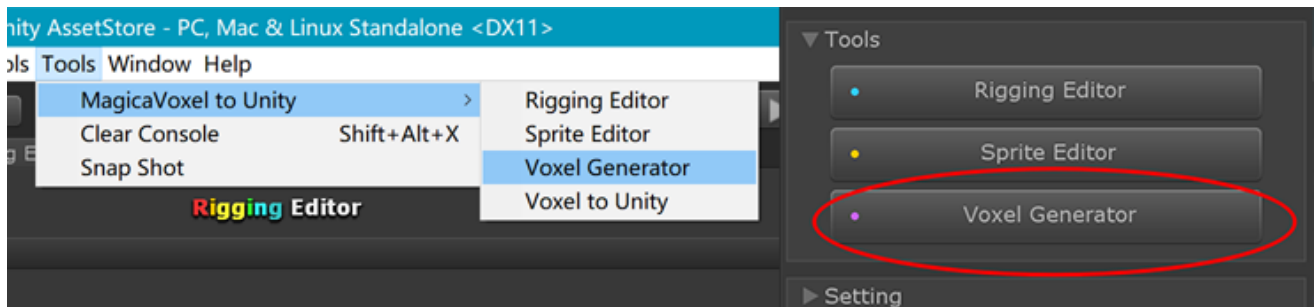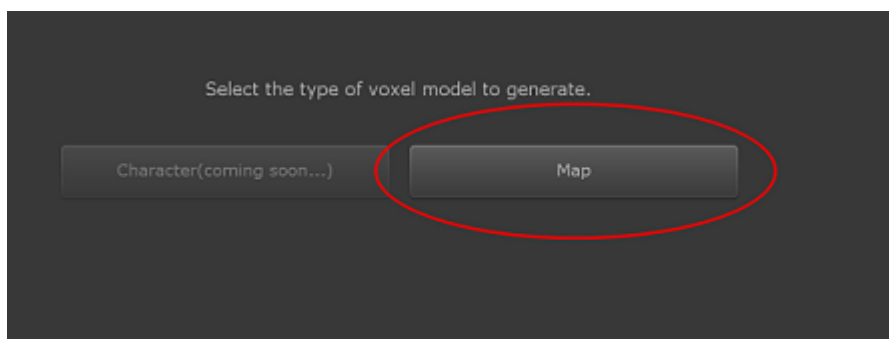# MagicaVoxel to Unity - Map Generator Tutorial

- Open voxel generator by click "Voxel Generator" button in tools panel, or use "Tools >> MagicaVoxel to Unity >> Voxel Generator" in the menu.

- Click "Map" button in the opened window.

- When you opened map generator, you can view the map after click on the "Generate" button (in ①). Use mouse right button to rotate, middle button to move, mouse wheel to zoom.
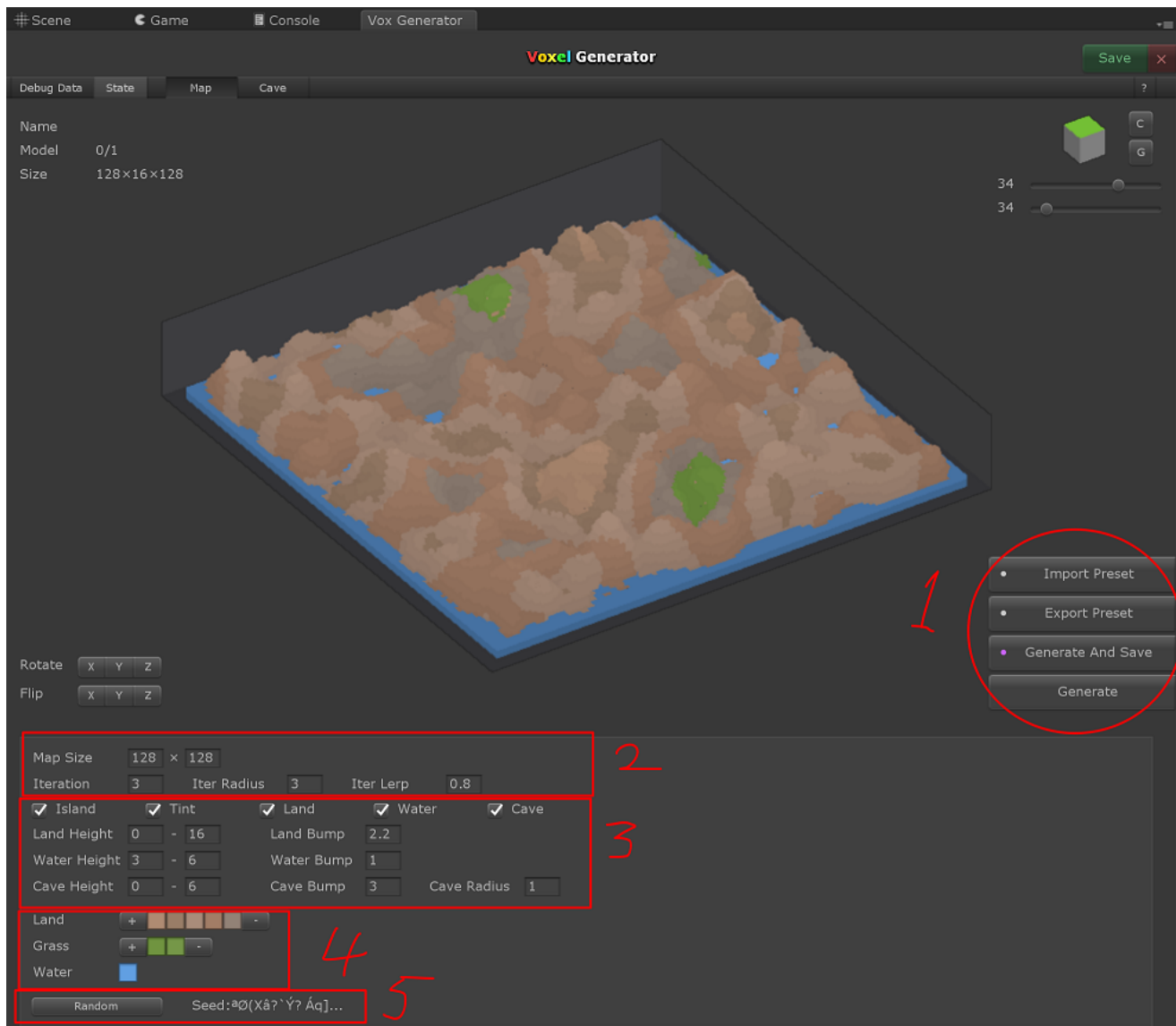
- - ① Major Functions

  - - ■ "Generate" button will create the map based on the current setting below and show it in the editor. To save the map into a vox file, click the "Save" button in top right corner.
    - ■ "Generate and Save" button do the same thing with "Generate" but will save the map into vox file after generate it.
    - ■ "Import/Export Preset" button will load/save the current setting with a json file. The same json file will always generate the same map, the random seed is also inside the json file.

  - ② Basic Settings

  - - ■ "Map Size" is the size of the map in X and Z axis. Larger map will take longer time to generate. Change the map size will also change the seed.
    - ■ "Iteration" means the number of iterations required to generate land. The more iterations, the smoother the land, and takes longer time.
    - ■ "Iter Radius" is the voxel range involved in a single iteration. Larger value will makes land more smooth and takes more time.
    - ■ "Iter Lerp" is the influence of iteration. Does not affect generation time. 1 means use the result of iteration, 0 means use random value, 0.5 means use the average of them.
- - ③ Element Setting

- - - With "Island" checked, the map will surrounded by water. Also will be less water in the land.
      - "Tint" means the lower the height, the darker the color. It applies to land and water.
      - "Land", "Water" and "Cave" determines whether the corresponding element will be generate.
      - "Land/Water/Cave Height" are the interval of the generated element in Y axis.
      - "Land/Water/Cave Bump" are of the agitated degree of generated element. "Land Bump" only affect the color of land.
      - "Cave Radius" means the thickness of the cave.
- - ④ Element Color
  - - "Land" and "Grass" are both the color of ground, grass only appears on the top of ground. Use the "+" and "-" button to add or delete them.
    - "Water" color are the color of water.
- - ⑤ Press "Random" button will recreate the seeds. The seeds are stored in preset json file.

- Press "Cave" button to only show the cave. Caves will be empty or water voxels in map. If you don't enable cave, the cave button will not shown.