



2019 22nd ANNUAL SKILLS MANITOBA COMPETITION CONTEST DESCRIPTION

CONTEST NAME: 3D Digital Game Art

CONTEST NO:

CATEGORY: Secondary

CONTEST LOCATION: Tec Voc High School

CONTEST START TIME AND DURATION:

Time	Task
8:00 am - 8:30 am	Orientation
8:30 am - 12:00 pm	Competition 3.5 hours
12:00 pm - 12:30 pm	Lunch (provided)
12:30 pm – 2:30 pm	Competition 2.0 hours
2:30 pm -3:00 pm	Judging

PURPOSE OF CHALLENGE:

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.

The competition will have a creative brief that will be issued to the competitors on the day of the competition. The scope of the competition enables learners to develop and demonstrate a variety of creative and technical skills that are essential within the contemporary gaming and creative industries.

SKILLS AND KNOWLEDGE TO BE TESTED:

Employability Skills:	Preproduction:	Production:
Team work	Interpretation of a Design Brief	3D Modelling
Time management	Creation of Concept Art	Texture mapping & UV Unwrapping
Planning		Lighting
Attention to detail		Exporting and uploading to Sketchfab.
		File Management
		Appeal of Final Product

CONTEST DESCRIPTION

Overview

Competitors will be given 6 hours to develop assets including designs, concept art, models, maps and exported artwork. The 2018 contest will be focused on the creation of a **low poly prop, with a hand painted style**. The model should use no more than 4,000 polygons. Individual texture maps should be no more than 1024x1024 pixel resolution.

Competitors will be provided with a sample piece of 3D artwork. It will show an model similar to that which must be created by each competitor during the competition. A written description of a different model will also be supplied.

Competitors will use their imagination to create a new model with an art style that matches the appearance of the professionally created artwork and follows the written description. The aesthetic of the game to which the model belongs will be included in a design brief provided on the day of the contest.

THE EXACT NATURE OF THE OBJECT WILL BE REVEALED ON THE COMPETITION DATE. SHIELD MODELS ARE FOR EXAMPLES ONLY

The link below shows an example of a development process.

<https://www.creativebloq.com/3d/how-create-low-poly-3d-models-121310159>

Example:



Examples from sketchfab.com

Competitors are required to explore ideas for their models and to draw concepts for their final models from at least three different angles. Computer software such as Photoshop should be used to complete an image containing the finalized designs. A 3D model of the design should be created using modelling software such as Blender or Maya. Finished models should not exceed the limit of 4000 polygons and should attempt to use close to that number. Efficient distribution of edges, polygons and vertices will be examined during judging. Texture maps for the model should be created in Photoshop or similar software. No texture map should exceed a pixel resolution of 1024 x 1024. Competitors should make maximum use of the texture maps so its pixels are 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.

Competitors are required to illuminate their model and export it to a 3D viewing platform (Sketchfab). Models, maps and materials should resemble the designs outlined in the concept art and should match the art style used in the example with which they are provided.

The reference image shows a model created by a professional. It uses an art style that must be replicated by the competitors when they design and create their own model which is detailed in the written description.

POINT BREAKDOWN / 100 TOTAL:

POINT BREAKDOWN	/100
Part 1:	
Organization and Management	5
Interpretation of the Design Brief	5
Concept Art	10
Part 2:	
3D Modelling	25
Texture Mapping	25

UV Unwrapping	20
Part 3: Export to 3D viewer (Sketchfab).	10
TOTAL	100

NATIONAL COMPETITION ELIGIBILITY:

- A mark of **70% or higher** must be scored by the gold medalist in order to attend the National Skills Competition. At present there is no national level competition in the area.

EQUIPMENT, TOOLS, MATERIALS TO BE PROVIDED BY COMMITTEE:

EQUIPMENT, TOOLS, MATERIALS TO BE SUPPLIED BY COMPETITOR:

The 3D Game Art competition may be BYOD, depending on availability of suitable equipment. (Bring Your Own Device for each competitor.)

Suggested Hardware Requirements:

- Intel Graphics Workstation i7 Quad Core Processors
- 1 TB HD
- 16Gb RAM
- Dedicated video card (suggested minimum 2GB) as approved by Autodesk
- Flat Panel Display 1920 X 1080
- Sound card
- Operating System –Windows 10 or Mac OSX
- Wi-Fi enabled computer system, able to connect as guest to a new network.

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

Suggested software:

- 3D Software: 3D Studio Max, Maya, Blender, Substance.
- 2D Software: Adobe Photoshop or Illustrator. Autodesk Sketchbook. Substance B2M, Substance Designer, Substance Painter, Krita, Clip Studio or GIMP.
- Viewing Software: VLC

Additional Equipment and material suggested.

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

Required clothing (Provided by competitor)

- No special requirements, but no school logos or business brands.

WORKSITE SAFETY RULES / REQUIREMENTS:

List of required personal protective equipment (PPE) provided by competitors

No (PPE) required.

SPECIAL CONDITIONS / ADDITIONAL INFORMATION:

Tie (No ties are allowed)

In the event of a tie, the team with the highest score in the Part 2 Modelling and Texture Criteria will be declared the winner. If there is also tie in the Modelling and Texturing criteria, then the highest score in the part 1 Preproduction Criteria will be declared the winner.

Competition rules

Please refer to the competition rules for the Skills Canada National Competition

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 5.5-hour event, you will submit 2D concept art, 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.

How much time do I have?

During the 6 hour competition, all tasks must be completed by the end of the 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

Can I use the Internet as a resource?

Competitors can use the internet for image reference during the creation of concept art.

Can I use my own tools?

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

What software should I use?

Competitors are providing their own computer and software. Competitors are advised to use 3D software that you own such as Maya, Blender, 3DS Max some of which are free. Competitors need 2D software such as Adobe Photoshop or Krita. Competitors are responsible for their own IT support so 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 National Technical Committee

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. Cell phones, text, email)

THE IMPORTANCE OF ESSENTIAL SKILLS FOR CAREERS IN THE SKILLED TRADES;

Essential skills are used in nearly every job and at different levels of complexity. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change. Good Essential Skills means you will understand and remember concepts introduced in technical training. The level of Essential Skills required for most trades is as high as or higher than it is for many office jobs.

The following 9 skills have been identified and validated as key essential skills for the workplace:

Numeracy, Oral Communication, Working with Others, Continuous Learning, Reading Text, Writing, Thinking, Document Use, Digital.

FOR MORE INFORMATION CONTACT TECHNICAL COMMITTEE MEMBER:

James Thomson jthomson@retsd.mb.ca