


Creating an Outline Puzzle using mathies Pattern Blocks+

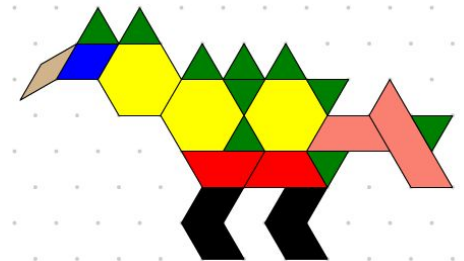
You can create your own outline puzzle, or template, and then challenge students to cover it with pattern blocks.

1. Open the [Pattern Blocks+ tool](#).


- If the puzzle is only going to be used on one type of device (e.g., iPad, tablet, computer), go to step 2.
- If the puzzle is going to be used on a variety of devices, it is recommended that the puzzle be created on the device with the smallest resolution.
 - Typically, you would use a desktop computer with a window size of about 800px by 600px, since most mobile tablets have a much higher resolution than this.
 - You can use <https://browsersize.com/> to measure the window size.
 - After resizing the window, refresh the tool to get the best default block size

2. Create your design.

- It does not matter if the blocks you use overlap. In the [Dinosaur example](#), the pink trapezoids that make up the tail overlap.
- If your design is too big for this window size, consider decreasing the block size .



3. Apply Template Settings.

- The gear icon  opens the Settings dialog which displays the  button.
- This makes all the blocks appear solid grey without an outline, ready to be used to create an outline puzzle.
- You may want to save the file at this stage before continuing.



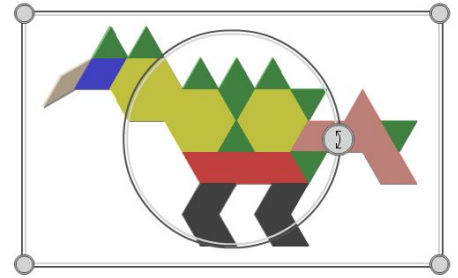
4. [Take a screenshot](#) of the grey blocks.

- Do **not** close the tool, or change the window size, as these blocks are required in the next step.
- If you have access to photo-editing software, consider making the background transparent.


5. [Insert the screenshot](#) into the Pattern Blocks workspace.

6. **Position the screenshot** to match the pattern blocks.



- From the Settings Dialog , click  to make the blocks stand out.
- It is easy to inadvertently move a block instead of the image.
- Use undo/redo   to help as you repeatedly move the image.

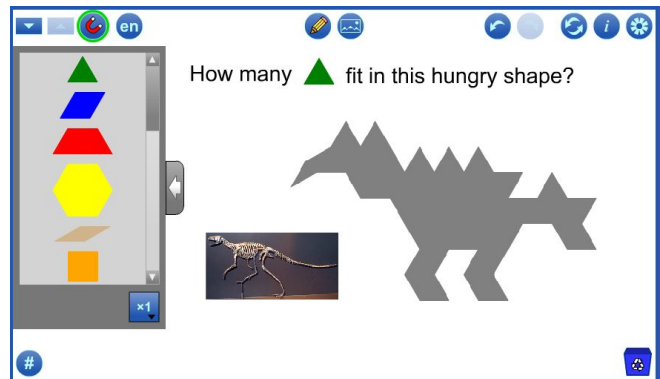


7. **Delete all the blocks.**








- Click in some white space to deselect everything.
- Click the recycle bin  to delete all the blocks, leaving just the image.

8. **Incorporate additional elements** (optional).

- [Annotation](#)  (e.g., instructions)
- Pattern blocks (e.g., reference blocks)
- [Images](#)  (e.g., [dinosaur skeleton](#))



9. **Create a file to share.**

- From the Settings Dialog , save  the file.
- Reset  the tool.
- Import  the saved file. Importing a file removes any undo/redo history steps, unlike opening a file.
- Save  the file again.
- Make this [final file](#) available to be used as an outline puzzle. This file can be stored on cloud-based storage sites like Google Drive, OneDrive, and Dropbox. It can be saved to a network drive or web server or emailed as an attachment.
- To use this outline puzzle template:
 - open the Pattern Blocks+ Tool
 - from the Settings Dialog , open  the file
 - start dragging blocks into the workspace

See [File Operations](#) for more details about working with mathies tool files.

Visit the Pattern Blocks+ [support page](#) for more details and examples.