

# Skills Canada British Columbia 3D Game Art

DATE

Wednesday, April 19, 2023

## 1. Schedule

Time	Task
8:30-9:00 am	Check-In, Setup and Testing
9:00 am	Competition begins
3:30 pm	Competition ends

## 2. Purpose of the Contest

To provide competitors with the opportunity to experience the 3D Game Art production process and demonstrate their knowledge and skill. The 3D Digital Game Artist takes a designer's brief and through a combination of conceptualization, creativity, selectivity, technical, and specialist skills, completes the brief to the satisfaction of the client.

## 3. Criteria

### Registration:

Competitors must be registered by a teacher with a username and password. Teachers needing usernames and passwords should contact Jamie Maxwell at [jmaxwell@skillscanada.bc.ca](mailto:jmaxwell@skillscanada.bc.ca). Online registration fees are \$100 per competitor.

### Overview

Competitors will be given **6.5 hours** to develop assets including designs, models, maps and exported artwork. The 2023 contest will be focused on a still-life with either a stylized or photorealistic look. The model should use **no more than 20,000 tris**. Individual texture maps should be no more than **2048 x 2048 pixel resolution**.

### Task:

You will model and texture the assets described. The intention of this competition is to create original artwork. All assets must be created on site during the competition. No outside assets allowed.

### Design Brief:

You will model, UV layout and texture a still-life setup of a lunch from your childhood. The lunch must also be accompanied by a drink and a lunchbox. The contents can be either inside or beside the lunchbox. If the artist chooses to place the meal and drink inside of the lunchbox, the box must be open. One **mystery hero prop** will be added to the modeling task at the time of the competition.

### Assets to Create:

1. Original digital concept art may be brought in advance to the competition.
2. Meal - A meal that you have had in your childhood, (preferably a meal that you have brought to school). Or a meal from your imagination that fits into the context of a school lunch (i.e. sandwich, fruit, pasta, salad, soup etc. in a ceramic or glass container, or a wrapping for foods such as sandwiches).
3. Drink – The main meal should be accompanied by a drink of your choosing that could be easily packed into a lunchbox (i.e. juicebox, milk carton, soda can etc.)
4. Lunchbox - The lunchbox can be a hard-surface or fabric/organic lunchbox. If food is going to be placed inside of the lunchbox it must be displayed open, if food is displayed outside the box the lunchbox itself can be displayed as either open or closed.
5. A mystery hero prop will be described on competition day.

### Use Your Imagination

The concept of this prompt will feature a lunch from your childhood, or a lunch from your imagination that is accompanied by a drink and lunchbox. The still-life itself should reflect you and your upbringing. Make it personal and give it character. You can be as stylized or as photo-realistic as you like but it should convey a story. Tell us about your culture, the time period you grew up etc.

Below are images to help you conceptualize, not copy. You are not expected to replicate everything you see, but to create a new piece of artwork that complements the example and exists in the same universe.





Artist: Andrew Baker



Artist: Craig Voight



Artist: Matt W (<https://www.artstation.com/nexialist>)

### Exported Models:

- Competitors are required to illuminate their model and export to Sketchfab. Ensure you have a working **Sketchfab account** and can upload files.
- Finished models **should not exceed the limit of 20,000 tris.**
- Texture maps for the model should be created in Photoshop or similar software. **No texture map should exceed a pixel resolution of 2048 x 2048.** Competitors should make maximum use of the texture maps so pixel space is not wasted. Multiple texture maps should be incorporated into materials or shaders which are applied to the competitor's model. The finished artwork should be UV unwrapped to distribute pixels evenly and efficiently over the surface of the models. Texel density will be examined during judging.
- It should be loaded into Sketchfab with the correct maps and materials. The final deliverable should conform to the design specification and art style defined in this brief.

### 4. Number of Stations / Allocations

#### BYOD - Bring Your Own Device

### 5. Skills & Knowledge to be Tested

- Time management
- Planning
- Attention to detail
- Interpretation of a design brief
- Creation of concept art
- 3D modeling
- Asset construction
- Texture mapping and UV unwrapping
- Exporting
- File management
- Appeal of final product

### 6. Prerequisites

#### *SCNS Prerequisites*

- Enrolled in a community college, university or private school OR be registered as an apprentice with the Ministry of Advanced Education, Skills and Training;
- Registered as a competitor with Skills Canada – British Columbia;
- The competitor cannot be a certified journey-person;
- **The competitor does not have to be a Canadian Citizen or Landed Immigrant to participate at Skills Canada British Columbia Provincials and may medal.**
- **The medalist who attends Skills Canada National Competition 2023 in Winnipeg must be a Canadian Citizen or Landed Immigrant.**
- Have been earning post-secondary credits any time during the academic school year (September to June);

- All competitors must be able to show either current apprenticeship status and/or proof of enrollment in a post-secondary institution upon request of the Provincial Technical Committee (PTC).

## 7. Equipment & Clothing

**3D GAME ART IS A 'BRING YOUR OWN DEVICE (BYOD) CONTEST. COMPETITORS ARE REQUIRED TO BRING THEIR OWN COMPUTERS AND RELATED EQUIPMENT. NO EQUIPMENT OR SOFTWARE WILL BE SUPPLIED. PLEASE SEE BELOW FOR MORE INFORMATION.**

Suggested Hardware Requirements:

- Intel Graphics Workstation i7 Quad Core Processors;
- 1 TB HD;
- 16Gb RAM;
- Dedicated video card (suggested 2GB) as approved by Autodesk;
- Flat Panel Display 1920 X 1080;
- Sound card;
- Operating System –Windows 10 or Mac OSX;
- WiFi enabled computer system.

Competitors can bring whatever 3D and 2D software they are comfortable with but no files, rigs, materials or texture libraries.

Suggested Software:

- 3D Software: 3D Studio Max, Maya, Blender, Softimage, Zbrush Substance Painter, Substance Designer;
- 2D Software: Adobe Photoshop, Corel painter, Illustrator, Krita, Clip Studio or GIMP, 3D coat
- Viewing Software: SketchFab

Additional Equipment and Material Suggestions:

- Tablet and driver (driver compatible with your system)
- Headphones
- Pencils and erasers

## 8. Evaluation & Judging Criteria

POINT BREAKDOWN	/ 100
Work Organization & Management	5
Interpretation of the Design Brief	10

3D Modelling Main Elements	20
Texturing Mapping	30
Mystery Hero Prop, Texturing & Shading	25
Export Sketchfab Presentation	10
<b>TOTAL</b>	<b>100</b>

## SCORESHEET

<b>Work Organization and Management</b>	
Ability to follow instructions and deliver assets & files as directed.	1__2__3__4__5__
<b>Interpretation of the Design Brief</b>	
Ability to match the requested art style	1__2__3__4__5__
Creative and original interpretation of the design brief	1__2__3__4__5__
<b>3D Modelling Main Elements</b>	
Appropriate distribution of polygons	1__2__3__4__5__
Organized naming of objects, materials and assets	1__2__3__4__5__
Similarity of models to relevant concepts	1__2__3__4__5__
Aesthetic appeal of models	1__2__3__4__5__
<b>Texture Mapping</b>	
Even and efficient use of texture space	1__2__3__4__5__
Varied use of texture types, (color, normal, specular, alpha, etc)	1__2__3__4__5__
Organized naming of maps	1__2__3__4__5__
Similarity of maps to relevant concepts	1__2__3__4__5__
<b>UV Unwrapping</b>	



Even distribution of UVs	1__2__3__4__5__
Neatness of application	1__2__3__4__5__
<b>Mystery Object Model, Texturing &amp; Shading</b>	
Appropriate distribution of polygons	1__2__3__4__5__
Organized naming of objects, materials and assets	1__2__3__4__5__
Cleanliness (seamlines, ngons, normals, holes etc)	1__2__3__4__5__
Texturing and shading	1__2__3__4__5__
Efficient and even distribution of UVs	1__2__3__4__5__
<b>Export</b>	
Illumination, camera set-up	1__2__3__4__5__
Aesthetic appeal of final model	1__2__3__4__5__
<b>TOTAL</b>	—

No ties are permitted. In the event of a tie, the team with the highest score in the '3D Modelling' will be declared the winner. If there is a tie in the '3D Modelling,' then the highest score in the 'Mystery Object Model, Texturing & Shading' will be declared the winner.

## 9. Submission Process

Finished models should be uploaded to Sketchfab.com.

1. You **must have a sketchfab account.**
2. Once uploaded, test to see if everything is working and is well illuminated.
3. Then email the url to [scbcgameart@gmail.com](mailto:scbcgameart@gmail.com) like so:

scbcgameart@gmail.com  
 Game Art Submission (Jamie Liu)  
 URL: (Paste URL)

4. Also attach a zipped file with the entire project via google drive. Make sure the textures and models are included please!

## 10. Additional Information



## Frequently Asked Questions (FAQ)

### What do I design?

Competitors will be given a written description of a game asset and a description of the game world to which it belongs.

### What do I create?

By the end of the 6.5-hour event, you will submit a 3D model mapped with texture maps created during the competition.

### What happens if my work does not adhere to competition specifications?

Work that does not conform to or exceeds the specifications described in the design brief will not be judged and will be disqualified.

### Where do I submit my projects?

Upload your model on to sketchfab. This article explains the steps to uploading to your account.

[https://help.sketchfab.com/hc/en-us/articles/202508836-](https://help.sketchfab.com/hc/en-us/articles/202508836-Uploading?utm_source=website&utm_campaign=upload_hints)

[Uploading?utm\\_source=website&utm\\_campaign=upload\\_hints](https://help.sketchfab.com/hc/en-us/articles/202508836-Uploading?utm_source=website&utm_campaign=upload_hints)

And here is a Youtube video explaining the process of how to present and edit your model.

[https://www.youtube.com/watch?v=VWjYbb8t7lw&ab\\_channel=GrantAbbitt](https://www.youtube.com/watch?v=VWjYbb8t7lw&ab_channel=GrantAbbitt)

### How much time do I have?

All tasks must be completed by the end of the 6.5-hour competition.

### Can I use my own files?

Competitors are not permitted to bring their own files, rigs, materials or maps for use during the competition. Concept art may be brought in advance.

### Can I use the Internet as a resource?

Competitors can use the internet for image reference or may use online help files. Competitors may not receive coaching in person or online during the competition.

### Can I use my own tools?

Digital Drawing tools such as tablets are permitted. If competitors bring their own tablet, please bring tablet drivers to the competition. Contestants will be responsible for installation and troubleshooting their devices.

### What software should I use?

Remember, you are providing your own computer and software. It is suggested that you use 3D software that you own such as Maya, Blender, 3DS Max, substance painter, 3D coat - some of which are free. Competitors need 2D software such as Adobe Photoshop, Corel Paint, Illustrator or Krita. Competitors are responsible for their own IT support, so please ensure that everything works in advance. **We would suggest a test at home and not as school to make sure that your**

software will load and function without access to a school/college network. Make sure you have an account with Sketchfab and can upload with no problems.

**Do I need to stay in the competition area the whole time?**

Yes, during the competition all competitors must remain within the proximity of the competition area, as specified by the Provincial Technical Committee (PTC).

**Can I communicate with my coaches, friends, and family during the competition?**

Communication with non-competitors is not permitted during the competition through any means. (i.e. mobile devices, text, email etc.) You may use your phone to listen to music with headphones.

**10. PTC Contact Information**

Name	Title	Email
Jamie Liu	Technical Chair	<a href="mailto:jamliu95@gmail.com">jamliu95@gmail.com</a>
Patty Chomseng	Co-Chair	Pchomseng@gmail.com
Bill Henderson	Tech Committee	Bhenderson@offloadstudios.com