**Initial Tutorial Text**

1.header: 'Welcome to SpaceWarps!'  
content: ' Gravitiational Lenses are <em>very</em> rare astronomical objects. We need your help to search the entire Canada-France-Hawaii Telescope Legacy Survey in order to \_\_\_\_(project goal)\_\_\_\_\_\_\_\_\_\_\_\_.'This short tutorial will show you how to identify gravitational lenses.'

2. header: 'What are gravitational lenses?'  
content: 'Gravitational lenses are massive astronomical objects -- such as galaxies -- that lie exactly in front of more distant galaxies.  Light rays from the background galaxy traveling towards our telescope are bent by the gravity of the foreground galaxy.  Just as the Earth's gravity keeps everyday objects (including us!) on the ground, the gravitational pull of massive galaxies also attracts light:  they act like huge natural magnifying glasses, focusing the light of the background galaxy towards us. '

3. header: ‘Spotters’ Guide’

content: ‘Gravitational lenses can look different depending on \_\_\_\_\_\_\_\_\_\_. Let’s checkout the Spotter’s Guide to see if there are any in this image.

**Optional Flip Through Spotters Guide pointing out 4 types but not marking….**

4. Double or quad lensed quasar

5. Single arc near a massive galaxy

6. System of arcs near a massive galaxy

7. No lens

4. (8) header: 'Identifying gravitational lenses'  
content: ' This lens looks like a single arc near a massive galaxy. In this image the gravitational lens is a small group of massive, luminous, yellow-ish galaxies. Far behind this group is a faint blue galaxy that you see as a blue arc surrounding the group. Lensed galaxies are often (but not always!) blue, and always stretched and curved around the lens like this.

5. (9) header: 'Marking gravitational lenses.’

content: ‘You don’t need to identify the type of lens, we only need you to mark it. Click the brightest part of the blue arc to mark this feature as having been lensed.’

6. (10) header: ‘Good job!.'  
content: "Great, you've helped identify a gravitational lens! As you continue to search for gravitational lenses you can use the Spotters’ Guide as a reference. Over your first few classifications we’ll give you a few more tips and access to some different tools to help you as you search for these rare objects. We’ll also throw in a few training images containing simulated gravitational lenses, giving you a chance to test your skills.

**FIRST CLASSIFICATION Random Survey Subject**

7. (11) header: 'Talk'   
content: "Talk is a place to discuss these images with the rest of the SpaceWarps community: together we aim to build a catalog of some of the rarest objects in the universe. If you have questions, the Science Team and other astronomers will help answer them.  If you find something that looks interesting, come and show it to the group!'

**SECOND CLASSIFICATION Training**

8. (12) header: ‘Training image’

content: ‘Yes! That was a simulated lens, well spotted!

or

content: ‘Ooh - you missed a simulated lens. \_\_\_\_\_\_\_\_\_\_\_\_\_\_”

**THIRD CLASSIFICATION Random Survey Subject**

**FOURTH CLASSIFICATION Training - No lens here**

8. (12) header: ‘Training image’

content: ‘Yes! That was a simulated lens, well spotted!

or

content: ‘Ooh - you missed a simulated lens. \_\_\_\_\_\_\_\_\_\_\_\_\_\_”

**FIFTH CLASSIFICATION Random Survey Subject**

header: 'Dashboard'  
content: "Dashboard is a place to examine your data even further.  You will find tools to visualize the images with more control, and to help us understand which objects are the lenses, and which just look a bit like them."

\**Order of and number of training images is TBD.*