

Colour a snowman

{code
club}

Introduction

Learn how to colour in a 3D model of a snowman using Blender.

What you will make

Here is how your finished piece will look:



What you will need

Hardware

- A desktop or laptop computer capable of running the Blender software

Software

- [Blender](#) (v2.73 or higher)

License

Colour a snowman by 3Dami & b3d101, Peter Kemp, Tom Haines, Monique Dewanchand is licenced under a Creative Commons Attribution 4.0 International License.

Step 1: Colour the hat

You will start with the snowman that you created if you have completed the Snowman resource. If you don't have a snowman, you can [download the starter project](#).

On its head, the snowman has a hat. Let's try and make it green.

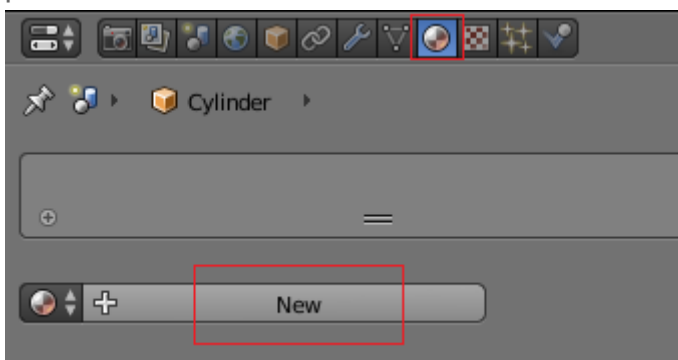
✔ Activity Checklist

- Render the image by pressing F12 (or FN + F12 if you're working on a Mac). If you look at what the camera sees, the snowman looks entirely grey. For example:

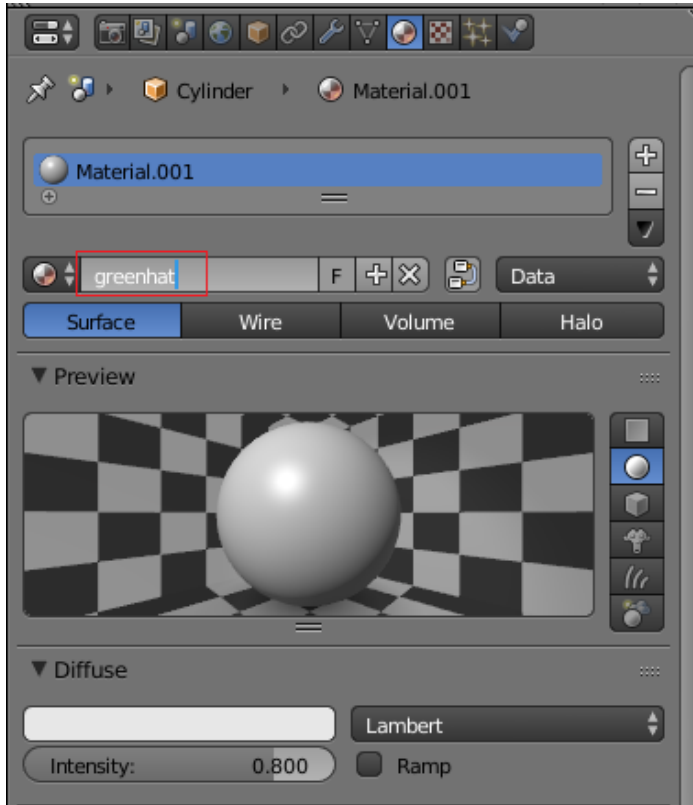


To colour the snowman, you need to add some **materials** to the model.

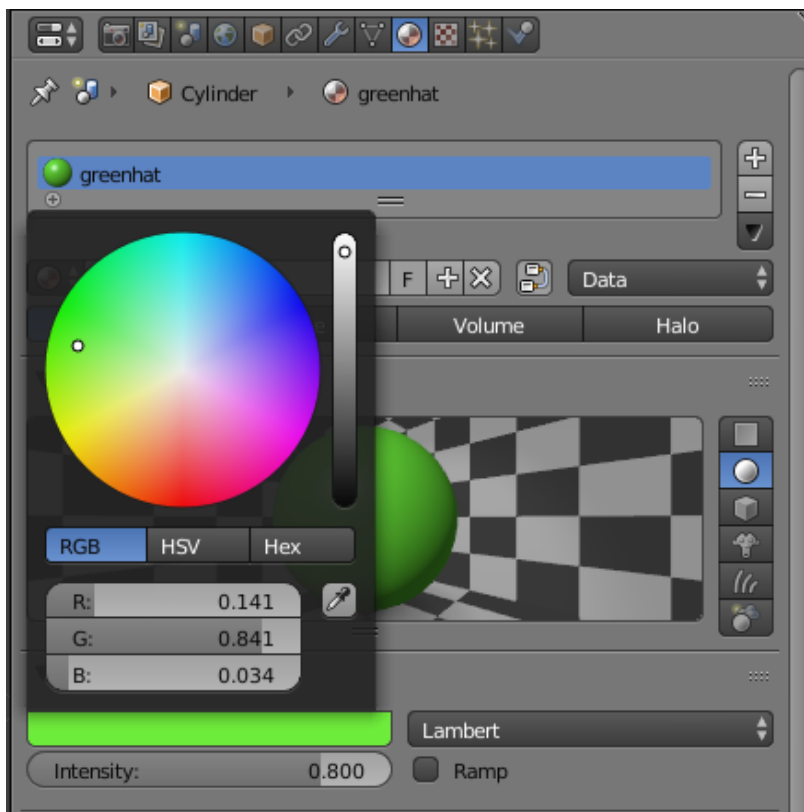
- Press ESC to exit the render view.
- Select the hat, then select the **Material** tab from the menu on the right-hand panel.



- Add a new material by clicking the **New** button.
- Name the material 'greenhat' by typing the name in the box.

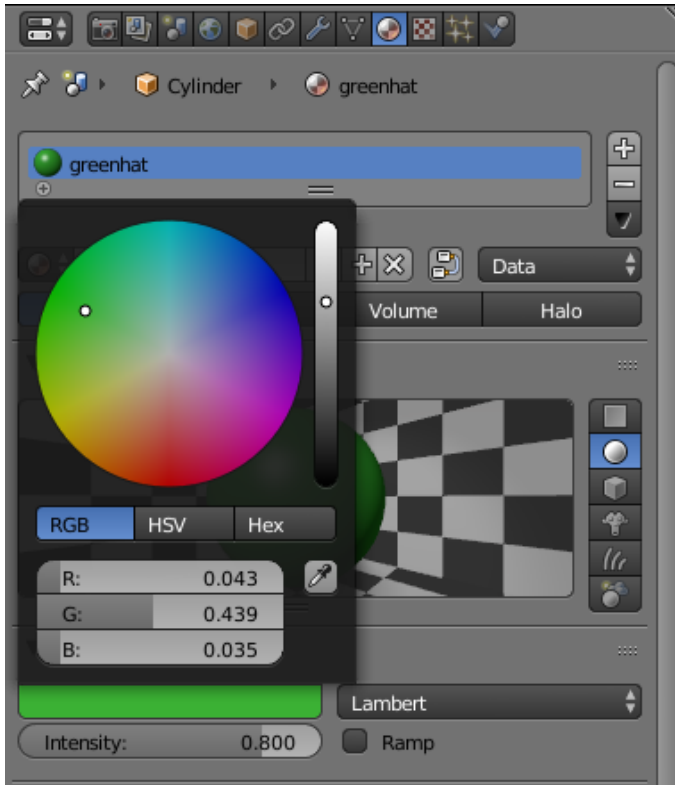


- Below, go to **Diffuse** and click on the white box. A colour palette will appear, where you can select a nice green colour.



The colour choices might look too bright green for your liking. If you would prefer a darker green, you can decrease the amount of intensity.

- Select **Diffuse** again by clicking on the coloured box. Lower the dot in the right bar on the colour palette towards the black colour. You'll see the green getting darker.



- Render your image to see what it looks like.



You can see that the snowman now has a green hat.

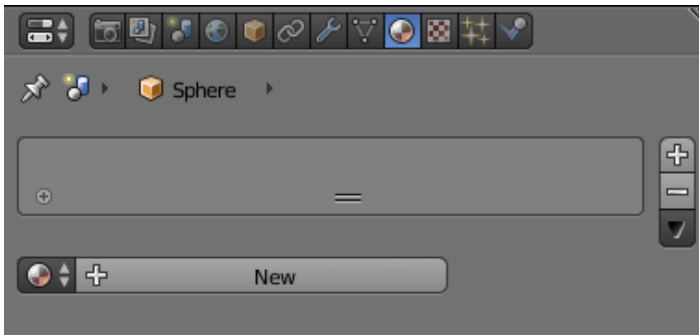
- Exit the render view.
- Use the middle mouse button to rotate the snowman — you'll see that the hat is green all the way around.

Step 2: Colour an eye

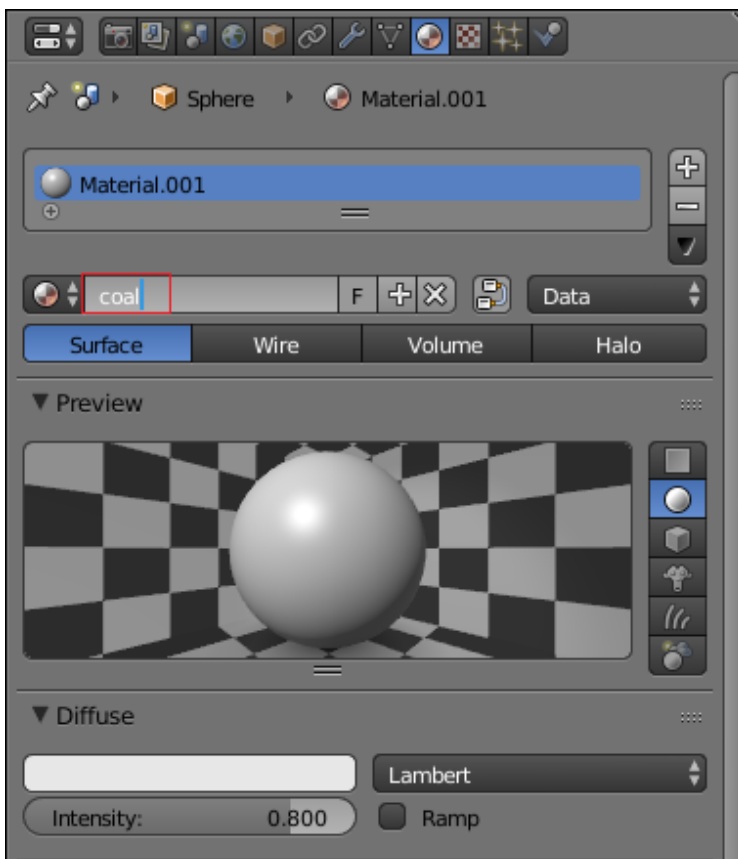
In this step, you'll be colouring an eye.

✔ Activity Checklist

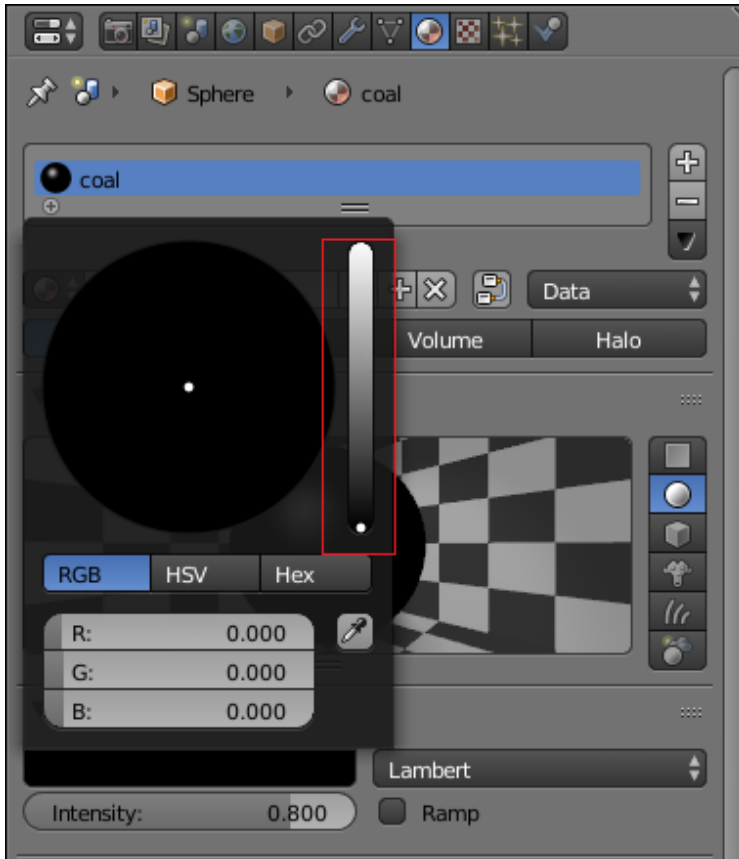
- Select one of the eyes by right-clicking on it. You can make sure that the eye is selected by checking whether there's an orange border surrounding it.
- Go to the **Material** tab on the right-hand panel and press **New** to create a new material for the eye.



- Name this material 'coal'.

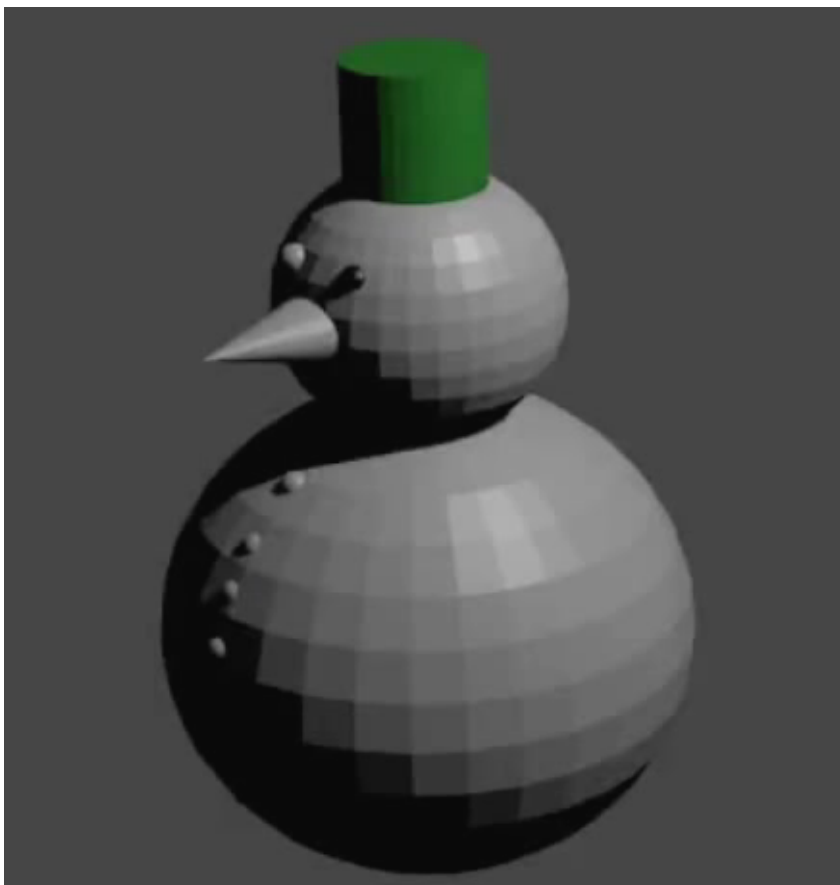


- Underneath, select **Diffuse**. You will see that there is no black on the colour palette! However, you can drop the intensity by moving the dot on the right down until you get to black.



So now you have a black eye. The rest of the snowman is still grey.

- Render the image to see what it looks like.



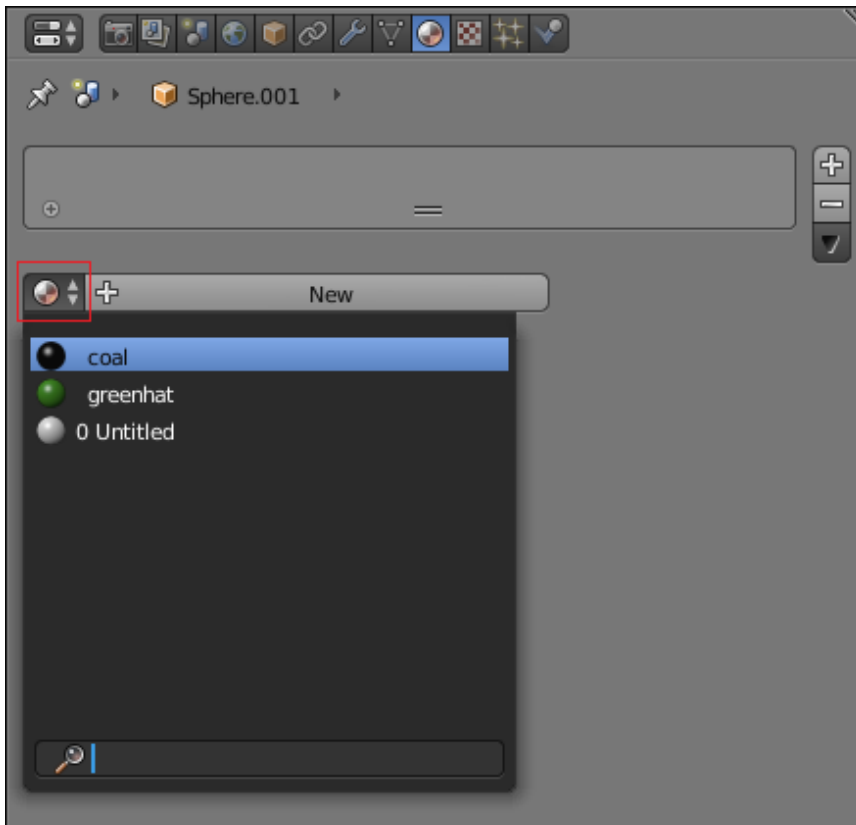
- Press ESC to exit the render view again.

Step 3: Colour the eyes and buttons

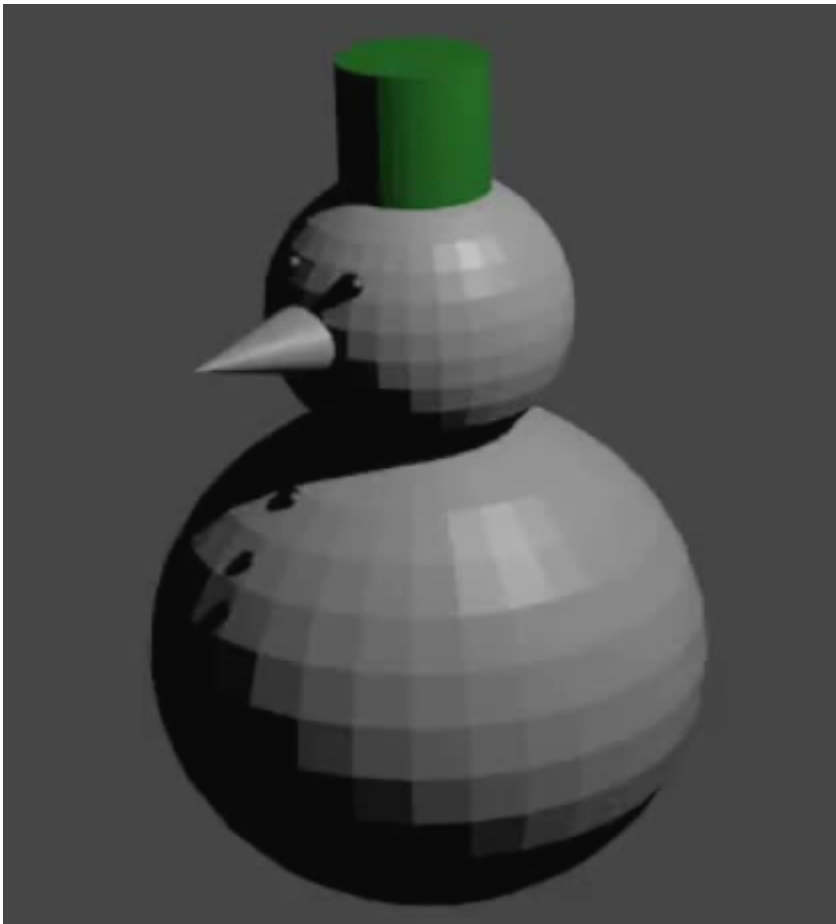
To colour the other eye and each of the buttons, you could go through the whole process of adding a new material for each, but this would be quite cumbersome. It's much easier to reuse a material that you have already made, so let's reuse the coal material to colour the other eye and the buttons!

✔ Activity Checklist

- Select the other eye.
- Go to the **Material** tab. Instead of selecting the **New** option, click on the **material selection** drop-down menu next to it.



- Select the 'coal' material you created earlier. Repeat this process for each of the snowman's buttons.
- Select a button, then click on the **Material** tab to select the 'coal' material.
- Render your image again. You will see that the snowman now has black buttons and black eyes.

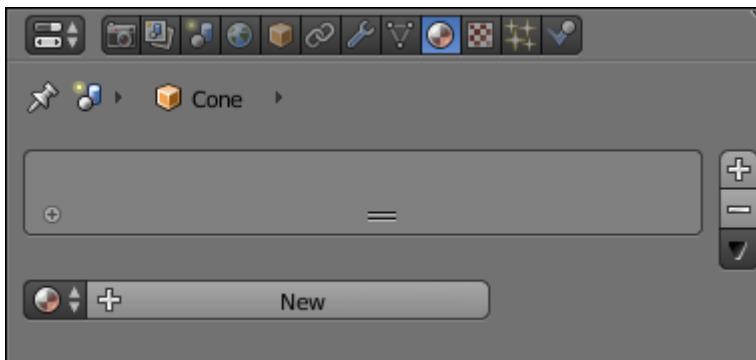


Step 4: Colour the nose

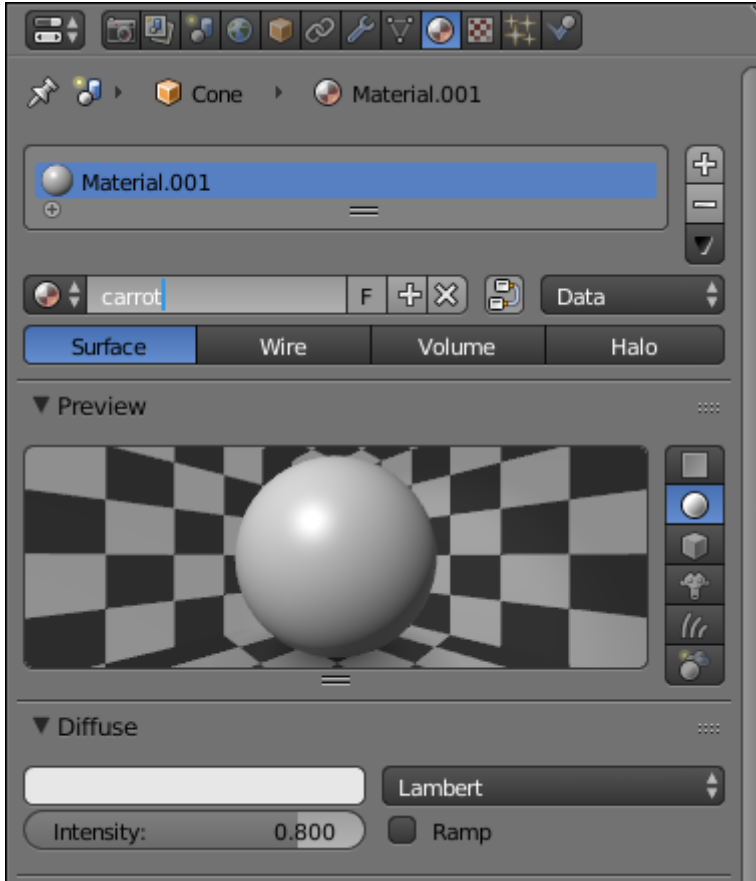
The snowman's nose will be orange. As you don't yet have an orange material, you will need to make a new colour.

✔ Activity Checklist

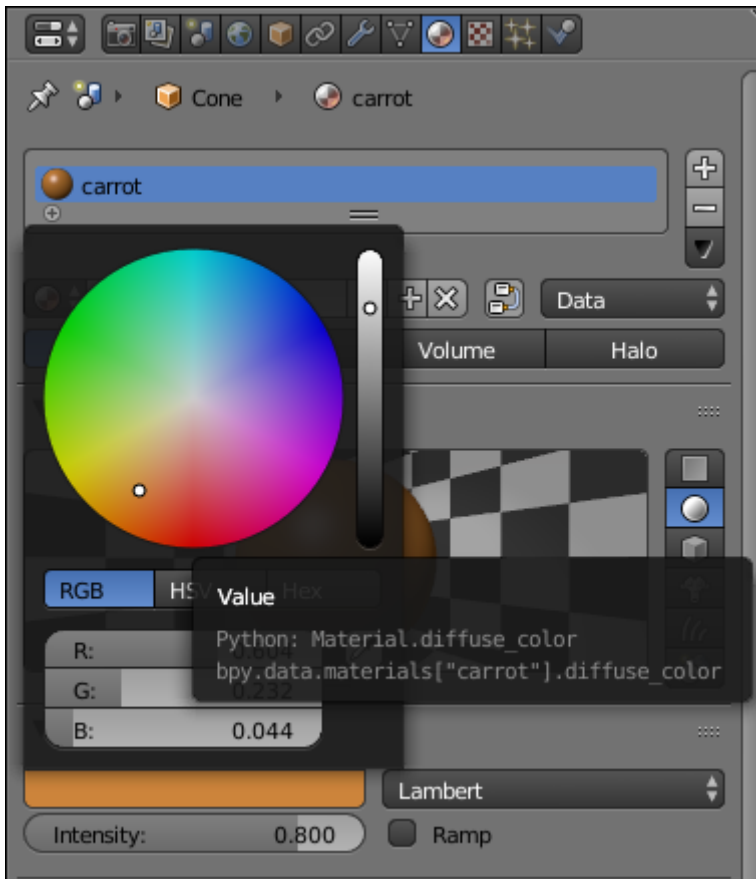
- Select the nose.
- Go to the **Material** tab.
- Select **New** to create a new colour.



- Give the material a name, for example 'carrot'.

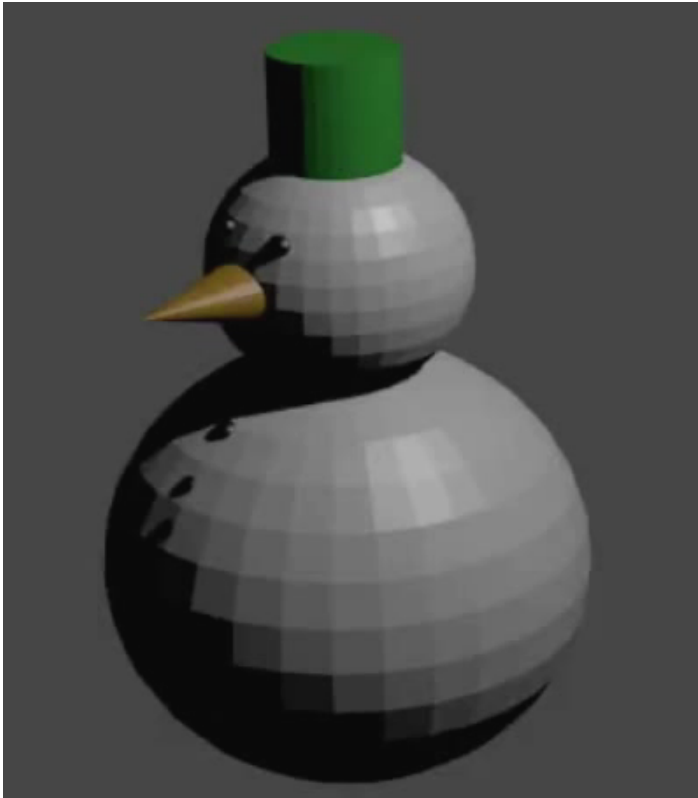


- Select **Diffuse** and pick a nice orange colour. If necessary, drop the intensity to get a nice carrot-like shade.





Render your image to check that the nose has a nice orange colour.



Exit the render view again.

Challenge: colour the body

When you're in 3D view, you will notice that the spheres making up the bottom and the head of the snowman are grey and not white.

See if you can use what you've learnt to colour the snowman's head and body white.

To make the colour white, you need to drag the dot on the slider all the way to the top.

