



Northwood Elementary Technology Fair Application

INDIVIDUAL

Your child would like to participate in the Northwood Technology Fair to be held on **Thursday, December 15, 2016** in the Media Center/Computer Lab. The Technology Fair is open to students in grades 3 – 5. This is a great opportunity for your student to share his/her knowledge with peers, teachers, and others.

Student Responsibilities:

1. A student may enter projects as an individual **OR** as a member of a team (maximum of 2 members per team, same grade level) in the following competition categories:
 - a) 3D Modeling
 - b) Animation
 - c) Audio Production
 - d) Device Modification
 - e) Digital Photo Production
 - f) Game Design
 - g) Graphic Design
 - h) Internet Applications
 - i) Mobile Apps
 - j) Multimedia Applications
 - k) Non-Multimedia Applications
 - l) Project Programming
 - m) Robotics
 - n) Video Production
2. All registration forms must be turned in by **FRIDAY, NOVEMBER 4**. **Students must return both the Parent Consent form with parent signature as well as the registration form to be eligible to enter the Fair.** These forms can be obtained from Northwood ES website (<http://www.northwoodelementary.com>) or the Media Specialist (Mrs. Bauer). Please turn in all forms to the **homeroom teacher**.
3. **There will be a “Tech Check” the week of November 28th** to check on progress and help with questions. Students will be assigned a day and time during that week based on their entry category. More information regarding specific times will be printed in the Northwood BEST and sent home with the students participating in the fair. Students should plan on being able to show at least half of their projects at that time.
4. Students will present their projects for judging on **Thursday, December 15th** between 8am and 12pm. Other grade 2-5 students will be able to view the projects after the judging is completed; **parents may view projects the morning of December 16th** in the Media Center and Computer Lab. More information regarding specific times will be printed in the Northwood BEST and sent home with the students participating in the fair.

CATEGORY DESCRIPTIONS

a) 3-D MODELING

This category is defined as any original artwork digitally created and modeled in three dimensions using specialized software. Software may include, but not be limited to, Maya, AutoCad, Sketch Up, GollyGee Blocks, and Light Wave. You may have up to 2 people on a team but teams and individuals will compete against each other within each grade grouping. Regardless of the length of the project, the judge time is 15minutes. Judges may only view a portion of the actual project.

b) ANIMATION

This category is defined as an original design with the primary purpose for allowing for the motion of objects. Software may include, but not be limited to Adobe Flash, KidPix, etc. You may have up to 2 people on a team but teams and individuals will compete against each other within each grade grouping. Regardless of the length of the project, the judge time is **15 minutes**. Judges may only view a portion of the actual project.

c) AUDIO PRODUCTION

This category is defined as any original audio production that has been edited/produced with digital software. Projects may include speaking, singing, music, sounds effects, and other audio components. Software may include, but are not be limited to - Audacity, Garage Band, Wavosaur, etc... The project must be displayed on a computer in the program in which it was created. The student should be prepared to demonstrate to judges how the software was used to create the finished project. You may have up to 2 people on a team. Teams and individuals will compete against each other within each grade grouping.

d) DEVICE MODIFICATION

This category is open to grades 3 - 12. This category is for devices engineered and/or modified by students to serve a specific purpose or meet a specific goal. Device and parts do not have to be new. However, the device must be fully functional. Some examples include, but are not limited to: Arduino, Raspberry Pi, and Makey Makey projects. Judges will use a category rubric as a guideline for exemplary characteristics of projects in this category. Students should use the rubric as a guide.

e) DIGITAL PHOTO PRODUCTION

This category is defined as any computer created original project using original student photographs. **The project must be displayed on a computer in the program in which it was created.** The student should be prepared to demonstrate to judges how the software was used to create the finished project. A hard copy of the finished project may be displayed but is not required. You may have up to 2 people on a team but teams and individuals will compete against each other within each grade grouping. There will be a 15 minute judging time limit on all entries.

f) GAME DESIGN

Game Design should include original content, design, and rules of an interactive game. Students may use the software program of their choice in order to demonstrate creativity, originality, organization, and interactivity. Students should be able to explain to judges what inspired their game idea and how they programmed their game to achieve project goals. There will be a 15 minute judging time limit on all entries. *If the student has used software other than what is on the Software List the student is required to bring his/her own computer to display the project.*

g) GRAPHIC DESIGN

This category is defined as any student created, computer-generated, non-animated graphic design project. Digital Photography and 3D Modeling are NOT part of this category. The student(s) must be able to display the content from the source project files using the program it was created in. Software may include, but not be limited to, Paint, KidPix, Photoshop, Corel Draw, Illustrator, or Free Hand. You may have up to 2 people on a team but teams and individuals will compete against each other within each grade grouping. There will be a 15 minute judging time limit on all entries.

h) INTERNET APPLICATIONS

This category is defined as web-based projects such as web pages, web sites, chat rooms, bulletin boards, and blogs. Projects should be uploaded to the World Wide Web; however, projects on removable storage devices will be accepted. Internet access will be on county-provided computers in a computer lab using Internet Explorer as the default browser. Should internet access fail due to technical problems or hosting site failure, each student should bring a backup copy of the project on a removable storage device. This backup should include the links captured at least one level deep.

i) MOBILE APPS

An entry in this category is an app that is specifically developed for a mobile device (phone, tablet, slate, etc...). This app can be developed for any operating system (Android, iOS, etc.) as long as the entrant has a mobile device that can run the app on the day of the fair. (This category does not include mobile-friendly web pages - please see the Internet Applications category). Pre-planning documentation materials such as a storyboard and a flowchart are required (examples).

j) MULTIMEDIA APPLICATIONS

This category is defined as any presentation which combines text, images and sound. Software for projects in this category includes but is not limited to: Power Point, KidPix, AppleWorks, Astound, Storybook Weaver and HyperStudio. Projects should be saved in "player" format so that the application software is not required to review the presentation. Presentations will be viewed and judged on school computers in a computer lab in the host school. The project should be stored on a removable storage device such as an USB flash drive or CD. Videos should not be entered in this category. If the student has used software other than what is on the Software List (see Technology Competition Guidelines), the student is required to bring his/her own computer to display the project unless the project is saved in "player" format.

k) NON-MULTIMEDIA APPLICATIONS

This category is defined as any project that has been created using software applications such as word processing, spreadsheet, database or other non-multimedia software. Software may include, but is not limited to Word, Works, Publisher, Excel, or Access. The project must be displayed on the computer in the program in which it was created. A hard copy of the finished project must also be displayed. Judges will consider not only the finished product but also the student's software knowledge and understanding. If the student has used software other than what is on the Software List (see Technology Competition Guidelines), the student is required to bring his/her own computer to display the project.

l) PROJECT PROGRAMMING

Projects in this category are self-executing programs created using recognizable programming languages such as BASIC, C++, Pascal, LOGO, etc. All parts of the program must be the author's own design. Programs must be identifiable in one of the three following categories: Computer-aided instruction or educational/learning games. Business or commercial applications. Personal applications that, with minor alterations, could be marketed for larger commercial audiences.

m) ROBOTICS

Projects may be constructed from kits or published drawings, modified from other devices to create new applications, or constructed from the student's own concepts and designs. All entries must be a working and functional piece of electro-mechanical hardware in which movement and intent is controlled through student created programming. Examples of commercially available kits are robotic "arms" or robot movers, Lego and K'Nex style building kits, Capsella, VEX, and Technics style robotics kits. Devices controlled through direct, real time remote control by the student are not appropriate (ie: remote controlled cars). Once started, the robotics project should operate as a standalone independent machine without human interaction.

n) VIDEO PRODUCTION

This category is defined as any original video project that has been edited on a computer with digital video editing software and exported into a digital video format. The project must be displayed for viewing on a computer. A project may have a single member or a two person team, but teams and individuals will compete against each other within grade groupings. Regardless of the length or complexity of the project, the judge time slots are 15 minutes in length. Judges may view only a portion of the actual project

Northwood Elementary Technology Fair Registration

Individual Entry

***** PLEASE RETURN ONLY THIS PAGE TO THE HOMEROOM TEACHER (BE SURE TO FILL OUT FRONT AND BACK)**

Student Name: _____

Homeroom Teacher: _____

Address: _____

City, State, Zip: _____

Please be sure to enter sponsor information below. This may be a parent or family friend who will be available to students for assistance and/or guidance.

Sponsor Name: _____

Sponsor Email Address: _____

Grade Level Group: 3rd -4th 5th -6th

Category:

- 3D Modeling**
- Animation**
- Audio Production**
- Device Modification**
- Digital Photo Production**
- Game Design**
- Graphic Design**
- Internet Applications**
- Mobile Apps**
- Multimedia Applications**
- Non-Multimedia Applications**
- Project Programming**
- Robotics (working functional pieces of electronics, which must be tied to a computer)**
- Video Production**

Parent Consent Form

Northwood Technology Fair

I give my child, _____,
permission to register for the Northwood Elementary Technology Fair.

Please check the appropriate boxes.

- I have reviewed the terms of the Technology Fair with my child and he/she is fully aware of the requirements.

- I give permission for my child to be photographed, videotaped and/or interviewed for stories/articles promoting the Northwood ES Technology Fair for these stories/articles to appear in the local newspaper.

Parent's Name _____

Parent's Signature _____

Parent Email Address _____

Date _____

Telephone _____