3D DIGITAL GAME ART

POST-SECONDARY

1. Schedule & Registration

DATE	
Wednesday, April 16, 2025	
Time	
8:00-8:29 am	Check-In, Setup and Testing
8:30 am	Competition begins
TBD on competition day	Lunch
3:30 pm	Competition ends
TBD	Medal Ceremony

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. Online registration fees are $125 per competitor.

2. Purpose of the Contest

This competition gives competitors the opportunity to experience the 3D Game Art production process and demonstrate their knowledge and skill. A 3D Digital Game Artist takes a designer's brief and through a combination of conceptualization and specialized skills, fulfills the brief to the client's satisfaction.

3. Project Overview

Competitors will have **6 hours** to develop assets, including models, textures, UV maps, and exported artwork, which must be uploaded to Sketchfab. You may use any 3D software you are comfortable with for your work, if it can be exported to Sketchfab for judging. Please note you should be familiar with uploading FBX files to Sketchfab and ensuring that your animation and lighting are optimized.

The intention of this competition is to create original artwork. All assets must be created on site during the competition. However, the concept art must be done in advance prior to the competition and must be submitted as a digital PNG file to scncbcgameart@gmail.com. **AI software or generated imagery are not permitted.**

Task:

You will be challenged with 6 modules to demonstrate your skills. Each module will be judged independently and is separate from the previous module. Each module will have a distinct submission requirement. For the final module, you will integrate the outcomes from all previous modules to create a cohesive final scene. Modules will enable you to demonstrate the following skills:

1. Your ability to create concept art based on a design brief.
2. Your ability to model hard surface & organic sculpting.
3. Your adaptability to incorporate a mystery object.
4. Your skill with UV unwrapping.
5. Your ability to texture models.
6. Your skill to publish your files onto an online platform (Sketchfab).

Cultural Brief:

This year's theme draws inspiration from the game Black Myth: Wukong. Shanxi Province is renowned for its famous grottoes, many of which have influenced the settings in the game. These ancient cave temples, carved into cliffs, are home to thousands of Buddhist statues and murals, with the Yungang Grottoes being one of the most notable examples, recognized as a UNESCO World Heritage Site.

A prominent aspect of the game is its architecture, which is deeply rooted in Buddhist culture and traditional Chinese stone carvings. Black Myth: Wukong meticulously recreates the architectural style from *Journey to the West*, utilizing a vast digital archive of ancient Chinese buildings to capture remarkable details.

Yungang Grottoes:
https://whc.unesco.org/en/list/1039/

The Temple of Datong:
https://news.cgtn.com/news/2019-09-14/Travelogue-The-Hanging-Temple-of-Datong-JYws8W8l6o/index.html

Design Brief:

Miniature Pagoda and "Wealth Bowl" created in the style of the game: Black Myth: Wukong

Competitors should incorporate the Buddhist architectural themes seen in Black Myth: Wukong and create a miniature pagoda. In front of the pagoda sits a wealth bowl, also known as a prosperity bowl for good luck and fortune. They both should adhere to the design aesthetic. Your model must not exceed a total of 200,000 polygons each (100,000 triangles), and individual texture maps should be limited to a maximum resolution of 2048x2048 pixels.

REFERENCE:

张 政 - BlackMyth WUKONG PV Environment Assets
https://zhengzhang1.artstation.com/projects/eagNoY
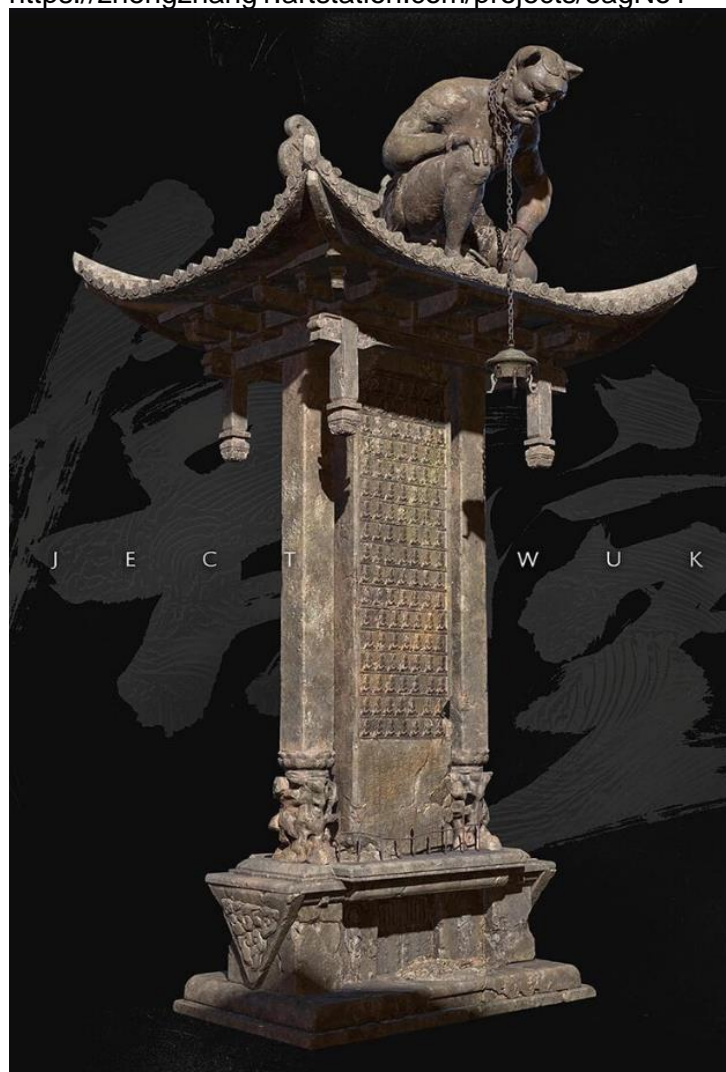
Modules
Module 1: Concept Art This module will assess your concept art skills. Your task is to create a detailed model sheet for the miniature pagoda and wealth bowl. Produce one full-color concept art model sheet with a resolution of 300 DPI which is 2400px X 3000px. This illustration should include three views of the final model—front, right-side, and ¾ view—along with a clearly documented color scheme. Use digital art software such as Photoshop, Procreate, Gimp, Krita, Corel Painter, or similar, to create and export a finalized PNG image of your design. This will be submitted at the start of the competition.
Module 2: Model the Miniature Pagoda and sculpt the Wealth Bowl Using your created concept art as a reference, model a miniature pagoda and the wealth bowl. The completed models you create should not exceed a total of 200,000 polygons each (100,000 triangles).
Module 3: Mystery object

On the day of the competition, a mystery object will be revealed. You must model, texture, and incorporate the mystery object with your Pagoda and Wealth Bowl. There is no limitation for the poly count, however, do keep in mind that it must be of the same style as your designs.

Module 4: UV unwrapping models

Unwrap the miniature pagoda and wealth bowl. Use game unwrapping techniques to ensure optimal performance, including maintaining consistent pixel density across the model. Pay attention to efficient UV layout and minimal texture stretching, aligning with industry standards for game-ready assets.

Module 5: Texturing models

Apply texture mapping to the pagoda and wealth bowl, ensuring that texture maps do not exceed a resolution of 2048 x 2048 pixels. Follow a consistent naming convention for all texture files. Incorporate multiple texture maps into materials or shaders, then apply these to the model.

Module 6: File management

Competitors must light their model and export it to Sketchfab, ensuring it can be viewed from a fixed camera position with 360-degree rotation capability. Models, textures, and materials should align with the design specifications and art style outlined in the brief. Make the models publicly viewable and share the links with Skills judges upon upload—double-check that all links are functional. Test 30 minutes prior to the end of the competition to ensure link is working.

All work must be created onsite; no external files, rigs, or materials are permitted, and AI tools are strictly prohibited.

Internet Use: You can use the internet for research but not for downloading files or rigs or to communicate with any coaches. You are not permitted to communicate with your coaches or tutors during the competition hours.

4. Number of Stations / Allocations

BYOD - Bring Your Own Device

Supplied by Skills British Columbia Technical Committee:
- Workspace: table, chair, electrical outlet

5. Skills & Knowledge to be Tested

- Interpretation of Design Brief
- Develop Concept Art
- 3D modeling
- Lighting
- UV Unwrapping & Texturing
- Organization & File Management
- Exporting & Uploading Files

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;
- 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 & Software

3D GAME ART IS A 'BRING YOUR OWN DEVICE (BYOD) CONTEST. NO EQUIPMENT OR SOFTWARE WILL BE SUPPLIED.

Suggested Recommended 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 (not necessary for competition)
- Operating System – Windows 10/11 or Mac OSX
- Wi-Fi enabled computer system

Suggested Software:
- 3D Software: 3D Studio Max, Maya Blender, Zbrush
- 2D Software: Adobe Photoshop or Illustrator, Krita, Clip Studio or GIMP, Substance Painter

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

Additional Equipment and Material Recommendations:
- Drawing Tablet and driver (driver compatible with your system)
- Headphones
- Pencils and erasers, sketchbook
- Any adapters that you may require to connect your hardware to the network and displays
- Memory stick or external hard drive

8. Evaluation & Judging Criteria

SCORESHEET

Module 1 – Concept Art	
Creative and original interpretation of the design brief	3%
Concept art is clearly labelled and illustrated in 3 views	3%
Concept art demonstrates proper proportions	3%
The final concept features shading techniques to represent form of the objects	3%
Exhibits use of color theory	3%
Total	**15%**
Module 2 – Modelling Pagoda and Wealth Bowl	
Model contains soft and hard surfaces	5%
Modelled with animation in mind (game ready)	5%
Appropriate distribution of polys under 100,000 tris	5%
No Ngons, clean unified geometry	5%
Efficient edge flow and topology	5%
3D asset conforms to the concept art	5%
3D interpretation of the concept art is proportioned to realistic dimensions	5%
Total	**35%**
Module 3 – Mystery Object	
Model and design is creative and original	5%
Model is incorporated with Pagoda and Wealth Bowl	5%
Total	**10%**
Module 4 – UV Unwrapping	
The UV islands are proportional to the corresponding areas on the model	5%
Smooth and even distribution of UV shells: asset has separate UV	5%

shells that represent understandable elements of the model	
No overlapping UVS (unless intended ex. mirroring) or texture bleeding	5%
Total	**15%**
Module 5 – Texture Mapping/Surfacing	
Texture and shading display an understanding of color theory & realistic construction	5%
Textures conform to the overall art style of the design brief	5%
Texture looks seamless on model, no obvious joins or break in texture	5%
Texture files are no more than 2048 x 2048 pixel resolution and has organized naming of maps	5%
Total	**20%**
Module 6 – Export & Uploading Files	
File is properly submitted on time to competition	1%
Models open and view without errors	1%
Logical naming conventions are used for objects, files, and textures	1%
Final product is enhanced with Sketchfab's lighting	2%
Total	**5%**
TOTAL	**/100%**

In the event of a tie, the competitor with the highest score in Module 2 will be declared the winner. If there is also a tie in Module 2, then the highest score in Module 5 will be declared the winner. If there is another tie, then the highest score in Module 3 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.
3. Email the url to scbc3dgameart@gmail.com like so: Subject: 3D Game Art Submission (Your name) Body: (Paste URL)
4. Attach a zipped file with the entire project via google drive. Make sure the textures and models are included please. (In case of Google drive failure, a USB will be used to collect the zipped files)

10. Additional Information

Frequently Asked Questions (FAQ)

What do I design?

Competitors will be given written descriptions under section 3, the "Design Brief."

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-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=VWjYbb8t7Iw&ab_channel=GrantAbbitt

How much time do I have?

All tasks must be completed by the end of the 7-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. Only the concept art may be brought in advance.

Can I use the Internet as a resource?

Competitors can use the internet for image reference or 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 bringing your 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. Competitors need 2D software such as Adobe Photoshop or Krita. (Please see information on suggest/recommended software in

section 7). Competitors are responsible for their own IT support therefore you must ensure that everything works in advance.

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). However, bathroom breaks are permitted.

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

Provincial Technical Committee Members		
Patty Chomseng	Technical Chair	Scbc3dgameart@gmail.com
Tim Tang	Co-Chair	Timtang3d@gmail.com
(TBA)	Judge	