Activity where we can create a line or a bar graph and also perform several operations on the same data table, etc:

Forma a gráfica das temperaturas medias da cidade de Vigo elevando os puntos ós seu táboa.


In the "Activity" tab we can find the following items:


## SECTION 1

This box (optional) allows us to give a title to the chart in the "Title" (1) field but we can also format it by choosing the font (2), size (3), colour (4) and by activating

## SECTION 2

Here we will insert the data and the characteristics of the items in the X axis. In the "Text legend" (1) we can write a short text identifying the items of
 this axis; it will be displayed in the lower right hand; with button (2) we can choose its colour and in the field (3) the font size. In the central areas (4) we can enter the names of the items that will be part of the X axis to a maximum of 12 ; at the bottom you can choose the family (5), size (6), and colour (7) for the texts of these 12 fields, as well as choosing whether these texts will be shown in bold (8).

NOTE: The font family, size and bold style also affect the items to the left in the Y axis, but not the colour ..

## SECTION 3

Here we will insert the data and characteristics of the items in the Y axis. In the "TexLen" field (1) we can write a short text identifying the elements in this axis; it will be located on the right side; with button (2) we can choose the colour of the text and in field (3) the font size. In the fields (4) we can add up to 3 items for each of the items that we have inserted in the fields of X axis; ie, there could be up to 3 different fields for each X value; with buttons (5) we can choose the colours of these columns or lines on the graph.

In the "Start in:" field (6) we will determine whether the Y-axis values will start from 0 or another value, even from negative numbers. In the "increment" field (7) we will indicate how many units each horizontal line appearing on the graph will represent; this also determines how many units will be necessary to display numbers on the Y axis. In the "Values Space" (8) field we will indicate, in case the user needs to adjust the columns or points to build the graph, the number of units which will be moved in a row every time the user moves the points or columns up. Finally in the "Number of divisions" (9)we can decide the maximum value for the data on the Y axis, that is, the number that would appear at the upper part of the axis.

## SECTION 4

Double-click on the table and a popup window will allow you to enter data:


On the left we can see the names we had inserted in section 2 for the X axis. In the center there are some drop-down lists (one per name) where we will indicate the value we want to associate to each of these names. In the list of values we will only see multiples of the number we have inserted in the "increment" in Section 3. In the example shown in the picture, we had put the value " 5 " in that field.

## SECTION 5

Here we can select different parameters related to the solution and presentation of the activity:

Seleccione los distintos parámetros para la actividad

buttons "Chart Type" (1) we can choose one of these two options. With the "Type of activity" (2) buttons we choose how to solve the activity: if you choose "Fixed" the graph data will only be presented and there will be no interaction; if you choose "Insert data" a data table will appear right below the graph with drop-down lists (in case we have marked those boxes) for each item in the X axis and the user must select the suitable data:


If we choose "Adjust data and graphic", besides having to complete the data table, as in the previous figure, the user must also create the graphic by moving the lines or the bars till the correct value. If we choose the "Open" option the user can freely create any graphic he or she wants (provided with limiting values we have placed on the axes) and the check button will not appear [?] To see if it is correct or not the activity. Finally, if we choose "Set chart", the user must create raising points or bars line up the proper value graph.

In the lower panel we can adjust the width and height for the activity (3); we can make it compatible with touchscreen devices (4) and choose if all the boxes will have rounded corners (5). By checking the "Correct" box (6) whenever the users press on the check button, in case there are some wrong answers the users won't have to re-enter the correct ones. If this box is not checked and there is an incorrect entry, the error message will be displayed and the user will have to review all the data again.

By checking the box "Insert data into the graph", a value will appear on each column or each point of the line according to their position (height) on the X axis. By checking the box "View data table" (8) a table will be displayed showing the data " Y " corresponding to each value in the " X " axis. This box must be checked at least when we choose the options "Cover data" and "Adjust data and graph". Finally in the "Font size" (9) we will determine the size of the characters that are part of the data table and the written items appearing in section 3.

