

# 4-H TECHNOLOGY GUIDE BOOK



# TECHNOLOGY and COMPUTERS

**Martha & Ben Powell, Chair (913) 302-5812, 302-3504**

1. Enrollment requirements for 4-H'ers: Computers and Technology, Space Tech, or Self Determined.
2. Entry tags must be filled out and attached to item.
3. May not enter more than one item in each class.
4. Conference judging will be used during judging.
  - a) See Kansas 4-H website for score sheet for Robotics & Computer Systems <https://www.kansas4-h.org/events-activities/fairs/kansas-state-fair/index.html>
5. All will be judged on the completeness of documentation, knowledge of the project and their communication skills.
6. Notebooks or posters are required to properly show project to its fullest extent without electronic presentation.
  - a) Include a "4-H Engineer's Notebook" with dated entries describing the start, progress and final product.
  - b) See Kansas State Fair guidelines for the Notebook. <https://www.kansas4-h.org/events-activities/fairs/kansas-state-fair/index.html>.
7. All digital exhibits will be accompanied with a copy on CD, DVD or Flash Drive.
8. Exhibits should be able to be operated. If not able to attend conference judging operating instructions must also be available.
9. Robotics Exhibitor must demonstrate knowledge of operation and program. Challenge must run robotics course during judging of robotics class 3650 and 3675.
10. Web Design must provide complete copy of web project. (Include a notebook, see rule 6.
11. Digital Graphics provide electronic output of file and copy of work in native program. (Include a notebook, see rule 6)
12. Presentation must provide representative printed material, final electronic output file and a work copy in native program. These will be judged on appropriate subject, design and communication to the audience.
13. Video must provide representative printed material, final electronic output file and a work copy in native program. These will be judged on appropriate subject, story line, character design, staging, environment and video principals.
  - a. Video-Commercial—This is any advertising, Max 30 sec. Judged on impact and clear communication.
  - b. Public Service Announcement—This is any PSA, Max 60 sec. Judged on completeness and clarity of message and clear communication.
  - c. News Package—This is any News Story, Max 3 Min. Judged on completeness and clarity of message and clear communication.
  - d. Music Video—This is any Music Video, Max 7 min. Judged on interpretive creativity and quality of music to video mix.
  - e. Short Film—This is any Short Film, Max 8 min. Judged on completeness and clarity of message and clear communication.
  - f. Video-Documentary—This is any Documentary, Max 10 Min. Judged on completeness and clarity of message and clear communication.
14. Repair / Refurbish Computer. Provide problem statement, solutions and logic. Computer presentation may be used.
15. Group projects in all lots will be judged against other group projects.
16. Only robotics classes are offered at the State Fair. No state fair class in all other computer classes.

LOT 1	Junior - Ages 7-8 (Not eligible for State Fair due to
LOT 2	Intermediate – Ages 9-13
LOT 3	Senior – Ages 14 & over

## **ROBOTICS**

### **3640 Lot 1 - Robotics-Challenge—**

Required to run course set up based on state fair course. Judged on time and successfully completing course

### **3641 Lot 1 -- Robotics- Notebook—**

Provide plans, schematics, cost of robot and record of design and building of robot. Photos may be used.

### **3642 Lot 1 - Robotics-Self Determined—**

Provide problem statement, solutions and logic. Computer presentation may be used.

### **3658 Lot 2 - Robotics-Challenge—**

Required to run course set up based on state fair course. Judged on time and successfully completing course

### **3659 Lot 2 - Robotics- Notebook—**

Provide plans, schematics, cost of robot and record of design and building of robot. Photos may be used.

### **3660 Lot 2 - Robotics-Self determined—**

Provide problem statement, solutions and logic. Computer presentation may be used, (see other categories below).

### **3677 Lot 3 - Robotics-Challenge—**

Required to run course set up based on state fair course. Judged on time and successfully completing course

### **3678 Lot 3 - Robotics- Notebook—**

Provide plans, schematics, cost of robot and record of design and building of robot. Photos may be used.

### **3679 Lot 3 - Robotics-Self determined—**

Provide problem statement, solutions and logic. Computer presentation may be used, (see other categories below).

The competition surface at fair will be a paper print out of the track. This can be slippery so slow your robots down to ensure the wheels do not slip on turns or during acceleration.

- Keep in mind that regular batteries will degrade as you practice with your robot. This will potentially change the speed, distance, etc. that the robot will travel. Lithium batteries will hold a consistent charge better. You may also want to use re-chargeable batteries. Also, have a spare set of batteries when you arrive for judging just in case.
- The fair will have a test track built on the floor for practice. Suggest you get to the fair early to test your robot on the actual track. You also might want to bring a PC with you to tweak your robot's program if you need to after you practiced on the track.
- Your robot can be programmed by distance or time. Try experimenting with both options.
- Most of all have fun at the fair learning about programming and robots.

**Judging Sheet    Robotics Notebook/SD LOT – 1 , 2, 3**

**Contestant:**

**3640 - 3642, 3658 - 3660, 3677-3679**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	NOTES
<b>PLANNING</b>	<ol style="list-style-type: none"> <li>1. What prompted the idea of the project</li> <li>2. Goals clearly defined</li> <li>3. How well did they document the goals</li> </ol>		
<b>Execution</b>	<ol style="list-style-type: none"> <li>1. How well did they follow the plan.</li> <li>2. How well were issues addressed</li> </ol>		
<b>Effectiveness</b>	<ol style="list-style-type: none"> <li>1. Was the goal accomplished</li> <li>2. How did the plan change and what adaptations were needed</li> <li>3. What did they learn about the process</li> </ol>		
<b>Communication and Presentation</b>	<ol style="list-style-type: none"> <li>1. Does the documentation clearly communicate the process?</li> <li>2. How well was the process communicated – one on one</li> </ol>		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**

## **PROGRAMMING**

### **3643 Lot 1 - Web Programming-Design—**

This will be judged on layout, functionality, completeness and creativity

### **3644 Lot 1 - Web Programming-Dynamic—**

This will be judged on significant database functionality, interaction, and completeness.

### **3655 Lot 1 - Web Programming-Animation—**

This will be judged on significant animation functionality, or complete animation design.

### **3661 Lot 2 - Web Programming-Design—**

This will be judged on layout, functionality, completeness and creativity

### **3662 Lot 2 - Web Programming-Dynamic—**

This will be judged on significant database functionality, interaction, and completeness.

### **3663 Lot 2 - Web Programming-Animation—**

This will be judged on significant animation functionality, or complete animation design.

### **3680 Lot 3 - Web Programming-Design—**

This will be judged on layout, functionality, completeness and creativity

### **3681 Lot 3 - Web Programming-Dynamic—**

This will be judged on significant database functionality, interaction, and completeness.

### **3682 Lot 3 - Web Programming-Animation—**

This will be judged on significant animation functionality, or complete animation design.

### **Requirements - All Web Categories:**

- Participants may enter a project in one of three categories: Web Design, Dynamic Database, or Flash Functionality.
- Each project will be scored in conference judging during fair by judges using the Judging Sheets shown. Dynamic Database and Flash Functionality sites will be scored on elements unique to their category, as well as all the applicable design aspects.
- The project may be one that the student has made for a school project or for a client.
- The project should have at least 5 pages, including the home page.
- Projects may be submitted on a CD, DVD or by URL. Sites Submitted by URL must be available from time of the entry deadline through the day of the contest.
- Dynamic Database sites must be submitted by URL only, as they depend on the server technology to function.
- Flash Functionality sites must also furnish their FLA files, either on the CD or via a link on the site.
- Projects will be disqualified for: Not satisfying the above criteria,

Copyright violation, inappropriate content, (language, hate, alcohol, drugs, sex, etc.) will not be allowed. Also avoid gaming as a Web site topic, since our Web browsers block most gaming related sites

**Judging Sheet Web Programming-Design LOT – 1 , 2, 3**

**Contestant:**

**3643, 3661, 3680**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	Notes
<b>Design Principles</b>	Contrast, Alignment, Repetition, Proximity		
<b>Design Principles</b>	Use of white space, Proportion		
<b>Graphics</b>	Quality, Appropriate file format, File size		
<b>Type</b>	Text is in core Web fonts, appropriate size, readable, consistent throughout site		
<b>Audio/Video</b>	If used, sound and video contribute to site effectiveness. Volume and on/off controls present.		
<b>Creativity</b>	The site, while largely adhering to conventions of design, expresses some uniqueness or creativity in one or more of the above elements.		
<b>Links</b>	All internal and external links function correctly and are relevant to the site.		
<b>Usability</b>	Clarity of navigation and content, uncluttered, respectful of user expectations, keeps the user oriented in the site. Links are clear and unambiguous.		
<b>Accessibility</b>	User may adjust the font size without breaking the design, Images have alt text, graphical menus have alternate plain text menu		
<b>HTML standards</b>	HTML must validate successfully at W3C.		
<b>CSS</b>	External CSS must be used for presentation - no FONT tags, background colors, etc. in the HTML.		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**

**Judging Sheet Web Programming-Design Dynamic LOT – 1 , 2, 3**

**Contestant:**

**3644, 3662, 3681**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	NOTES
<b>Dynamic Database Functionality</b>	Public Site content is drawn from a database to customize user experience		
<b>User Data Collection</b>	User-entered data is stored in the database		
<b>Administrator Interface with site &amp; data</b>	Administrator interface to access and modify data		
<b>Server-side Language Syntax</b>	Whatever language is chosen (PHP, ASP, ColdFusion, etc.) is used correctly and appropriately.		
<b>Design Principles</b>	Contrast, Alignment, Repetition, Proximity		
<b>Design Principles</b>	Use of white space, Proportion		
<b>Graphics</b>	Quality, Appropriate file format, File size		
<b>Type</b>	Text is in core Web fonts, appropriate size, readable, consistent throughout site		
<b>Audio/Video</b>	If used, sound and video contribute to site effectiveness. Volume and on/off controls present.		
<b>Creativity</b>	The site, while largely adhering to conventions of design, expresses some uniqueness or creativity in one or more of the above elements.		
<b>Links</b>	All internal and external links function correctly and are relevant to the site.		
<b>Usability</b>	Clarity of navigation and content, uncluttered, respectful of user expectations, keeps the user oriented in the site. Links are clear and unambiguous.		
<b>Accessibility</b>	User may adjust the font size without breaking the design, Images have alt text, graphical menus have alternate plain text menu		
<b>HTML standards</b>	HTML must validate successfully at W3C.		
<b>CSS</b>	External CSS must be used for presentation - no FONT tags, background colors, etc. in the HTML.		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**

**Judging Sheet Web Programming-Design Animation LOT – 1 , 2, 3**

**Contestant:**

**3665, 3663, 3682**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	For the benefit of the contestant, please justify reason for score given by indicating specific areas
<b>Animation purpose</b>	Tasteful, purposeful, contributes to site effectiveness		
<b>Animation quality</b>	Smooth tweens, creativity, no use of canned clipart/animations or built-in Flash timeline effects		
<b>Symbols</b>	Appropriate use of graphic, movie clip, and button symbols		
<b>Action Script</b>	No errors, actions on separate layer, formatted according to convention		
<b>Naming &amp; Organization</b>	Layers, instances, symbols named appropriately, layer and library folders used		
<b>Design Principles</b>	Contrast, Alignment, Repetition, Proximity		
<b>Design Principles</b>	Use of white space, Proportion		
<b>Graphics</b>	Quality, Appropriate file format, File size		
<b>Type</b>	Text is in core Web fonts, appropriate size, readable, consistent throughout site		
<b>Audio/Video</b>	If used, sound and video contribute to site effectiveness. Volume and on/off controls present.		
<b>Creativity</b>	The site, while largely adhering to conventions of design, expresses some uniqueness or creativity in one or more of the above elements.		
<b>Links</b>	All internal and external links function correctly and are relevant to the site.		
<b>Usability</b>	Clarity of navigation and content, uncluttered, respectful of user expectations, keeps the user oriented in the site. Links are clear and unambiguous.		
<b>Accessibility</b>	Scalable for various resolutions, selectable text, text contrast, keyboard access, audio is helpful but not essential to the site, screen reader accessibility, text equivalents for non-text elements		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**



## **DIGITAL GRAPHICS**

### **3646 Lot 1 - Digital Graphics- Typography –**

This will be judged on arrangement, creativity, and illustration.

### **3647 Lot 1 - Digital Graphics- Design Layout –**

This will be judged on arrangement, creativity, and composition.

### **3648 Lot 1 - Digital Graphics- Print Media –**

This will be judged on arrangement, creativity, and message.

### **3649 Lot 1 - Digital Graphics- Technical Drawing –**

This will be judged on arrangement, clarity of graphics and communication.

### **3664 Lot 2 - Digital Graphics- Typography –**

This will be judged on arrangement, creativity, and illustration.

### **3665 Lot 2 - Digital Graphics- Design Layout –**

This will be judged on arrangement, creativity, and composition.

### **3666 Lot 2 - Digital Graphics- Print Media –**

This will be judged on arrangement, creativity, and message.

### **3667 Lot 2 - Digital Graphics- Technical Drawing –**

This will be judged on arrangement, clarity of graphics and communication.

### **3683 Lot 3 - Digital Graphics- Typography –**

This will be judged on arrangement, creativity, and illustration.

### **3684 Lot 3 - Digital Graphics- Design Layout –**

This will be judged on arrangement, creativity, and composition.

### **3685 Lot 3 - Digital Graphics- Print Media –**

This will be judged on arrangement, creativity, and message.

### **3686 Lot 3 - Digital Graphics- Technical Drawing –**

This will be judged on arrangement, clarity of graphics and communication.

### **Requirements - All Graphics Categories:**

Participants may enter a project in one of four categories: Typography, Design Layout, Print Media or Technical Drawing.

Each project will be scored in conference judging during fair by judges using the Judging Sheets shown.

The project may be one that the student has made for a school project or for a client.

Project shall be submitted on a CD or DVD in native program.

Projects will be disqualified for: Not satisfying the above criteria,

Copyright violation, inappropriate content, (language, hate, alcohol, drugs, sex, etc.) will not be allowed.

Also avoid gaming as a Web site topic, since our Web browsers block most gaming related sites

**Judging Sheet    Typography LOT – 1 , 2, 3**

**Contestant:**

**3646, 3664, 3683**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	NOTES
<b>Typography Font Choice</b>	<ol style="list-style-type: none"> <li>1. Were fonts chosen carefully not haphazardly? Do the font(s) and attributes applied give interest and detail to the piece. Is there a level of sophistication visible, classic style application or reference to the "Keep it Simple" rule?</li> <li>2. Fonts were not chosen carefully and have a haphazard appearance. The font(s) and attributes applied do not give interest and detail to the piece. No reference to traditional styles or rules is apparent</li> <li>3. Font usage is appropriate and stronger visually? Some visual interest and detail have been achieved by the combination of font choices and attribute selection. Typographical rules and styles were minimally adhered to without much impact on the overall design of the piece</li> <li>4. Strong font choices that add visual interest, complexity, dimension and detail to the piece. A high level of sophistication is visible, along with classic style application and/or adherence to the "Keep it simple" rule?</li> </ol>		
<b>Readability</b>	<ol style="list-style-type: none"> <li>1. Student clearly embraces message delivery and recognizes its importance and demonstrates understanding of font usage and readability issues that can be a part of any designed/ written printed piece</li> <li>2. Little or no understanding of message delivery, font usage and readability issues</li> <li>3. Evidence student understands font usage and addresses the importance of readability.</li> <li>4. Professional and sophisticated application of strong font selections and application of attributes that assist in the readability of the printed piece. Students work stands out from others completed pieces'.</li> </ol>		
	<ol style="list-style-type: none"> <li>1. Are the graphics, rules and images necessary for the effectiveness of the design? Does the student demonstrate image manipulation and creation skills?</li> <li>2. The graphics, rules and images are not necessary for the design's effectiveness? No image manipulation and creation skills are apparent?</li> <li>3. The graphics, rules and images are necessary for the design's effectiveness? Minimal to average image manipulation and creation skill-set demonstrated by student?</li> <li>4. The graphics, rules and images necessary for the effectiveness of the design? The student demonstrates above average image manipulation and creation skill-set?</li> </ol>		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**

**Judging Sheet Design and Layout LOT – 1 , 2, 3**

**Contestant:**

**3647, 3665, 3684**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	NOTES
<b>Design</b>	<ol style="list-style-type: none"> <li>1. Is exploring and experimenting evident? Do images demonstrate appropriate manipulations and enhancements? Is it an engaging and visually pleasing piece to view?</li> <li>2. Very little exploring and experimenting is evident. Some manipulation of imagery can be seen but, is a bit intrusive. Has some visual interest</li> <li>3. More exploring and experimenting are evident. Increased use of image manipulations (color, balance, transformation, and adjustments.) Much more Interesting and pleasing to the eye.</li> <li>4. Image manipulations are cognizant and so skillfully applied that it is nearly impossible to determine what tools, effects and filters were used. Excellent colors making it look abstract or realistic. Very interesting and pleasing to the eye.</li> </ol>		
<b>Layout</b>	<ol style="list-style-type: none"> <li>1. Student clearly embraces the project and has a basic understanding of direction, proximity, grid structure and layout.</li> <li>2. Student clearly embraces the project and has a good understanding of direction, proximity, grid structure and layout.</li> <li>3. Student clearly embraces the project and has an excellent understanding of direction, proximity, grid structure and layout.</li> <li>4. Professional and sophisticated application of proximity, grid structure and layout. Stands out from others work.</li> </ol>		
<b>Typography</b>	<ol style="list-style-type: none"> <li>1. Were fonts chosen carefully not haphazardly? Do the font(s) and attributes applied give interest and detail to the piece. Is there a level of: sophistication visible, classic style application or reference to the "Keep it Simple" rule?</li> <li>2. Fonts were not chosen carefully and have a haphazard appearance. The font(s) and attributes applied do not give interest and detail to the piece. No reference to traditional styles or rules is apparent</li> <li>3. Font usage is appropriate and stronger visually? Some visual interest and detail have been achieved by the combination of font choices and attribute selection. Typographical rules and styles were minimally adhered to without much impact on the overall design of the piece</li> <li>4. Strong font choices that add visual interest, complexity, dimension and detail to the piece. A high level of sophistication is visible, along with classic style application and/or adherence to the "Keep it simple" rule?</li> </ol>		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**

**Judging Sheet Print Media LOT – 1 , 2, 3**

**Contestant:**

**3647, 3666, 3685**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	NOTES
<b>Composition</b>	<ol style="list-style-type: none"> <li>1. Is exploring and experimenting evident? Is it interesting and pleasing to the eye? Does it demonstrate attention to detail? Is the intended audience apparent?</li> <li>2. Some manipulation of imagery/element placement is evident but somewhat blatant or obvious. Strikes lower visual interest to the viewer with little to no attention to detail. The intended audience is not apparent?</li> <li>3. Increased use of manipulations (Use of a color system, font awareness direction and purpose.) Images may show use of common filters and canned effects. Interesting and pleasing to the eye. Paid more attention to detail and their audience.</li> <li>4. Design choices are a conscious effort and demonstrate advancing skill levels. Strong use of color and typography. Very interesting and pleasing to the eye with great attention to detail and their audience is targeted and apparent.</li> </ol>		
<b>Software Knowledge</b>	<ol style="list-style-type: none"> <li>1. Student clearly embraces message delivery and recognizes its importance and demonstrates understanding of font usage and readability issues that can be a part of any designed/ written printed piece.</li> <li>2. Little or no understanding of message delivery, font usage and readability issues.</li> <li>3. Evidence student understands font usage and addresses the importance of readability.</li> <li>4. Professional and sophisticated application of strong font selections and application of attributes that assist in the readability of the printed piece. Students work stands out from others completed pieces</li> </ol>		
<b>Color Grey Scale and Contrast</b>	<ol style="list-style-type: none"> <li>1. Was there variation in color/gray scale levels? Are highlights, middle tones shadows apparent and a strong part of the image?</li> <li>2. Little variation in color/ gray scale. Contrast is too low or high and weakens overall effect of image.</li> <li>3. The Variation in color/ gray scale is stronger and more apparent. Contrast is appropriate to image and works as a positive giving the overall effect of image dimension and variety to image</li> <li>4. Excellent usage of color / Gray scale techniques and color elements -gives a realistic look to the image</li> </ol>		

**For the benefit of the contestant, please justify reason for score given by indicating specific areas**

**Judging Sheet    Technical Drawing    LOT – 1 , 2, 3**

**Contestant:**

**3649, 3667, 3686**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	NOTES
<b>Arrangement</b>	<ol style="list-style-type: none"> <li>1. Is exploring and experimenting evident? Is it interesting and organized? Does it demonstrate attention to detail? Is the intended standard apparent?</li> <li>2. Some manipulation of element placement is evident but somewhat blatant or obvious. Strikes lower visual interest to the viewer with little to no attention to detail. The intended audience is not apparent?</li> <li>3. Manipulation of element placement is evident and clear. Has visual interest to the viewer with attention to detail. The intended audience is apparent.</li> <li>4. Sophisticated manipulation of element placement is evident and clear. Has visual interest to the viewer with attention to detail. The intended audience is apparent.</li> </ol>		
<b>Software Knowledge</b>	<ol style="list-style-type: none"> <li>1. Student clearly under- stands and embraces the digital editing software</li> <li>2. Little or no understanding of digital editing software is apparent by the lack of manipulation or correction.</li> <li>3. Evidence student understands the digital editing software and can apply it to areas needing refinement or repair .</li> <li>4. Outstanding application of digital editing software. Student is able to edit and manipulate at a higher level</li> </ol>		
<b>Communication and Clarity</b>	<ol style="list-style-type: none"> <li>1. Little understanding of communication purpose.</li> <li>2. Basic understanding of communication purpose.</li> <li>3. Clear understanding of communication purpose.</li> <li>4. Exceptional understanding of communication purpose</li> </ol>		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**

## **PRESENTATION**

### **3650 Lot 1 - Presentation- Computer Slide Show –**

No less than 5 slides and no more than 5-minute presentation.

### **3651 Lot 1 - Presentation- 2D Animation –**

This is any 2D show -MAX. 5 minutes. Judged on character design, staging, environment and animation principals.

### **3652 Lot 1 - Presentation- 3D Animation –**

This is any 3D show -MAX. 5 minutes. Judged on character design, staging, environment and animation principals.

### **3653 Lot 1 - Presentation- 3D Modeling –**

This is any 3D model. Judged on modeling, texturing, lighting, post processing, realism, and /or creativity.

### **3668 Lot 2 - Presentation- Computer Slide Show –**

No less than 5 slides and no more than 5-minute presentation.

### **3669 Lot 2 - Presentation- 2D Animation –**

This is any 2D show -MAX. 5 minutes. Judged on character design, staging, environment and animation principals.

### **3670 Lot 2 - Presentation- 3D Animation –**

This is any 3D show -MAX. 5 minutes. Judged on character design, staging, environment and animation principals.

### **3671 Lot 2 - Presentation- 3D Modeling –**

This is any 3D model. Judged on modeling, texturing, lighting, post processing, realism and/or creativity.

### **3687 Lot 3 - Presentation- Computer Slide Show –**

No less than 5 slides and no more than 5-minute presentation.

### **3688 Lot 3 - Presentation- 2D Animation –**

This is any 2D show -MAX. 5 minutes. Judged on character design, staging, environment and animation principals.

### **3689 Lot 3 - Presentation- 3D Animation –**

This is any 3D show -MAX. 5 minutes. Judged on character design, staging, environment and animation principals.

### **3690 Lot 3 - Presentation- 3D Modeling –**

This is any 3D model. Judged on modeling, texturing, lighting, post processing, realism and/or creativity.

### **Requirements - All Graphics Categories:**

Participants may enter a project in one of four categories: Computer Slide Show, 2D Animation, 3D Animation or 3D Modeling.

Presentation must provide representative printed material; final electronic output file and a work copy in native program. These will be judged on appropriate subject, design, communication to the audience.

Each project will be scored in conference judging during fair by judges using the Judging Sheets shown.

The project may be one that the student has made for a school project or for a client.  
Project shall be submitted on a CD or DVD in native program.  
Projects will be disqualified for: Not satisfying the above criteria,

Copyright violation, inappropriate content, (language, hate, alcohol, drugs, sex, etc.) will not be allowed.  
Also avoid gaming as a Web site topic, since our Web browsers block most gaming related sites

**Judging Sheet Computer Slide Show LOT – 1 , 2, 3**

**Contestant:**

**3650, 3668, 3687**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	NOTES
<b>Arrangement</b>	<ol style="list-style-type: none"> <li>1. Is exploring and experimenting evident? Is it interesting and organized? Does it demonstrate attention to detail? Is the intended standard apparent?</li> <li>2. Some manipulation of element placement is evident but somewhat blatant or obvious. Strikes lower visual interest to the viewer with little to no attention to detail. The intended audience is not apparent?</li> <li>3. Manipulation of element placement is evident and clear. Has visual interest to the viewer with attention to detail. The intended audience is apparent</li> <li>4. Sophisticated manipulation of element placement is evident and clear. Has visual interest to the viewer with attention to detail. The intended audience is apparent.</li> </ol>		
<b>Software Knowledge</b>	<ol style="list-style-type: none"> <li>1. Student clearly under- stands and embraces the digital editing software.</li> <li>2. Little or no understanding of digital editing software is apparent by the lack of manipulation or correction.</li> <li>3. Evidence student under- stands the digital editing software and is able to apply it to areas needing refinement or repair.</li> <li>4. Outstanding application of digital editing software. Student is able to edit and manipulate at a higher level</li> </ol>		
<b>Communication and Clarity</b>	<ol style="list-style-type: none"> <li>1. Little understanding of communication purpose.</li> <li>2. Basic understanding of communication purpose.</li> <li>3. Clear understanding of communication purpose.</li> <li>4. Exceptional understanding of communication purpose.</li> </ol>		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**



**Judging Sheet 2D Animation LOT – 1 , 2, 3**

**Contestant:**

**3651, 3669, 3688**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	NOTES
<b>Technical use of program</b>	<ol style="list-style-type: none"> <li>1. Knows very little. Just enough to get elements moving on the screen. Jerky frame movement. Few effects if any.</li> <li>2. Shows basic understanding and usage of their medium. Well done but doesn't show a high level of expertise.</li> <li>3. Shows good understanding and usage of their medium. Well done but doesn't show a high level of expertise.</li> <li>4. Shows strong control of their medium. Uses sophisticated effects that show depth of knowledge.</li> </ol>		
<b>Concept or Story Structure</b>	<ol style="list-style-type: none"> <li>1. Minimal concept and structure or confusing structure. Sequence doesn't make sense</li> <li>2. Concept well developed. Adequate structure;</li> <li>3. Concept well developed. Good structure;</li> <li>4. Concept exceptionally well Developed. Structure apparent, sequence is logical and nuanced.</li> </ol>		
<b>Originality</b>	<ol style="list-style-type: none"> <li>1. Rehash of others' ideas, little evidence of original ideas.</li> <li>2. Project based on others' ideas but extended with new and personal insights. Sequence is logical</li> <li>3. Project based on Own ideas and personal insights. Sequence is logical</li> <li>4. Exceptional inventiveness. Content is fresh and original and expresses ideas or feelings of student. Sequence is logical. Tells a story.</li> </ol>		
<b>Aesthetic Design principals</b>	<ol style="list-style-type: none"> <li>1. Little attention to aesthetic principles; elements work against content</li> <li>2. Basic use of aesthetic principles; elements reinforce the content</li> <li>3. Good use of aesthetic principles; elements reinforce the content</li> <li>4. Exceptional attention to aesthetic principles; elements enrich the content Execution of art is very clean.</li> </ol>		
<b>Principals of Animation</b>	<ol style="list-style-type: none"> <li>1. Little movement or sense of timing typically lacking. Movement detracts from concept</li> <li>2. Basic sense of timing. Movement enhances message.</li> <li>3. Good sense of timing. Movement enhances message.</li> <li>4. Excellent sense of timing, overlapping action. Animation or movement appropriate to subject and extends meaning beyond still images</li> </ol>		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**

**Judging Sheet 3D Animation LOT – 1 , 2, 3**

**Contestant:**

**3652, 3670, 3689**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	NOTES
<b>Modeling</b>	<ol style="list-style-type: none"> <li>Shows a grasp of the basics but has problems with getting clean geometry. Awkward vertices or face placement.</li> <li>The model is basically proportionate but does not show a sophistication of using advanced modeling tools. Areas not smooth, that should be.</li> <li>The model is proportionate and shows a sophistication of using advanced modeling tools. Areas are smooth that should be.</li> <li>Shows strong control of their medium. Has enough geometry to make a clean model. Not over smoothed. Subject matter is proportionate or exaggerated in a way that makes sense.</li> </ol>		
<b>Shading and Texturing</b>	<ol style="list-style-type: none"> <li>Uses only shaders (flat color), and/or includes texture distortion. Lacks a full understanding of texturing</li> <li>Uses clean shading and texturing. No evidence of advanced texturing</li> <li>Uses clean shading and texturing with evidence of advanced texturing</li> <li>Uses clean shades or textures without distortion. May have bump maps, painting and/or UV texture mapping.</li> </ol>		
<b>Lighting</b>	<ol style="list-style-type: none"> <li>Uses default or improper lighting. Difficult to see detail.</li> <li>Scene is lit but has areas of that light or lack of that make the animation hard to see. May not have shadows</li> <li>Scene is lit, well with appropriate shadows.</li> <li>Uses correct lighting and intensity for the illumination of the scene throughout the animation. Has cast shadows</li> <li></li> </ol>		
<b>Originality</b>	<ol style="list-style-type: none"> <li>Rehash of others' ideas, little evidence of original ideas.</li> <li>Project based on others' ideas but extended with new and personal insights. Sequence is logical</li> <li>Project based on Own ideas and personal insights. Sequence is logical</li> <li>Exceptional inventiveness. Content is fresh and original and expresses ideas or feelings of student. Sequence is logical. Tells a story.</li> </ol>		
<b>Principals of Animation</b>	<ol style="list-style-type: none"> <li>Little movement or sense of timing typically lacking. Movement detracts from concept</li> <li>Basic sense of timing. Movement enhances message.</li> <li>Good sense of timing. Movement enhances message.</li> <li>Excellent sense of timing, overlapping action. Animation or movement appropriate to subject and extends meaning beyond still images</li> </ol>		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**

**Judging Sheet 3D Modeling LOT – 1 , 2, 3**

**Contestant:**

**3653, 3671, 3690**

<b>Scores:</b>	<b>1—Beginning</b>	<b>2—Developing</b>	<b>3—Accomplished</b>	<b>4-Distinguished</b>
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		<b>Score</b>	<b>NOTES</b>
<b>Modeling</b>	<ol style="list-style-type: none"> <li>Shows a grasp of the basics but has problems with getting clean geometry. Awkward vertices or face placement.</li> <li>The model is basically proportionate but does not show a sophistication of using advanced modeling tools. Areas not smooth, that should be.</li> <li>The model is proportionate and shows a sophistication of using advanced modeling tools. Areas are smooth that should be.</li> <li>Shows strong control of their medium. Has enough geometry to make a clean model. Not over smoothed. Subject matter is proportionate or exaggerated in a way that makes sense.</li> </ol>		
<b>Shading and Texturing</b>	<ol style="list-style-type: none"> <li>Uses only shaders (flat color), and/or includes texture distortion. Lacks a full understanding of texturing.</li> <li>Uses clean shading and texturing. No evidence of advanced texturing</li> <li>Uses clean shading and texturing with evidence of advanced texturing</li> <li>Uses clean shades or textures without distortion. May have bump maps, painting and/or UV texture mapping.</li> </ol>		
<b>Lighting</b>	<ol style="list-style-type: none"> <li>Uses default or improper lighting. Difficult to see detail</li> <li>Scene is lit but has areas of that light or lack of that make the animation hard to see. May not have shadows.</li> <li>Scene is lit, well with appropriate shadows.</li> <li>Uses correct lighting and intensity for the illumination of the scene throughout the animation. Has cast shadows</li> </ol>		
<b>Originality</b>	<ol style="list-style-type: none"> <li>Rehash of others' ideas, little evidence of original ideas</li> <li>Project based on others' ideas but extended with new and personal insights. Sequence is logical</li> <li>Project based on Own ideas and personal insights. Sequence is logical</li> <li>Exceptional inventiveness. Content is fresh and original and expresses ideas or feelings of student. Sequence is logical. Tells a story.</li> </ol>		
<b>Features and Characteristics</b>	<ol style="list-style-type: none"> <li>Totally misses the mark in trying to make an object or character life-like. Attempts at exaggeration fall short.</li> <li>Characteristics attempt to form proper proportions with some areas of error in anatomy and/or life like references.</li> <li>Characteristics form proper proportions. Could use some more time examining anatomy and/or life references.</li> <li>Characteristics that are meant to imitate life, are done either proportionately and with realism, and/or are exaggerated in such a way that life-like features are enhanced.</li> </ol>		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**

## **VIDEO**

**3654 Lot 1**

**3672 Lot 2**

**3691 Lot 3**

### **Lot 1-3 – Video- Commercial –**

This is any advertising, Maximum 30 seconds. Judged on impact and clear communication.

### **Lot 1-3 – Video- Public Service Announcement –**

This is any PSA (Public Service Announcement), Maximum 60 seconds. Judged on clarity of message and clear communication.

### **Lot 1-3 – Video- News Package –**

This is any News Story, Maximum 3 Minutes. Judged on completeness and clarity of message and clear communication.

### **Lot 1-3 – Video- Music Video –**

This is any Music Video, Maximum 7 minutes. Judged on interpretive creativity and quality of music to video mix.

### **Lot 1-3 – Video- Short Film –**

This is any Short Film, Maximum 8 Minutes. Judged on completeness and clarity of message and clear communication.

### **Lot 1-3 – Video- Documentary –**

This is any Documentary, Maximum 10 Minutes. Judged on completeness and clarity of message and clear communication.

### **Requirements – All Graphics Categories:**

Participants may enter a project in one of six categories: Commercial, PSA, News Package, Music Video, Short Film or Documentary.

Presentation must provide representative printed material; final electronic output file and a work copy in native program. These will be judged on appropriate subject, design, communication to the audience.

Each project will be scored in conference judging during fair by judges using the Judging Sheets shown.

The project may be one that the student has made for a school project or for a client.

Project shall be submitted on a CD or DVD in native program.

Projects will be disqualified for: Not satisfying the above criteria,

Copyright violation, inappropriate content, (language, hate, alcohol, drugs, sex, etc.) will not be allowed.

Also avoid gaming as a Web site topic, since our Web browsers block most gaming related sites

**Judging Sheet Video – LOT 1, 2, 3**

**Contestant:**

**3654, 3672, 3691**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	NOTES
<b>Camera Work</b>	<ol style="list-style-type: none"> <li>1. Erratic camera movements in video. Proper camera techniques not used.</li> <li>2. Some erratic camera movements in video. Camera techniques need improvement</li> <li>3. Most all camera movements are Appropriate. Proper camera techniques not used.</li> <li>4. Camera movements are clear and follow proper camera techniques.</li> </ol>		
<b>Audio</b>	<ol style="list-style-type: none"> <li>1. Audio is distorted and/or hard to hear. Audio dialog or sound effects do not sync with video</li> <li>2. Some audio is insufficient and sometimes hard to hear. Occasionally Audio dialog or sound effects do not sync with video.</li> <li>3. Audio has minor errors; Audio dialog or sound effects typically sync with video.</li> <li>4. Audio is clear and easy to listen to. It is at the same level throughout the entire broadcast.</li> </ol>		
<b>Editing</b>	<ol style="list-style-type: none"> <li>1. Video has blank or missing frames and continuity is compromised.</li> <li>2. Video editing is adequate and needs improvement.</li> <li>3. Video is good but sometimes there are disruptions in the flow.</li> <li>4. Video is clear and well thought out.</li> </ol>		
<b>Lighting</b>	<ol style="list-style-type: none"> <li>1. Lighting techniques are inadequate; Scenes are dark and hard to see.</li> <li>2. Lighting techniques and scenes are adequate; Needs improvement.</li> <li>3. Lighting techniques are proficient, and most scenes are easy to see.</li> <li>4. Lighting techniques are exceptional; scenes are clear and easy to read.</li> </ol>		

<b>Graphics</b>	<ol style="list-style-type: none"> <li>1. Some use of graphics. Some words are misspelled.</li> <li>2. Graphics are used sometimes. They help reinforce the information.</li> <li>3. Graphics are used when needed but they take away from the finished product.</li> <li>4. Graphics are used to tell the story. They are well placed and thought out. They are not distracting to the viewer.</li> </ol>		
<b>Script</b>	<ol style="list-style-type: none"> <li>1. There is no apparent script. Actors are expected to invent what they say and do as they go along.</li> <li>2. Script has a few major flaws. It is not always clear what the actors are to say and do. Script shows an attempt at planning but seems incomplete.</li> <li>3. Script is mostly complete. It is clear what each actor will say and do. Script is shows planning.</li> <li>4. Script is complete, and it is clear what each actor will say and do. Entries and exits are scripted as are important movements. Script is quite professional.</li> </ol>		
<b>Effectiveness</b>	<ol style="list-style-type: none"> <li>1. Video does not follow a story and has no clear direction.</li> <li>2. Video story is adequate but needs improvement.</li> <li>3. Video story is good.</li> <li>4. Video follows a clear story.</li> </ol>		
<b>Communication and Clarity</b>	<ol style="list-style-type: none"> <li>1. Little understanding of communication purpose.</li> <li>2. Basic understanding of communication purpose.</li> <li>3. Clear understanding of communication purpose.</li> <li>4. Exceptional understanding of communication purpose</li> </ol>		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**

## **CONSTRUCTION**

**3655 Lot 1 – Computer - Construction –**  
**3656 Lot 1 – Robotics - Construction –**  
**3657 Lot 1 – Self Determined - Construction –**

**3673 Lot 2 – Computer - Construction –**  
**3674 Lot 2 – Robotics - Construction –**  
**3675 Lot 2 – Self Determined - Construction –**

**3692 Lot 2 – Computer - Construction –**  
**3693 Lot 2 – Robotics - Construction –**  
**3694 Lot 2 – Self Determined - Construction –**

## **SELF DETERMINED**

**3676 Lot 2 – Group – Self Determined –**  
**3695 Lot 2 – Group – Self Determined –**

**Judging Sheet Construction-Robotics-SD and Group SD LOT – 1, 2, 3**

**Contestant:**

**3655-3657, 3673-3676, 3692-3695**

Scores:	1—Beginning	2—Developing	3—Accomplished	4-Distinguished
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		Score	NOTES
<b>PLANNING</b>	4. What prompted the idea of the project 5. Goals clearly defined 6. How well did they document the goals		
<b>Execution</b>	3. How well did they follow the plan. 4. How well were issues addressed		
<b>Effectiveness</b>	4. Was the goal accomplished 5. How did the plan change and what adaptations were needed 6. What did they learn about the process		
<b>Communication and Presentation</b>	3. Does the documentation clearly communicate the process? 4. How well was the process communicated – one on one		

**For the benefit of the contestant, please justify reason for score given by indicating specific concerns**