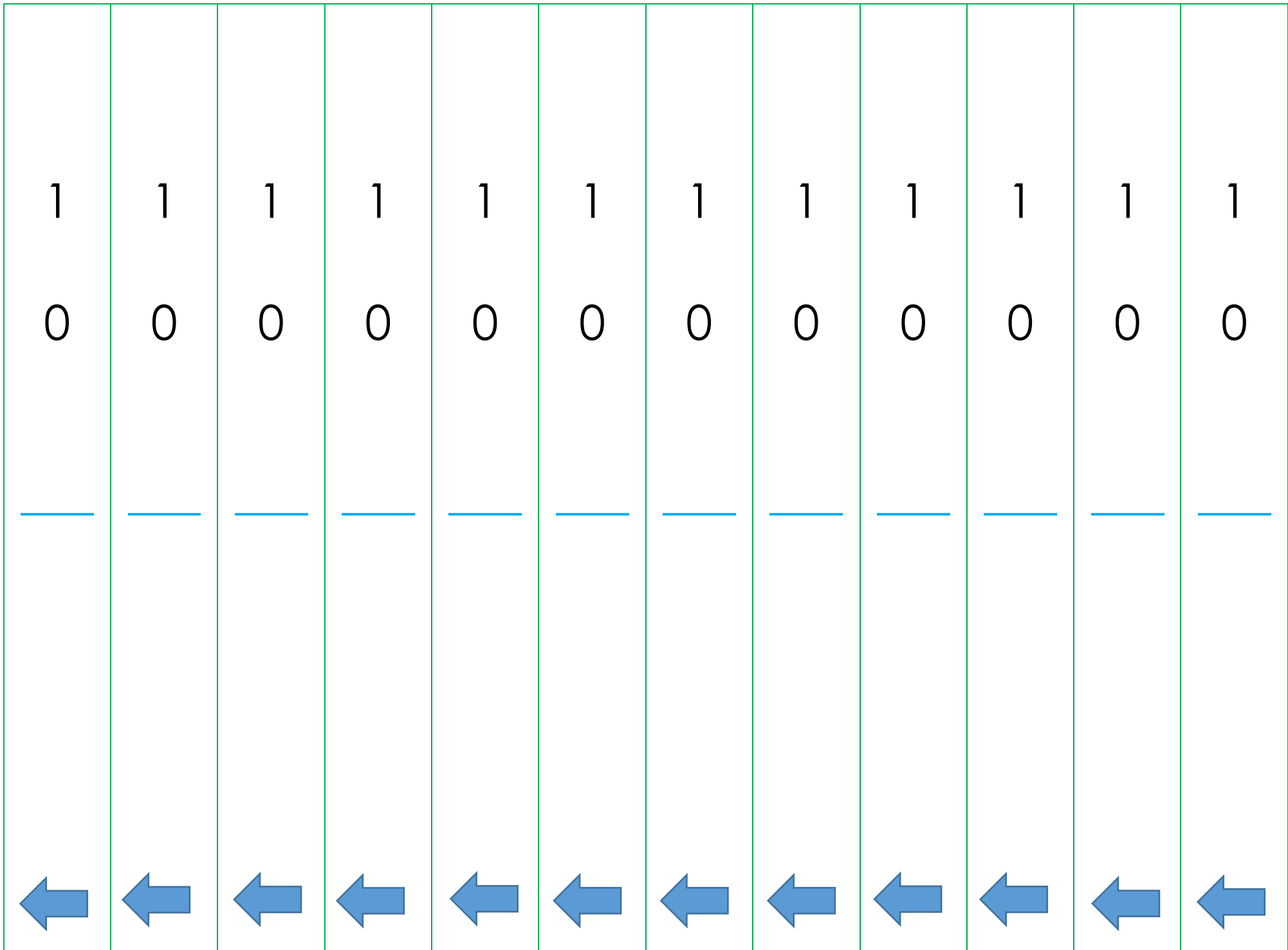


# Making Your Binary Calculator

Before you start, make sure that you print the Binary Strips Page and the Binary Calculator page on card; paper will rip.

## Instructions

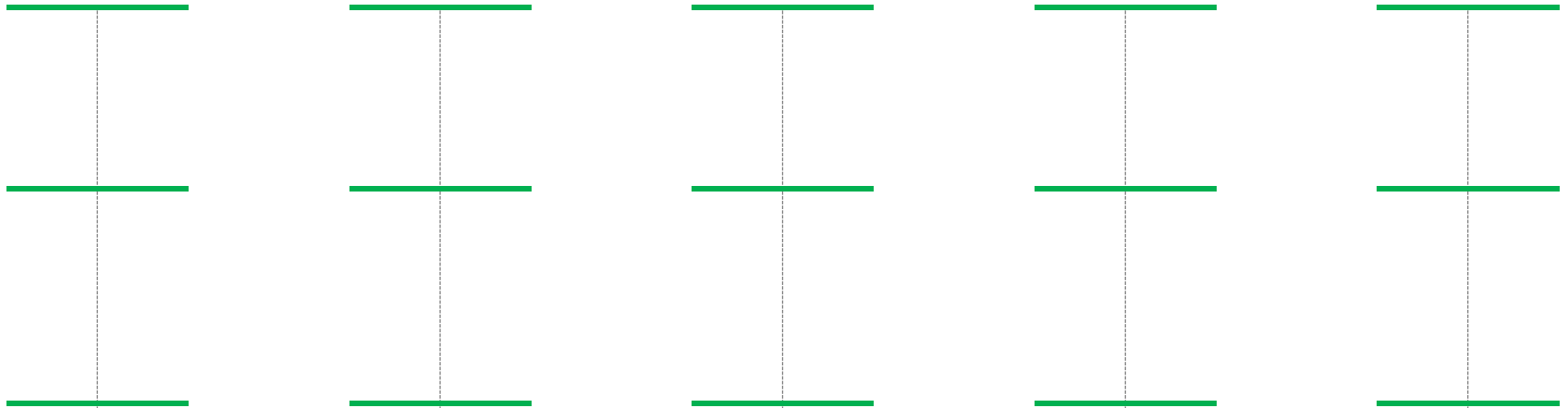
1. Create your Binary Strips
  - Cutting only along the green lines, cut out 5 strips from the Binary Strips page.
2. Now follow the instructions below to create slots in each column of your Binary Calculator. These slots are for the binary strips.
  - Fold along the first dotted line
  - With the card folded cut each of the 5 short green lines.
  - Unfold the card
  - Now fold along the dotted line in the second column
  - Keeping the card folded, cut each of the 5 short green lines for this column
  - Unfold the card
  - Repeat this for each column until all of the green lines have become a slot
3. Open the card flat then thread through each of the Binary Strips.
  - Questions:
    - Does it matter how the strip goes in?
    - Should you start from the bottom or the top?
    - Should you insert from the front or the back?
  - Hint:
    - Which part of the strip needs to always be showing?
4. Now that your strips are threaded through, what is missing?
  - Can you insert the missing information in the right places to make your Binary Calculator work?
5. Your Binary Calculator is ready to use! Test it then challenge yourself to find the binary representation for some denary numbers.



# My Binary Calculator

made by \_\_\_\_\_ date \_\_\_\_\_

Binary



Denary

+ + + +

OFF OFF OFF OFF OFF

ON ON ON ON ON

# My Binary Calculator – Correct layout = if on denary numbers shown as below

Binary                                                                                  
          1            1            1            1            1

Denary                      +                      +                      +                      +                      +                  
          16            8            4            2            1

                                                                            
OFF            OFF            OFF            OFF            OFF

ON ←      ON ←      ON ←      ON ←      ON ←