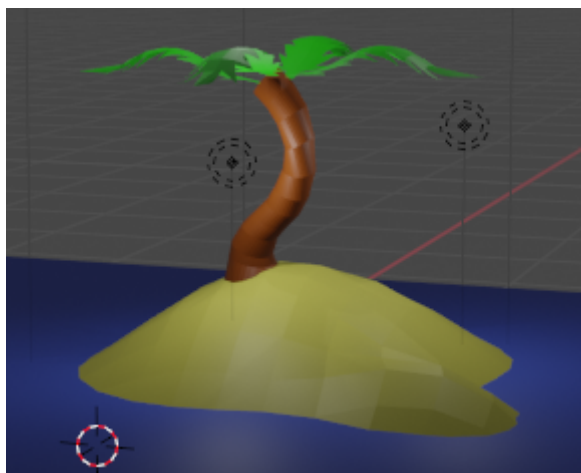
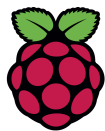


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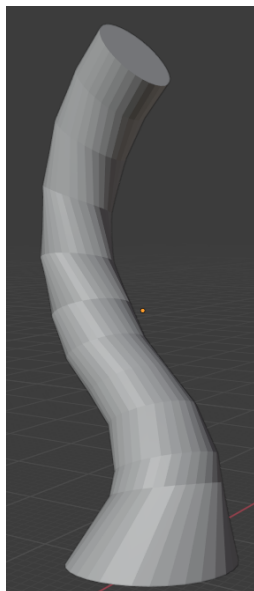
Lesson 4 - Organic modelling





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Task Proportional editing



Steps

1. Make the trunk of the tree

Instructions

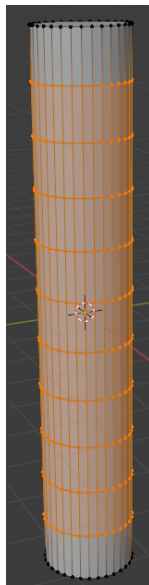
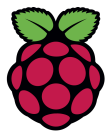
Delete the default cube and add a cylinder:

Add ▸ **Mesh** ▸ **Cylinder**

Scale the cylinder along the z axis by pressing:
S + Z and moving your mouse.

Switch to **Edit Mode**

Use **loop cut**  to divide the trunk into **11** round sections, by using the menu in the bottom left, or by repeatedly applying loop cut:



Switch back to **Select Box**  mode

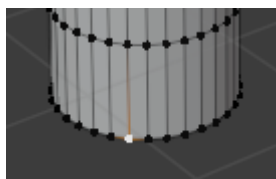
2. Make the base of the trunk

Tree trunks are larger towards the bottom.

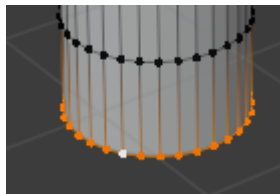
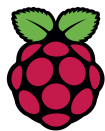
Whilst still in **Edit Mode** change to **Vertex select**



Select a vertex on the bottom of the tree trunk

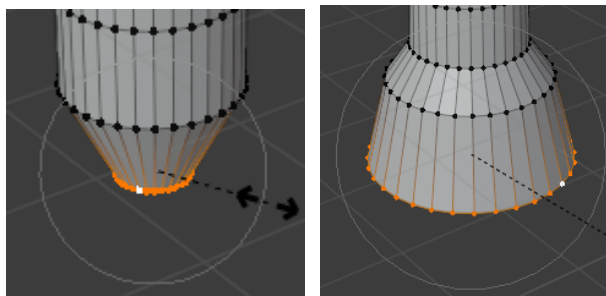


Now **click** on it again whilst holding down **Alt**, to **select a loop** of vertices. You might need to attempt this a few times as it might select a vertical loop first.

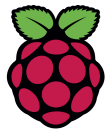


Enable **proportional editing** by clicking on the icon in the menu at the top middle of the Blender interface.

Press **S** to change the scale of the base, you'll notice a small circle, this is the power of your proportional editing. Roll your **mouse wheel** immediately after pressing s, to change the **strength**. **left-click** to fix the change.



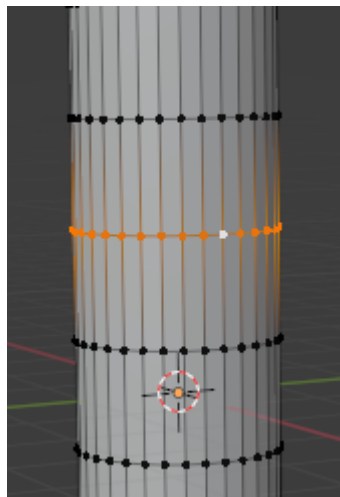
Tip: You can enable/disable proportional editing by pressing **O**. You can change the **strength** in the **menu** that appears in the bottom left of the Blender interface:



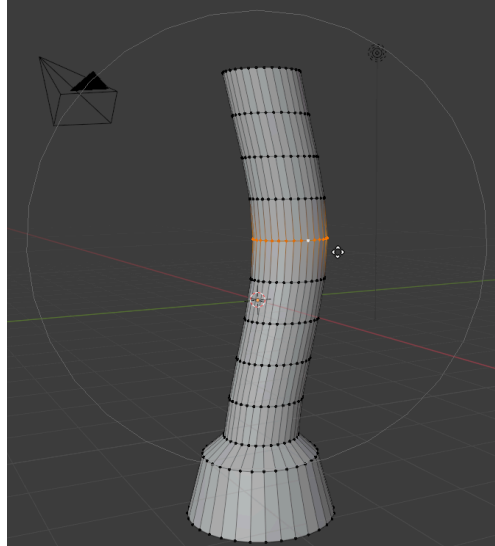
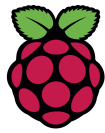
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-
3. Use proportional editing to twist the tree trunk

Use **Loop select** (hold **Alt** when clicking on a vertex, edge or face) to select a ring around the middle of the trunk.

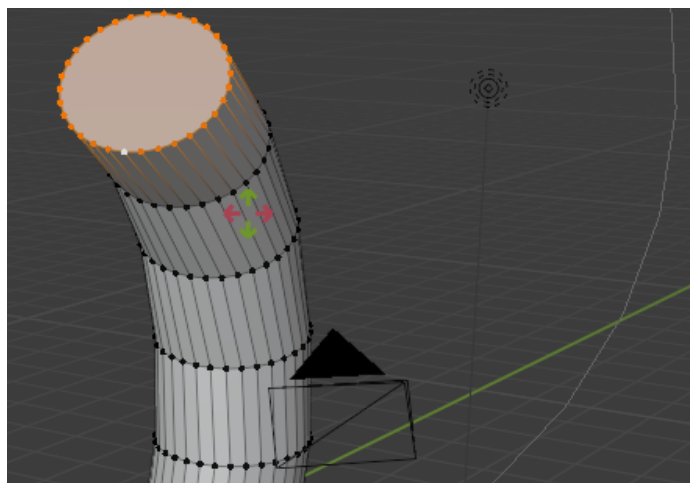


Press **G** to **move** this loop left or right, scroll your mouse wheel to add extra strength to the proportional editing:

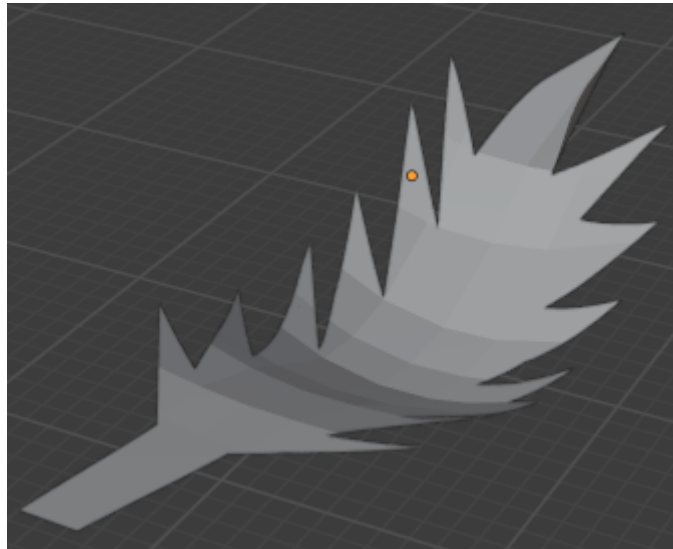


Select the top ring of vertices using loop select.
(Or just select the top face).

Use **R** to **rotate** the trunk and make sure that
proportional editing is on with enough strength to
twist the top of the tree:



Task The knife tool



Steps

1. Add a plane to cut you leaf from

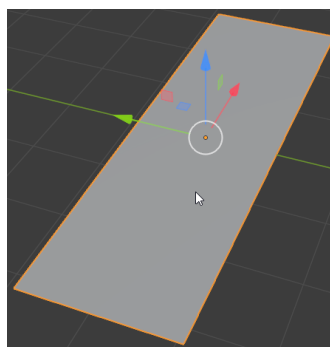
Instructions

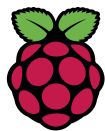
In the same Blender window as your tree trunk, make sure you are in **Object Mode**, then:

Add ▸ **Mesh** ▸ **Plane**

Focus on this plane by press . on the numpad

Scale the plane along the x axis by pressing **S** ⊕ **X**



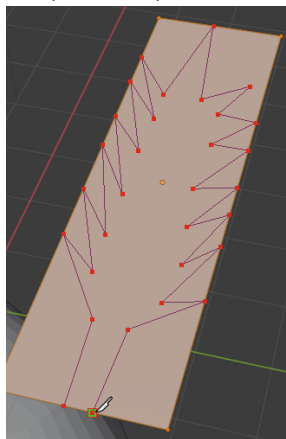


2. Cut a leaf out of the plane

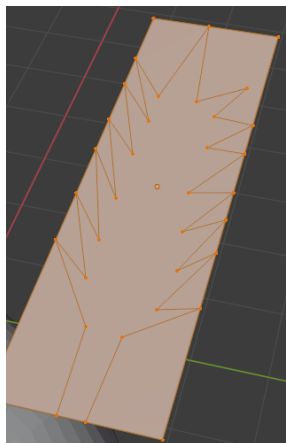
Go into **Edit Mode**

Select the **Knife tool**, , or press **K**

Click on plane then keep clicking to make the shape of a palm tree leaf:

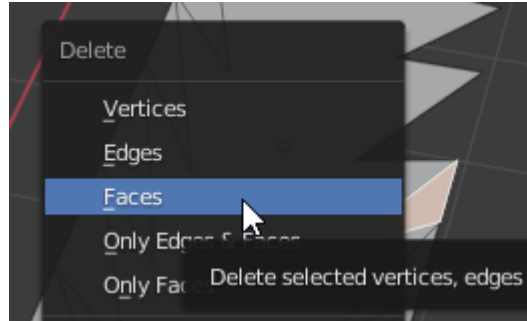
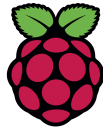


Press **Enter** to fix the cut (or **Escape** to try again):



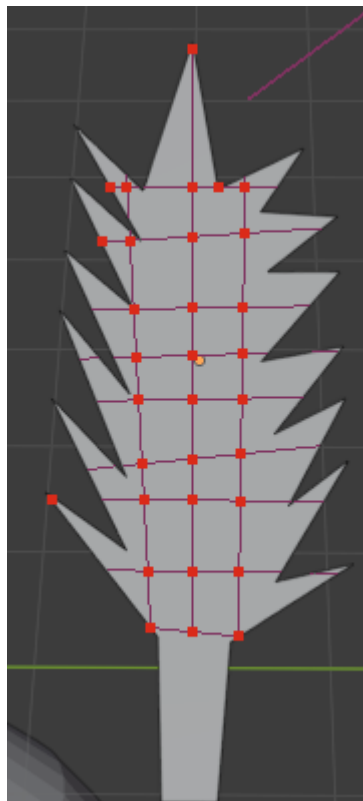
Switch back to **Select Box**  mode

Switch to **Face select** mode and click on the faces you don't want, press **X** to **delete** them

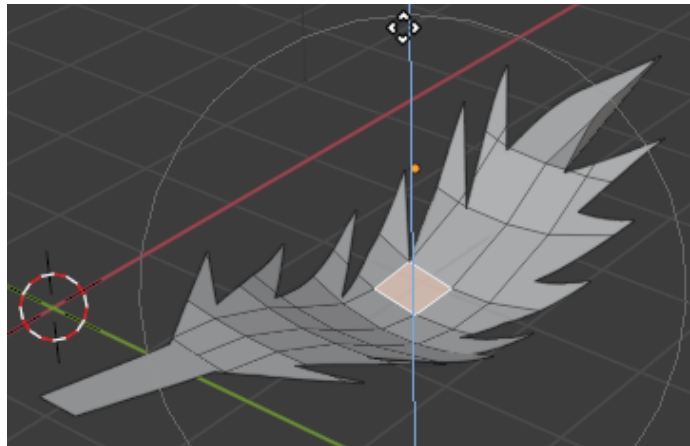


Select the **Knife tool**, , or press **K**

Criss cross the leaf with cuts and press **Enter** to fix them:



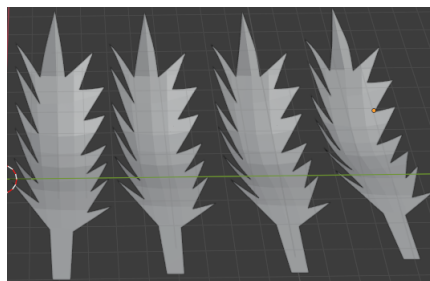
Use the **Move tool**  and push the middle of the leaf down (make sure that **proportional editing** is enabled and adjust the **strength** of it to get the right effect):



3. Make multiple leaves

Return to **Object Mode**

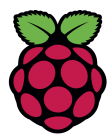
Duplicate the single palm leaf four times using **Shift + D**



4. Position the leaves on the trunk

Position each of the leaves on the top of the tree:



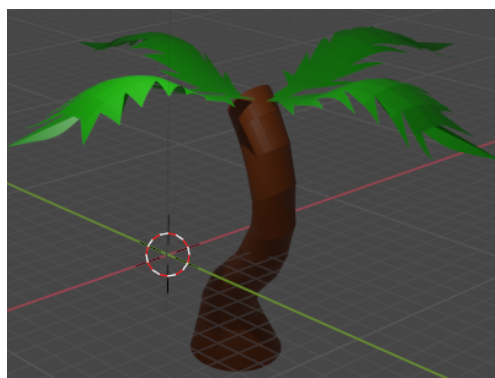


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5. Colour the tree in

Tip: Reuse the same colour for each of the leaves.

Tip: Use **Rendered** mode to preview the colours

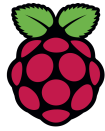


Explorer task

Name the parts of the tree and parent them together so they are easier to move

Add different shaped leaves

Add coconuts



Task Subdivision



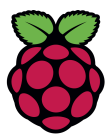
Steps

1. Hide the palm tree

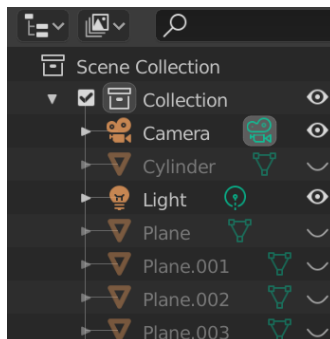
Instructions

In the **Outliner panel**  in the top right of the Blender interface, find all the elements of the palm tree and **hide** them by clicking on the **eye symbol**





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Tip: You can click on the eye again to re enable the objects.

2. Add the island

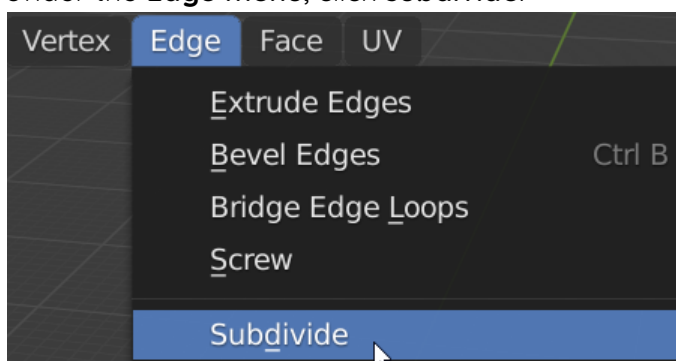
Add a **plane** that will make the island

Add ▸ **Mesh** ▸ **Plane**

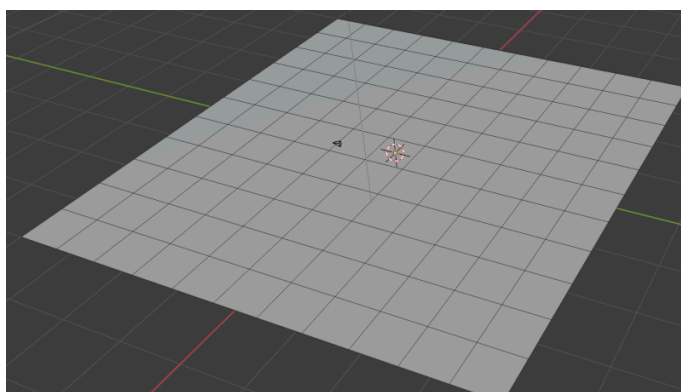
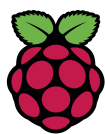
Press **s** + **40** to **scale** the plane to be much larger.

Go into **Edit Mode**

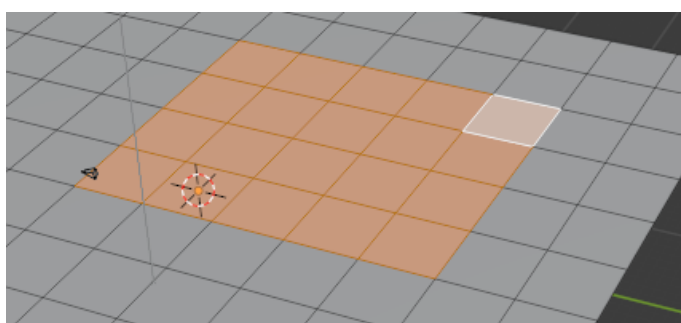
Under the **Edge menu**, click **subdivide**:

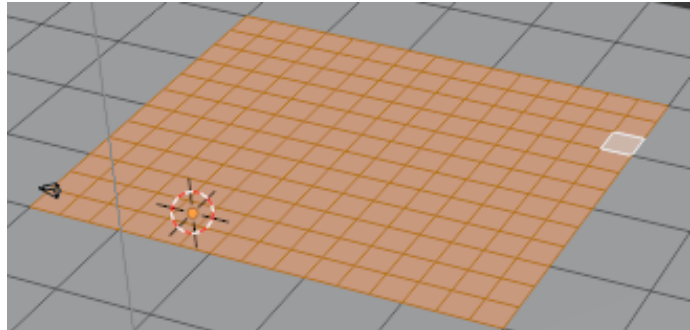


You can click this menu item several times, or click on the new **Subdivide menu** that has appeared in the bottom left of the screen and set number of cuts to **10**:

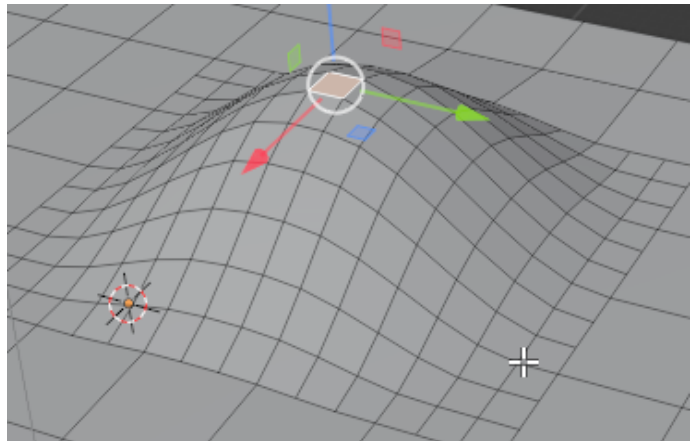


Select some squares where the island will be and **subdivide** another **2** times

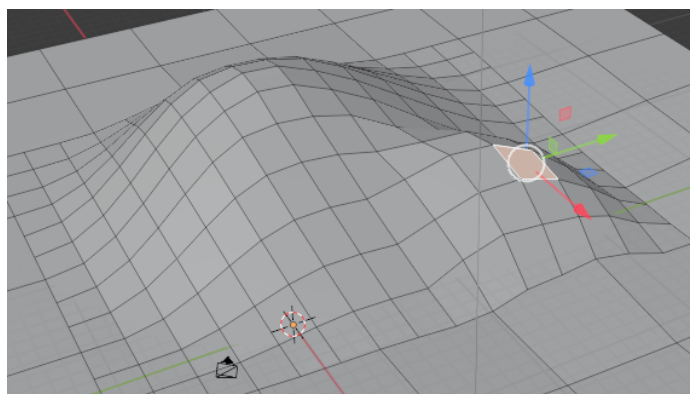




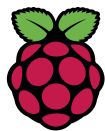
Select a midpoint of the island and pull the face up, with proportional editing enabled:



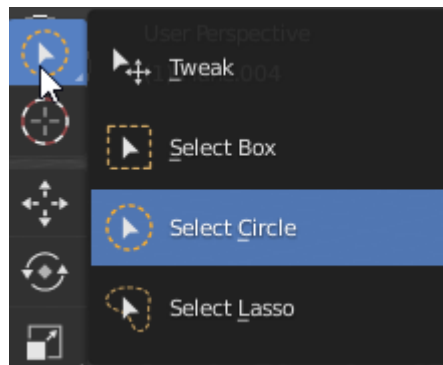
Select another part of the island and repeat, until you get something island shaped:



Tip: You can easily select lots of items by pressing **C** to enable the **Select circle**, then ‘drawing’ on the things you want to select. This is also accessible from clicking and holding on the **Select menu**:



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3. Make the sea

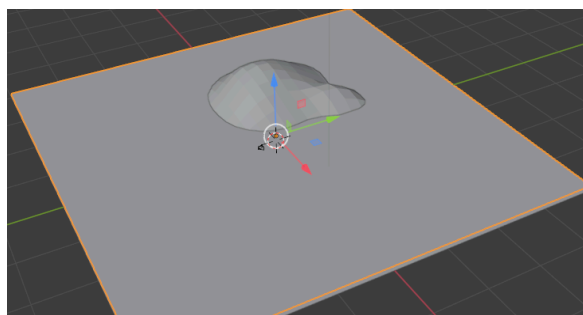
Return to **Object Mode**

Make a plane to represent the sea:

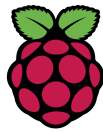
Add ▸ Mesh ▸ Plane

Press **S ⊕ 40** to **scale** the plane to be much larger

Move the sea plane slightly upwards so that it surrounds the island:

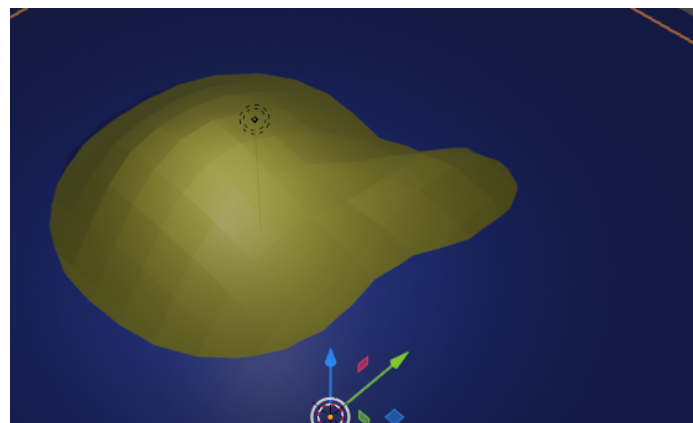
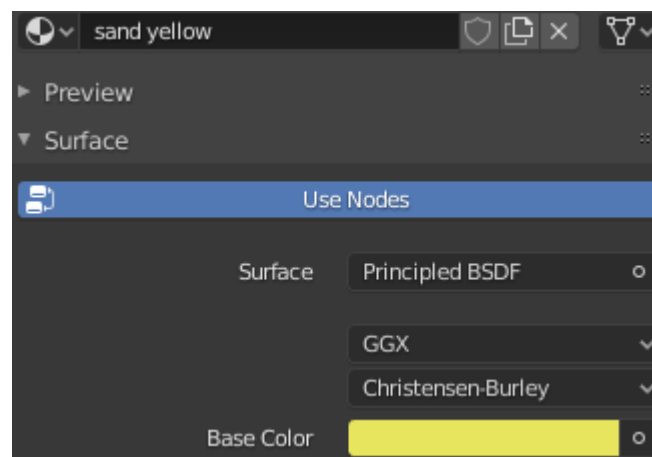


Tip: In **object mode** when you try and move the land or sea, you might find that they move together?! Make sure you have turned off proportional editing to stop moving one object and also grabbing other objects.

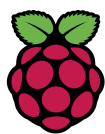


4. Colour in the land and sea

Use the **materials** tab .



Tip: You can use different **surface types** to give different effects. For example, you might want to try out the **Transparent BSDF** for the sea.

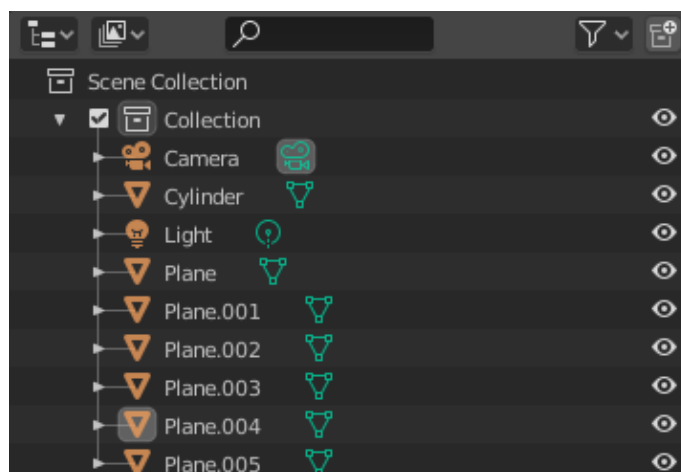


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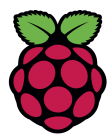
And you can make things **glow** with **Emission**

5. Position the palm tree

In the **Outliner panel**  in the top right of the Blender interface, find all the elements of the palm tree and **show** them by **clicking** on the closed **eye symbol**



Move the tree onto the island:



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Explorer task

Add other trees

Add a shipwreck

Add rocks and coconuts to the island

Animate the sea to go up and down