

## Credits for Treasure Hunt

The images in this activity were created in the 3D software application Vue (Esprit and later Complete) using wireframe models and textures from many different sources, including some I created. The image for each page was then edited extensively in PhotoShop. I also used a wonderful iPad app, TreeSketch, to create a 3D model tree for the birds clue.

I built the activity in IntelliTools Classroom Suite first, so that I could take advantage of the tweening in IntelliMation. For other formats, I used screendumps from ICS imported into QuickTime to produce movies of the animations. Later I did some of the animation directly in Vue.

### Photos Used For Textures

**Map background** 15-stained-parchment-paper.jpg from [grungetextures.com](http://grungetextures.com) (I edited to make this lighter) combined with my original art.

**Banana peels** were built from three photos from Flickr.com. They were:

5201428953\_aed51d6618\_b.jpg Banana Peel by Quinn Dombrowski (2010) (CC BY-SA 2.0) via Flickr.com.

7661920366\_4d4a90d1cc\_k.jpg Squashed Banana by PJR (2012) (CC By-NC 2.0) via Flickr.com.

124489362\_3f59edd90c\_b.jpg Banana Peel by Glenn (2006) (CC By-NC-SA 2.0) via Flickr.com.

**Coins in treasure chest:** Texture created from photo, 486871235\_7159732b76\_o.jpg Coins by Glenn Harper (2007) (CC By-NC-SA 2.0) via Flickr.com.

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**Persian Carpets in Treasure Chest:** PersianCarpets0030\_1\_M.png, PersianCarpets0037\_M.png, and PersianCarpets0044\_2\_S.png from textures.com, licensed for private or commercial use.

**Lion-like Statue in Treasure Chest:**

MarbleWhite0005\_1\_seamless\_S.jpg from textures.com, licensed for private or commercial use.

**Draped Woman Figurine in Treasure Chest:**

TexturesCom\_MarbleWhite0063\_1\_XL.jpg from textures.com, licensed for private or commercial use.

### **About Wireframe 3D Models**

3D art is created by first mapping the objects in three dimensions. The math involved is beyond me, a sort of magic, but the results are displayed as sets of topographical lines forming what are called **wireframe models**. They do look like the wire forms used to make topiary gardens!

These models can be exported as separate files, and luckily for me, there are websites where people contribute licensed versions I can use for free or for a small fee. I can build simple models in my Vue application, and sometimes I can disassemble parts of models and recombine and reshape them to make other models. I also have an app called **TreeSketch** that lets me draw life-like trees in three dimensions and export those.

However, for a major project like this, I rely on being able to get finished models others have built in applications dedicated to model building. Even if I learned how to use those, it would take far too long to build all the models I used for **Treasure Hunt!**

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Once I get a model, I load it into Vue and often need to add texture pictures. Texturing can be complex, if the model is detailed. For example, the treasure chest was modeled so that each separate stud, handle, lock, and surface needed a separate texture. It took several days, but I think the result is so real looking you feel like you could touch it!

Then, once the items for a scene are finished, I have to add them into the landscape, jungle, ocean, or cave, where they belong. Arranging them is like setting up a still life using a drone and robotic hands, since I can't really touch anything. One special problem is that all these very realistic looking items are like ghosts. I have to make sure things don't go through the cave wall, for example, and can only guess where the floor surface is.

Finally, I render the scene, which means turning the job over to the Vue magic machinery to calculate where everything is, complete with lighting and logical shadows. The image for each page in **Treasure Hunt** is the result of going through this entire process, each being a separate project. Each picture also required editing in PhotoShop to optimize the colors and contrast.

The following credits are listed with great gratitude. It's taken me two years to finish **Treasure Hunt**, but without the work of all the separate model builders listed below, it would have been a never-ending task. Except for a very few purchased items (the posable starfish, desert island, and jungle landscape), all these models were posted for free download. As you scroll through this long list of wireframes, take a moment to appreciate the incredible generosity of all these artists.

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## **Wireframe 3D Models Used**

### **Models I Made All Or Part Of In Vue**

**Tree model** created by Ann Brundige in TreeSketch app: Tree full of birds. Most plants in that scene are part of **Tropical\_Island\_52.vue**, but I added the large deciduous tree.

**Cover image** included items from elsewhere in the story plus part of the wireframe from **Flying Carpet by Forrester** (Cornucopia 3D) for the map. The sand terrain and necklaces were part of **Pirate Pack**.

**Coins** I made using cylinders and images of real old coins (Ptolemy I, pieces of eight, and Alexander).

**Giant Tiki** was made from a cylinder in Vue. I drew the face and somehow Vue turned that cylinder into a carving. Magic is real!

**Bridge** assembled from pieces of other models and rope I made in Vue

**Caves created by Ann Brundige**, built in Vue, including all the cave formations, the room with the four tunnels, and the treasure room.

**Cave door** added to cliff in **Tropical\_forest\_55\_1**.

**Torch, Cup, and Matches** were made in Vue

**Monster** in cave created by Ann Brundige in Vue.

**Lava River** created in Vue, my only attempt at Vue animation.

**Several goblets** made using primitives, then exported as Lightwave (.lwo) objects.

**Persian Rugs** that fly out of the treasure chest are 3 draped cloth models from **Brugge Cloth Drape Collection by Don Webster**, with persian rug textures from textures.com.

### **From Cornucopia 3D/e-on software**

**License:** These are models I own through Vue 11 - Vue 2015 or have purchased from Cornucopia 3D

**Tropical\_Island\_52.vue** by Stefan Haeger Used for first 11 pages.

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**Note In A Bottle by Forrester** (I changed the note material to the map)

Open chart from **Pirate Pack by Forrester** (I changed the chart, which was a map of Hispanola, to the treasure map.)

**Starfish**

**Colorful bird**

**Tropical\_forest\_55\_1 by Luigi Marini** Main scenery from Page 12 onward to the cave.

**Old Brass Spyglass** (which I colored blue.)

**Boat Boolian object** which I altered and textured.

**Shovel**

**Barrel**

**Crate**

**Anchor** which I altered and textured

**Scimitar**

**Two trash bags** which I turned into burlap bags.

**Banana tree**

**Banana** which I duplicated to make a whole banana bunch.

**Date palm.**

**Bridge** used spars from **Pirate Pack**.

**Treasure items** from Vue library included doubloons, two necklaces, emeralds, assorted gemstones, diamonds, gold ring with rectangular stone, necklace, bracelet, torc, ankh (Realms Art), cupid statue, Chinese gong, plates, gold and silver goblets, fancy antique goblet, chain, copper tray, fancy pottery, ornamental bowl, scarabs, draped cloths for carpets.

**Ornament for throne:** Medallion in middle of chair back and fancy piece across front edge are from Ceiling Objects collection.

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**From 3dextras.com**

**License:** Free to use including commercial projects.

3 masted sailing ship for opening scene by skerta FLYING-Ship.zip

**Ruby ring**

**Chain**

**Sapphire ring** ( I changed it to a topaz and side sapphires)

**Throne** (Victorian chair) See credits under Cornucopia3D,

Turbosquid, 3dextras, and archive 3d for ornamentation added to turn this into a fancy throne.

**From Turbosquid.com:**

**License:** Free to use including commercial projects.

**High poly Norman helmet**

**Rusty Half Helm**

**Lion Headed Corbel** (arms of throne)

**From Totally Free 3D Models.com**

**License:** For personal use including educational purposes

**Crab 3D Model** from VG "Tomb Raider" by 3dregenerator

**2 Tropic Birds 3D Model** by Kim. I adapted one of these for the flying toucan.

**Parakeet 3D Model** by umar6419 (I recolored the maps to make purple, aqua, and green/yellow parakeets.)

**Hummingbird 3D Model** by umar6419 (I recolored the maps to make a bright green bird.)

**Blue Jay 3D Model** by umar6419 (I recolored the maps to make a dark bird with blue on the back and a red crest.)

**King Kong 3D Model (Rigged)** by 3dRegenerator Note: Rigging means adding a set of joints and bones to the model so that it can be bent

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into different poses. That extra work by this artist added a whole extra dimension to the story!

### **From Free 3D Max.com**

**License:** Free for non-commercial use.

**Treasure chest:** Treasure-box model plus pile of doubloons.

**Golden Crown** (simple ring with tall points)

**Genie lamp**

**Horned helmet**

### **From Archive3d.net**

**License:** Models may be modified and used to produce 3D art for projects, including commercial use.

**Shell N060213** 3D Model by Vladis. Sort of a Conch with spikes.

**Cockle-shell N260111** 3D Model by Nora Twomey. Looks like a murex.

**Cockleshell N280608** 3D Model by PS3D. Snail like an ammonite.

**Shell N291011** 3D Model by Alexey Pavlov. Conch shell no spikes.

**Shell N140113** 3D Model by Alexey Pavlov. Wentletrap shell, deep ridges.

**Shell decor N161213** 3D Model by BeBaker. Auger shell.

**Macaw N200908** 3D Model by Wood John. Two macaws, one red and one green. (I recolored the maps to make a third blue macaw.)

**Parrot N140707** 3D Model by Giovanni Battista Note: Mislabeled parrot, but is a very nice standing toucan. I did surgery on the model to get flying poses.

The following were all in the treasure chest:

**Book old N051113** by Vladimir Old magic book with straps

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**Casket** 3D Model by Lubasha Rectangular closed casket.

**Corner** decor (Decor 3 N241112), fancy capital (Capital N270716, middle of chair back), lion head (Lion N021009 ) on top of capital on throne.

**Crown** 3D Model Crown Kingskeppy by Scott Henderson (crown with cross on top)

**Crown N151013** by Joe (crown with red cloth and cross plus sphere gem on top)

**Crown N150408-** 3D model Royal Crown by Arg@nizm (crown with red cloth and cross)Pillow N130513 by V. Milovich Purple Pillow with tassels

**Decor Rose Window Pendant** made with Decor Gothic Rose Window N230416 by Todd attached to a chain from the Vue collection.

**Dragon** N191009 by Serill Medjan, Lion-like Asian statue.

**Plate, Decorative N090512** by Valery Corneev Decorative platter

**Plate N190112** by Erica Kaufman, Round plate with painted border and central image.

**Ring N130411** by Tom Blake Gold bracelet modified to make an arm ring.

**Statue Anubis N161211** by Ed Harris Standing figure of Anubis, jackel-headed Egyptian god

**Statue Classic Male Head** by Bobby. Head from David by Michaelangelo.

**Statue Ganesh N010113** by Aleey Pavlov Elephant-headed diety figurine

**Statue Pharaon** by Quaroni Ludovico, Seated pharaoh figurine.

**Statue Shiva N031210** by Erica Weis. Small metal figure of Shiva dancing.

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**Statue Woman N111011** by Eva Loran Figurine of a standing draped woman

**Vase N180411** by Michael Alperin, tall closed vessel with scaled sides and dragons or lions on top.

**Vase N180114** By Ana Tall formal vase with handles

**Vase amfora N020612** by Larissa Mare Greek red on black design vase. I made a new texture for the painting on the vase.

**Vase N020612** by Larissa Mare, Footed vase with cherub picture.

**Vase 1 N110510** by Eliz Horn. Ornate vase with lid and decorated handles.

**From artist-3d.com**

**License:** Various CC licenses

**Small combat axe** by Danish Axes (CC BY-NC-SA 3.0).

**Roman Helmet** by unknown source (CC BY-NC-SA 3.0).

**From 3dplants.com**

**License:** Free for commercial use, but untextured. I created the texturing materials. Aquatic Plants 06, 07, and 10.

### **Sounds Credits**

**Feedback Sounds for shells, birds, and tikis:** Recorded computer voices extensively edited in Audacity.

**Picking Bananas: BOYIYING.mp3** from Zillion Sounds Collection (License: Free for non-commercial use) [www.sounds.beachware.com](http://www.sounds.beachware.com)

**Gorilla growls choices 1 and 2:** Parts of Gorilla-SoundBible.com-1576451741.wav and Ape-

SoundBible.com-1651128585.wav from SoundBible.com (CC 0)

**Gorilla Growl 3 and Happy Gorilla:** My voice, with a lot of help from Audacity.

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### **The Freesound Project**

Most sounds in **Treasure Hunt** were downloaded from [freesound.org](http://freesound.org) and edited in **Audacity**. **Freesound** is an extensive collection of Creative Commons -licensed sounds contributed from all over the world and free to use, with attribution (CC BY-NC 2.0), for any non-commercial project. Many are even free for commercial use (CC BY 3.0), and some are public domain (CC 0). **Audacity** is a free sound editor that can be downloaded in formats for Mac and Windows. Read more about Freesound and Audacity and find links to both on [annbrundigestudio.com](http://annbrundigestudio.com).

The sounds you hear in **Treasure Hunt** are remixed and combined from the following list of original sounds:

**Pirate Ship sound:** Pirate Ship at Bay.wav by CGEffex (CC BY 3.0) + Silent Movie - Sam Fox - Sailor.wav by FreqMan (CC BY 3.0)

**Drop Anchor sound:** Winch.wav by Gremsongs (CC-BY-NC 3.0) + Splash.wav by Kayyy (CC BY 3.0)

**Background sound, bottle and seashells:** beach\_waves.mp3 by 3bagbrew (CC BY 3.0)

**Opening Bottle And Map sound:** Cork3.aif by Traveler (CC BY 3.0) + Paper Crumpled 001 by razrox (CC 0)

**Starfish dance:** Success! Quest Complete! (RPG Sound) by qubodup (CC 0)

**Unroll Map sound:** Paper Crumpled 001 by razrox (CC 0)

**First View Of Jungle:** cicadasplus.wav by acclivity (CC-BY-NC 3.0) + jungle02.wav by soundbytez (CC BY 3.0) + beach\_waves.mp3 by 3bagbrew (CC BY 3.0)

**Distant Birds:** birds in rainforest.wav by laurent (CC BY 3.0)

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**Birds In Toucan Tree:** birds in rainforest.wav by laurent (CC BY 3.0)  
+ toucans.wav by soundbytez (CC BY 3.0)

**Toucan Flies Away and Toucan flies up stream:** toucans.wav by soundbytez (CC BY 3.0) + bird flapping by pepv (CC 0)

**Jungle sounds with boat:** cicadasplus.wav by acclivity (CC-BY-NC 3.0) + jungle02.wav by soundbytez (CC BY 3.0)

**Find Spyglass:** 2dogSound\_tadaa1\_3s\_2013jan31\_CC-BY-30-US.wav by rdholder (CC BY 3.0)

**Jungle sounds with 4 tikis:** jungle02.wav by soundbytez (CC BY 3.0)

**Giant Tiki:** imp\_rolls.flac by spt3125 (CC 0)

**Jungle At 4 paths:** jungle02.wav by soundbytez (CC BY 3.0)

**Tree-climbing sounds:** 1136walking\_through\_forest.wav by reinsamba (CC BY 3.0)

**Forest View From Tree:**

Silencyo\_FOREST\_DAY\_Wind\_Trees\_Birds\_.aif by silencyo (CC 0)

**Happy Gorilla Catching Bananas:** kleiner\_reverse.wav by Anton (CC BY 3.0), thump.wav by Reitanna (CC 0), and my attempt at gorilla noises.

**Gorilla Leaving:** Running in the snow.wav by mallement (CC BY 3.0)

**Jungle After Gorilla and Near Cave Entrance:** Layered snippets from jungle02.wav by soundbytez (CC BY 3.0) and birds in rainforest.wav by laurent (CC BY 3.0)

**Jungle Beside Stream:** Snippet from

[BhagwanMahavirWLSBrook@March92013.wav](#) by Calcuttan (CC BY 3.0)

**Cranking Down The Bridge:** Hand Powered Pillar Drill.wav by Benboncan (CC BY 3.0) layered with Creaky automatic library doors.wav by rblalack (CC 0) plus 7 Thump.wav by numar (CC Sampling + 2.0)

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**Sounds At Cave Door:** Borneo Jungle - Day by RTB45 (CC BY 3.0)

**Cave Door Opens:** Wood Crack 1.wav by corkscr3w (CC 0) layered with Skull crack on porcelain tub.wav by swimignorantfire (CC BY 3.0) plus cavedoor.wav by smidoid (CC BY 3.0)

**Ambience In Cave Entrance:** Snippet from Borneo Jungle - Day by RTB45 (CC BY 3.0) layered over nog.wav by \_NOMINAL (CC BY 3.0)

**Ambience Near Unlighted Torch:** Snippet from Derelict-basement-r.wav by spectrm (CC 0) layered over nog.wav by \_NOMINAL (CC BY 3.0)

**Lighting The Torch:** Snippet from Material Scrape on Scratchy Surface.mp3 by Alvinwhatup2 (CC 0) followed by KAZÁN.wav by csengeri (CC BY 3.0)

**Narrow Passage In Cave:** Layered snippets from Derelict-basement-r.wav by spectrm (CC 0), Cave-drips.wav by everythingsounds (CC BY 3.0), and short bits from cavedoor.wav by smidoid (CC BY 3.0)

**Decorated Cave Room:** Layered snippets from Atmo-dripstone-cave.mp3 by connum (CC BY-NC 2.0), Waterdrops-cavern-in-madeira.wav by e330 (CC BY 3.0), and Cave-wind-10.wav by yottasounds (CC 0)

**Large Cave Room With Four Tunnels:** Combination of Cave-wind-10.wav by yottasounds (CC 0) and Cave-stone.aiff by voltae

**Creepy Monster In Cave:** Combination of Zipper5.wav by pagancow (CC 0) plus polyester rustle.aiff by mwmarsh CC Sampling + 2.0) and 120110\_15 hot plate, cold water (4).wav by toiletrolltube (CC 0) for the hiss

**Gorilla In cave:** Part of destruct.wav by Augdog (CC BY 3.0) followed by my attempt at gorilla noises.

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**River Of Lava:** Part of Lava loop.wav by Audionautics (CC BY 3.0)

**Treasure Tunnel Door:** 2dogSound\_tadaa1\_3s\_2013jan31\_CC-BY-30-US.wav by rdholder (CC BY 3.0) layered over part of percussion-choir-final-01.wav by klankbeeld (CC By-NC 2.0).

**Treasure Victory Music:** Snippet from suspense.wav by mmleys (CC 0) followed by Goofy Music by FlatHill (CC 0) layered over music bonus.wav by milton (CC-BY-NC 3.0) followed by snippet from Captain Sparrow by Fantozzi (CC BY 3.0) layered over snippet from Fireworks in Berlin-Neukölln after football match by zaem (CC 0)

**Coin Falling - The End:** picked-coin-echo-2.wav by NenadSimic (CC BY 3.0).