	If you wish to change the color or style of the data being displayed, click on any of the points in the legend and a color picker will appear in the lower left corner. Here, you can select your color as well as the style, such as linear, stepped, natural, or curve. Feel free to experiment with these options and see what looks the best to you.
0:06:58–0:07:01	That concludes our video about tables and charts. Thanks for watching.