**WGVU PUBLIC MEDIA KIDS INVENTION CONTEST**

**FACT SHEET**

**Who:** Kids currently in grades 4-8 (public, private or home-schooled)

**What:** WGVU Kids Invention is an opportunity for kids to demonstrate their ability to “invent” a product or model that will solve a problem or show a new or easier way to do something.

**When:** Contest will run from September 12, 2016 - February 28, 2017.

**Why:** The WGVU Kids Invention Contest will foster designing, engineering and problem-solving skills that kids will be able to apply in their daily life. Plus, it will hopefully be a fun, creative way for kids to build and design their “own” product or model.

**How:** Kids will need to submit their name and grade along with either a video, or picture(s) of their actual invention model nomination. All entries must include the Entry Form. Kids will also submit a description explaining what the name of the invention is, what problem it solves or new/easier way to do something and how the invention works.

**Prizes:** Winning inventors will have their invention featured on WGVU-TV during kids programming and also be invited to personally appear on a WGVU-TV program promoting their invention.
Overview: The WGVU Kids Invention Contest is designed to promote problem-solving and creative thinking skills. Kids have a natural curiosity and this allows them the opportunity to apply critical thinking skills to “invent” a creative way to solve a problem. This program challenges students in grades 4-8 public, private and home schooled to identify a problem, brainstorm solutions and build/design and test their working prototype invention.

Goal: The goal of this program is to allow kids the opportunity to have fun designing, building, inventing a product, model or prototype of an invention they feel will solve a problem or be a different way to do something. Plus, the opportunity to realize the potential their invention could have in the world today or the future.

Eligibility:

- The WGVU Kids Invention Contest entrant must currently be in grades 4-8 (public, private or home-schooled).
- Submissions must be original to the student. Adult supervision is allowed in the building/making of the model or prototype but, the idea and design must belong to only the student. Please follow this requirement because this is where the goal and overview of the program will succeed.
**Requirement:**

- All inventors must create a model or prototype of their invention.
- The invention must solve a problem or be a different or new way to do something.

**Guidelines:**

- The prototype does not have to work, but must demonstrate how the invention would work if it were operational.
- **Inventors may not use matches, lighters, candles or any other open flame heat source that is flammable.**
- **Inventions may not contain any biohazard content that could become dangerous.**

**Submitting an invention electronically:**

- Inventor's entry can be submitted electronically (video or picture(s)) at wgvu.org/kidinvention.
- Participant is asked to upload a 1-3 minute video. Video must be no more than three minutes in length. Inventor's name, a description explaining what the name of the invention is, what problem it solves or is a new/easier way to do something and how the invention works must all be stated as part of the three minute video.
- Acknowledgement of the rules and an electronic signature will be required by the entrant's parent or legal guardian if the entry is submitted electronically by video or picture(s).
Submitting an invention by mail:

- Mailed in entries must include the official WGVU Kids Invention Contest Entry Form, with the required signature of a parent/legal guardian consenting to allow their child/ward to enter the Contest, and confirming that the invention is original and granting certain rights to entry materials.
- Submission must include a description explaining what the name of the invention is, what problem it solves or is a new/easier way to do something and how the invention works.
- The entry form must be complete and legible to be eligible.
- Picture(s) of the actual invention/prototype must accompany fully completed entry form.
- Address is posted on “Inventor’s Entry Form”.

Many of life’s failures are people who did not realize how close they were to success when they gave up.

~ Thomas Edison
WGVU PUBLIC MEDIA KIDS INVENTION CONTEST

Required Inventor’s Entry Form

Name________________________________________ Grade________

Address________________________________________________________

City/State/Zip____________________________________________________

Parent/Guardian Signature________________________________________

Printed Name____________________________________________________

Parent Email Address____________________________________________

If different from the above address:

Mailing address___________________________________________________

City/State/Zip____________________________________________________

Inventor Information

Name of Invention_________________________________________________

Deadline for receipt (postmarked) of entries: February 28, 2017

Address for mailed in entries:

WGVU Public Media
WGVU Kids Invention Contest
301 Fulton St. W
Grand Rapids, MI 49504-6492
Registration Information Continued:

Name of Invention

Where did you get the idea for your invention?

What problem does your invention solve/or is it an easier to do something?

Describe how your invention works
NO PURCHASE NECESSARY TO ENTER OR WIN. The WGVU Kids Invention Contest is coordinated by WGVU Public Media. The Contest begins on September 12, 2016 and ends on February 28, 2017. Mailed in entries must be postmarked on or before February 28, 2017 and received by WGVU Public Media by March 3, 2017 to be eligible. WGVU Public Media is not responsible for late entries due to mishandled mail.

Eligibility & Entry Guidelines

- Entrants must currently be in grades 4-8 (public, private, or home-schooled).
- Only one entry per person will be accepted in this contest, all subsequent entries will be disqualified.
- An “Inventor’s Entry Form” must accompany the entry submission, including parent signature.
- Entries can be submitted electronically or by mail.

Judging

Entries will be judged on the following criteria:

- Does the invention appear to be original or creative?
- Does the invention appear to be a unique solution to a problem?
- Does the invention appear to be the original, creative work/idea of the participant?
- Does the content of the written description clearly express the purpose of the invention, how the invention works and what problem does the invention solve?
- Does the context of the written description appear to be original to the participant?
Prizes

- Two winners will be chosen each month (October-February) and have their first name, name of invention, description of how their invention works and what problem it solves aired on WGVU-TV during kids programming.
- All winning inventors will be invited to bring their invention to WGVU (mid-late March) and appear on a WGVU-TV show describing their invention, how it works and what problem it solves.
- Winning inventors will be invited to attend the WGVU Education Celebration in May, where they will be recognized along with Cool Teacher and Kids Writer’s Contest winners.
- Prizes are not redeemable for cash, non-transferable, and non-substitutable, except at the sole discretion of WGVU Public Media.

Return of Entries

The Contest administrators at WGVU Public Media will make every effort, but not required, to return mailed entries only if accompanied by a stamped, self-addressed envelope of an appropriate size. WGVU Public Media is not responsible for the late, lost, stolen, misdirected, damaged, mutilated, incomplete, returned, or illegible entries, or the postage-due mail.

Parent’s Role

Parents are encouraged to help their son/daughter with the gathering of materials to build/create their invention, encourage critical thinking skills of how to solve a problem or find a new/easier way to do something, foster ideas for designing, but most importantly all ideas must be original to their son/daughter.
Rights Associated with Content

Submission of the WGVU Kids Invention Contest Entry Form constitutes permission from the participant's parent/legal guardian for WGVU Public Media to use the participants’ name, likeness, biographical information, information and materials contained in the Entry Form, photographs, and any statements or remarks made about the Contest in advertising and promotion without further compensation or permission, except where prohibited by law. By entering, entrants' parent/legal guardian agree to abide by the above stated rules, and warrant that their child's/ward's entry is their original work and does not infringe upon or violate rights of any third party, and grant to WGVU Public Media the right to promote, and otherwise use their entry materials without permission, notice or compensation. No royalties will be paid at this or any time. By submitting an entry and Entry Form, each participant’s parent/legal guardian, on behalf of the participant, agrees to assign all right, title, and interest in and to the entry and Entry Form to WGVU Public Media and warrants that the participant’s parent/legal guardian has the authority to assign such right, title and interest. In the event that any applicable law requires certain formalities to be fulfilled to effectuate such grant of rights, each participant (and parent or guardian) agrees to cooperate with WGVU Public Media. WGVU Public Media does not profit in any way from any invention submitted by participants. Participants are cautioned that the contest is open to the public, and since portions will be aired on WGVU-TV, participants may find it necessary to take steps to secure certain intellectual property rights in their inventions.
Inventor's Resource Guide
Introduction to inventing:

1.) Finding an idea or problem- It can be said that need is the driving force of an invention. Your idea for an invention will come from something that you or someone you know needs.

2.) Identify possible solutions- Next, find a way to correct some of the problems. Your ideas for solving the problems can be a big step toward inventing a new or improved product. Keep in mind that your invention does not have to be a product. Instead, it can be a new process for doing something.

3.) Research and planning- Before an invention can be successful, you have to make a plan. Your plan should include all the steps you can think of, from beginning to end.

4.) Designing- At some point you will need to decide what solution you want to design your invention around. You will need to decide what materials you will use for the invention, what it will look like and how it will work.

Logic will get you from A to B. Imagination will take you everywhere.

~ Albert Einstein
5.) **Creating the invention** - Now the fun and work begins! Follow your plan step by step. You will need to build a model/prototype of your invention or illustrations detailing your invention. Please follow the "Guidelines" section mentioned above.

6.) **Testing your invention** - You will need to test your invention and make any improvements you feel will help the invention work best. If you have difficulty with a certain part of your invention, ask for help. Try different things until you overcome the difficulty...**most of all, don’t give up!**

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*Success is walking from failure to failure with no loss of enthusiasm.*  
~ Winston Churchill
1.) Find an idea or problem:

There are several ways to find ideas for inventions. One way is to ask people if there is anything they need. For most people, problems can be found everywhere.

Another method is called brainstorming. You can brainstorm alone or with others (parent(s), friend, teacher, sibling, family relative, etc.). An example could be trying to find a problem in the following industries or fields:

- Arts
- Communication
- Education
- Environmental
- Food
- Household
- Manufacturing
- Safety
- Sports
- Transportation
Problem Template

<table>
<thead>
<tr>
<th>Problem(s):</th>
<th></th>
</tr>
</thead>
</table>

| The problem(s) I chose to solve: |  |
2.) **Identifying possible solutions:**

- Keep an open mind and try to come up with a solution to one of the problems. Remember, because something doesn’t work the first time or hasn’t been tried before, doesn’t mean there isn’t a solution to the problem or that it won’t work.
- There are usually many solutions to a problem. Try to find as many as possible so you can narrow down to what you feel is the best one.

Solution Template

<table>
<thead>
<tr>
<th>Solution:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Do you have everything you need to make your idea(s) become a solution?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>What materials will you need or use?</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Will you need any special tools?</th>
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</thead>
</table>
3.) Research and Planning:

Don’t be surprised if you have to change your plans along the way. Sometimes a plan will not work as well as you first thought it would. So keep an open mind for change. You may discover a better way for completing a certain step.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What can I read about that will help me with my invention?</td>
<td></td>
</tr>
<tr>
<td>Who can I talk to about solving the problem and planning properly?</td>
<td></td>
</tr>
<tr>
<td>What steps should I follow?</td>
<td></td>
</tr>
<tr>
<td>How can I test my invention?</td>
<td></td>
</tr>
</tbody>
</table>
4.) Designing:

**Very important that you check to verify that your invention is original and that it doesn't already exist**

Reminders:

- Inventors may not use matches, lighters, candles or any other open flame heat source that is flammable.
- Inventions may not contain any biohazard content that could become dangerous.

5.) Creating the invention:

You can create your invention using household items, items you can borrow or purchase at a minimal cost. It is not necessary to spend money to create your invention model to demonstrate how it works.

Parent(s) are allowed to help with the gathering of materials to build/create your invention, but the idea of your invention must be original to you.

Most often your invention/model will not be perfect at first, that’s okay and to be expected, because it is this imperfection that gives you the opportunity to make changes and improve your invention/model.

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You may have to fight a battle more than once to win it.

~ Margaret Thatcher
6.) **Testing your invention:**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What I thought would happen with my invention?</td>
<td></td>
</tr>
<tr>
<td>How well did it work? (If it didn’t work right, don’t give up, keep trying different solutions)</td>
<td></td>
</tr>
<tr>
<td>What are some possible improvements you could make?</td>
<td></td>
</tr>
<tr>
<td>What I thought would happen with my improvements, did they work?</td>
<td></td>
</tr>
<tr>
<td>What are some possible future improvements?</td>
<td></td>
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</tbody>
</table>
Invention questions to get you started!

Having a tough time trying to think of an idea for an invention? Feel free to ask a parent, family member, teacher, relative, friend, etc. these questions to help you get started on an idea for your invention:

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does not work like you would like it to work?</td>
</tr>
<tr>
<td>What problems would you like to have solved by something at home?</td>
</tr>
<tr>
<td>What problems would you like to have solved by something at school?</td>
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<tr>
<td>What problems would you like to have solved by something at a store, car,</td>
</tr>
<tr>
<td>building, etc.?</td>
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<tr>
<td>If you could invent something to make life easier, what would it be?</td>
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</tbody>
</table>
Invention Contest resource websites:

http://wgvu.pbslearningmedia.org/
http://www.uspto.gov/kids/
http://pbskids.org/designsquad/


www.rubegoldberg.com
http://asktheinventors.com/
http://invent.org/
http://inventivekids.com/
http://www.42explore2.com/invent.htm