

## **Official Blender User Manual**

<http://docs.blender.org/manual/en/dev/index.html>

Very useful. Includes a wealth of information on both render engines, so always check to make sure that you are looking in the Cycles sections.

Also a great starting point if trying to find search terms.

## **Blender Fundamentals**

[http://www.youtube.com/watch?](http://www.youtube.com/watch?v=kes2qmijy7w&list=PLa1F2ddGya_8V90Kd5eC5PeBjySbXWgK1)

[v=kes2qmijy7w&list=PLa1F2ddGya\\_8V90Kd5eC5PeBjySbXWgK1](http://www.youtube.com/watch?v=kes2qmijy7w&list=PLa1F2ddGya_8V90Kd5eC5PeBjySbXWgK1)

This series of brief video tutorials from the Blender Foundation is currently (October 2017) one of the best and most up to date introduction to using Blender. After watching the first few, feel free to skip around and watch the ones that interest you most.

## **Blender Basics 5<sup>th</sup> Edition**

[http://www.cdschools.org/cms/lib04/PA09000075/Centricity/Domain/81/BlenderBasics\\_5thEdition2017.pdf](http://www.cdschools.org/cms/lib04/PA09000075/Centricity/Domain/81/BlenderBasics_5thEdition2017.pdf) -direct link

<http://www.cdschools.org/Page/455> -main page with additional resource links

<http://www.youtube.com/playlist?list=PLjNL5V9Xne2Y05kGUaLmJJCZABtJUBC2H>

-YouTube channel

This PDF is a very nice textbook created and used by a high school instructor.

## **Blenderartists.org – A Blender Community**

<http://blenderartists.org/forum/forum.php>

One of the oldest and most active online communities for Blender users. A good place for asking Blender questions.

## **Blender Stack Exchange**

<http://blender.stackexchange.com/>

Another good place for asking questions. Google and other search engine results from Blender Stack Exchange are most helpful.

## **Blendertarium**

<http://groups.google.com/forum/#!forum/blendertarium/>

A Google group founded by our very own Ron Proctor. The group is a friendly place for discussing dome-related Blender questions.

## **BlenderNation**

<https://www.blendernation.com/>

News site for all things Blender. Tutorials, development news, resources...

A few tutorials of particular interest. Not aimed at beginners, but certainly of interest and lots of fun.

### **Space nebula world environment.**

Mark Kingsnorth created and shared a wonderful node group for creating a space nebula to surround a Blender scene. These can also be rendered out as equirectangular images or animated sequences for use in full 360 projects.

The node group can be downloaded from his website, and he made a YouTube video detailing the creation of the node group.

<http://www.markkingsnorth.com/2017/02/16/nebula-node-group-v1-2-released/>  
<http://youtu.be/7EtXI4ePzO4>

### **Micropolygon Displacement** (good for rocky planets, asteroids and comets)

Creative shrimp sells training on topics of interest for fulldome science creators, but also offers some free tutorials. The tutorials aren't as in-depth, but are still of value.

<http://www.creativeshrimp.com/exoplanet-blender-tutorial.html>

### **Fire Shader**

A very nice multi-part written tutorial on using Volume Materials instead of Surface Materials. Although the tutorial creates an animated camp fire, the node setups can be adapted to make a nebula.

<http://real3d.fr/fire-shader/>

### **Adding Clouds to Blender Cycles' Sky Texture**

A video tutorial creating a World environment with clouds that can be animated.

<http://youtu.be/Tr6wTyfAO04>

### **How to Make Earth (Cycles)**

Blender Guru has many great tutorials. This is one of the most popular.

<http://www.blenderguru.com/tutorials/earth-cycles>

### **Blender Tutorial: Planets Colliding Animation**

A fun tutorial. Delightfully easy to follow.

<http://youtu.be/epyqHzoCxa0>

### **How to Create the Northern Lights in Blender 3D and GIMP**

One of several methods for simulating an aurora with Blender.

<http://www.youtube.com/watch?v=duUw9BpJttl>