



SAM Labs 2020

STEAM & Coding

Creators Competition

Season 1



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INTRODUCTION

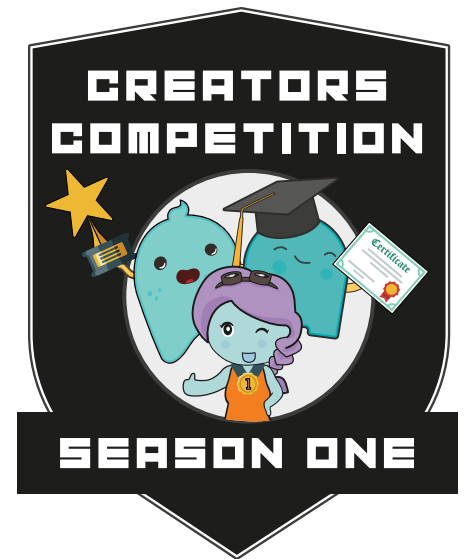
Welcome to Season One of SAM Labs Global STEAM and Coding Competition!

Our competition is designed to bring students, teachers and parents from all over the world to showcase the power of STEAM and coding.

The best part about this tournament is that SAM Labs is committed to an equitable experience for all participants — students can choose to participate in our primary format using SAM Labs STEAM or Coding hardware kits or participate in our secondary format, called our Prototype Challenge, which only requires the use of offline materials.

We can't wait for you to get started and enjoy your experience.

Please read the following document carefully for instructions on how to compete in this season's tournament. Failure to follow instructions will result in disqualification and your entry will not be considered.



Important Information

Participants

Participants in this tournament can be individuals or teams composed of groups of individuals within the ages defined below, classes or families in up to groups of 3.

Please note that even if students participate in teams, if the child is under 16, they must complete a parental consent form (see below).

Age Restrictions

Junior Category, Age 6 to 11:

The participant must be born between January 1, 2009 and December 31, 2014

Senior Category, Age 12 to 16:

The participant must be born between January 1, 2004 and December 31, 2008

Parental Permission

Participation in this tournament requires parental permission for children under the age of 16. In order to share any information, including names, photos or project information with SAM Labs, children and their parents will need to complete the form attached at the end of this document, sign and return to SAM Labs prior to the start of the tournament. Failure to complete this form may result in disqualification.

Key Dates and Deadlines

Registration Open: Friday, April 10th - Friday May, 1st 2020

Competition Begins: Friday, April 24th 2020

Competition Ends: Sunday, May 17th 2020

Awards and Prizes Announced: Sunday, May 24th, 2020

Share Your Journey on Social Media

If you haven't already, follow SAM Labs official social media channels for routine updates on our tournament and other great resources.

Twitter: <https://twitter.com/SAMLabs>

Facebook: <https://www.facebook.com/samlabs/>

We also invite competition participants, parents and teachers to join in with other participants from all over the world to show their amazing progress and cheer on others along the way.

If you post your progress on social media, make sure you tag @SAMLabs and use the hashtag #creatorscompetition so we can share your work!

Tournament Contact Information

If you have any questions or concerns during the tournament, please contact support@samlabs.com. We're here to help.





THE TOURNAMENT

Theme

COVID-19 is an unprecedented pandemic that has changed the entire landscape of teaching and learning for students. Students have had to resort to online learning tools, check-ins with teachers and the support of parents to complete school work.

In contrast, SAM Labs is an education technology solution that combines Bluetooth-enabled blocks, a free app called SAM Space and/or Google Workbench and dozens of free STEAM and Coding lesson content to teach computational thinking skills. These blocks can be used to create just about anything, simply by making connections or using drag-and-drop coding in the applications.

Tip: What is STEAM?

STEAM stands for Science, Technology, Engineering, The Arts and Mathematics. It's by including all of these subjects together when teaching and learning that students can learn and apply real-world skills.

The theme of this season's tournament is "Show how you can pass the time using SAM Labs during COVID-19."

SAM Labs' STEAM and Coding kits provide the foundation for creating just about anything students can dream up while stuck at home. Example project ideas could include:

- Health:
 - Due to quarantine, we eat more and move less, therefore, create a system that controls your eating diet and increases exercise.

- Social:
 - Due to Covid-19, we are advised to social distancing, create a system which can alert us when people are close to each other.
 - 100 years ago, we did not have the technology to communicate with each other, prototype a system that sends distress signals in Morse code using both sound and light.

- Economics:
 - Reducing, reusing, and recycling can help you, your community, and the environment. Create a prototype of recycling materials in your community

- Just for fun:
 - Create a Board game to engage with your family members.
 - Create a Transformer character.
 - Create a RoboCar.
 - Create a sensory room for your younger siblings.
 - Create a SMART House/School.
 - Create construction vehicles (cranes-bulldozer)

Format

There are two ways that students can enter the competition: one that requires a SAM Labs kit and one that does not.

Primary Format: STEAM and Coding Using SAM Labs Kits

General Information

In the Primary Format, students can use the SAM Labs Alpha Kit, STEAM Team Kit, STEAM Maker Kit or Learn to Code Kit for their entries. The number of SAM Blocks used is unlimited.

There are no restrictions on the structural building materials used. Participants are allowed to use all available materials including paper, metal, 3D printed models, as well as building blocks or products that integrate from any brands readily available in the marketplace that integrate with SAM Labs (i.e. LEGO™ or Sphero™).

Submission Requirements

Once students have created their project, they are required to submit the following:

1. Up to five pictures of their project (can include iterations and final photos)
2. A title of their project
3. A written summary of their project and how it works (600 words max)
4. Other teammates names, if applicable
5. A logo of their project (optional)
6. A video clip of their project in action/being presented (optional)

Submission must be accompanied by a written description that describes in detail how the design concept works and its relevance to the main topic of the theme. Final SAM Space or Google Workbench code submission is strongly preferred by screenshot. Submission must be in PDF, JPG or PNG form and file size limit to below 1GB.

Primary Format Resources:

- [SAM Space App](#)
- [Google Workbench](#)
- [SAM Labs Example Content Lessons](#)
- [SAM Labs List of Integrations](#)
- [SAM Labs Teacher Professional Development](#)
- [SAM Labs Support](#)

Secondary Format: Prototype Challenge

General Information

The secondary format available for students is the Prototype Challenge. This format does not require the use of any SAM Labs kits, blocks or applications. The only required materials for this challenge include basic materials such as paper, pencils, markers, crayons and other common classroom/office supplies.

For this challenge, students will sketch out a prototype using the supplied block directory of SAM Labs blocks, behaviors, inputs and outputs and exemplify how a project would work in detail if it were to be constructed using hardware.

Tip: What is a prototype?

A prototype is the first draft of a design used to test out an idea before the final product begins to be built using hardware or software.

Submission Requirements

1. Up to five pictures of their project (can include iterations and final photos)
2. A title of their project
3. A written summary of their project and how it works (600 words max)
4. Other teammates names, if applicable
5. A logo of their project (optional)
6. A video clip of their project being presented (optional)

Submission must be accompanied by a written description that describes in detail how the design concept works, which blocks were used for the prototype, and its relevance to the main topic of the theme. Submission must be in PDF, JPG or PNG form and file size limit to below 1GB.

Secondary Format Resources:

- [SAM Labs Prototype Block Directory](#)
- [SAM Labs Behaviors, Inputs and Outputs Directory](#)
- [SAM Labs Example Content Lessons](#)
- [SAM Labs Prototype Webinars](#)
- [SAM Labs Support](#)

Optional Challenges

There are a number of other ways to win in the competition while competing in your format.

These include:

- Coming up with a business idea while making your project, connecting your project to the idea and including it in your written summary
- Designing a logo that goes along with your project
- Working well as a team on your project
- Showcasing communication on your team on your project
- Showcasing critical thinking on your project
- Showcasing that your project went through multiple iterations during your design process
- Being social with SAM Labs during the competition

For more information on the awards tied to these challenges, see [Awards](#).



Rules

Any significant deviation from the official theme will result in a disqualification.

Children under the age of 13 must have completed the parental permission form and have a parent sign the document prior to any sharing of social media with SAM Labs or submission of project materials.

In addition, the following behaviors are prohibited:

- Damage to any public or private property
- Use of hazardous materials or items
- Inappropriate behavior or language towards competing participants, teams, spectators, judges and general staff
- Any other behavior that the Panel of Judges and/or organizers deem inappropriate, insensitive, rude, offensive or contravene the spirit of this tournament

Judging

Organizers will put together a panel of judges comprising experts from different fields in education from all over the world.

Judging will take place in two waves: first, through a first internal judging panel within SAM Labs. Projects will go through an anonymous judging process based on the judging criteria communicated prior to the start of the tournament below. Next, finalists will be sent to our external judging panel, where judges will vote on the winners.

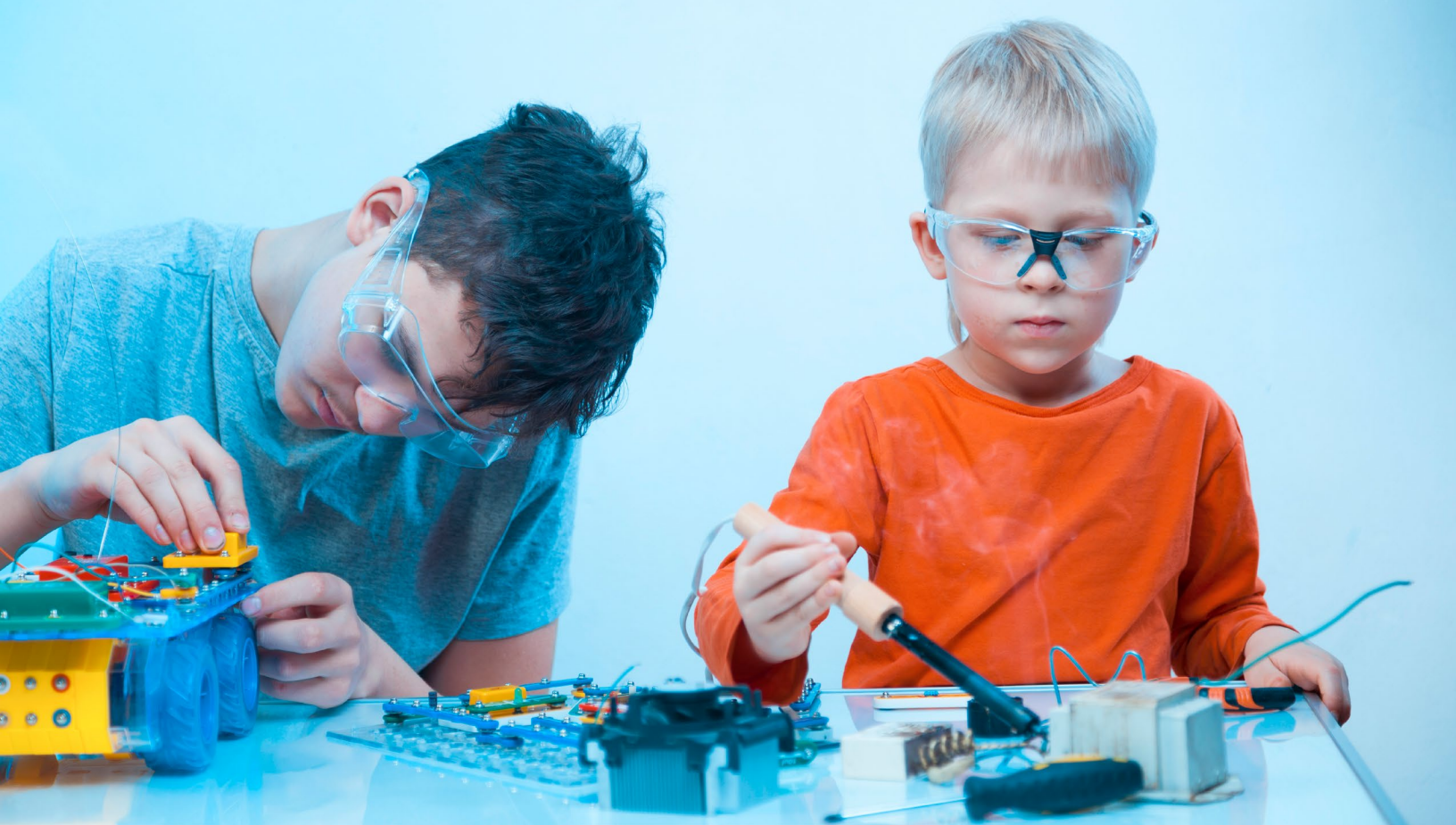
Scoring

Below is the scoring rubric for the two formats of the competition. Each age division will be scored separately.

Primary Format: STEAM and Coding Using SAM Labs Kits

Criteria	Points	Remarks
Relevance to Theme	15	Does the project tie back to the original theme of the competition?
Originality	15	How original is the project idea?
Construction Technique	15	How elaborate was the construction technique?
Diversity of Materials	15	What materials were used when constructing the project?
Degree of Automation	15	Does the code work and how complex is the coding for the division?
Demonstrated Understanding	15	Does the written summary show a demonstrated understanding of why the project was created and how the project operates?
All Materials Submitted	10	Were all materials submitted in the submission?

Total Points: 100



Secondary Format: Prototype Challenge

Criteria	Points	Remarks
Relevance to Theme	15	Does the project tie back to the original theme of the competition?
Originality	15	How original is the project idea?
SAM Blocks Used Effectively	15	Were SAM Blocks used effectively and correctly in the project?
Behaviors, Inputs and Outputs Used Correctly	15	Were Behaviors, Inputs and Outputs used effectively and correctly in the project?
Detail of Prototype	15	How detailed is the Prototype?
Demonstrated Understanding	15	Does the written summary show a demonstrated understanding of why the project was created and how the project operates?
All Materials Submitted	10	Were all materials submitted in the submission?

Total Points: 100

Award and Prizes

There are numerous awards to be given out this season! Each winner (participant or team) will be the recipient of an Amazon gift card*. In addition, at the end of the competition, each awarded participant or team will receive a selected SAM Labs product on behalf of SAM Labs and our gracious sponsors.

*Amazon Gift Cards in USD currency

Gold Award Junior Division \$100 Gift Card	Silver Award Junior Division \$50 Gift Card	Bronze Award Junior Division \$25 Gift Card	Gold Award Senior Division \$100 Gift Card	Silver Award Senior Division \$50 Gift Card	Bronze Award Senior Division \$25 Gift Card
Best in Show Junior Division US \$50 Gift Card	Best in Show Senior Division US \$50 Gift Card	Best in Show Junior Division EMEA \$50 Gift Card	Best in Show Senior Division EMEA \$50 Gift Card	Best in Show Junior Division EU \$50 Gift Card	Best in Show Senior Division EU \$50 Gift Card
Best in Show Junior Division APAC \$50 Gift Card	Best in Show Senior Division APAC \$50 Gift Card	Coding Class Act Award \$25 Gift Card	World Logo Superstar \$25 Gift Card	Brightest Business Spark Award \$25 Gift Card	Best Example of S-TEAMwork \$25 Gift Card
Problem-Solving Champion Award \$25 Gift Card	Most Imaginative Award \$25 Gift Card	Best Communicator Award \$25 Gift Card	Best Critical Thinker Award \$25 Gift Card	Social Media Superstar Award \$25 Gift Card	Most Iterative Design \$25 Gift Card

Creators Competition Parental Consent Form

Dear Parent/Guardian:

Please read and sign the following form for any children 16 years of age or under who would like to compete in SAM Labs Global Creators Competition Season One. For the purposes of this competition, SAM Labs needs to collect competition submission materials, including photos, videos and written work that may identify a specific student. SAM Labs will publish results via a student's first name and last initial, school, along with their country and/or state if applicable.

I as the Parent/Guardian of _____ (child's first/last name) agree to my child participating in SAM Labs Global Creators Competition Season One.

In addition, I agree to my child submitting the required materials to SAM Labs, and the permission to use my child's photographs and/or videotaped image for the purposes mentioned above. I understand that SAM Labs may use these submission materials in subsequent years for promotional purposes.

Please check the appropriate box:

I **DO** give my consent for my child to participate in SAM Labs Global Creators Competition Season One and for SAM Labs to collect and distribute submission materials from my child.

I **DO NOT** give my consent for my child to participate in SAM Labs Global Creators Competition Season One and for SAM Labs to collect and distribute submission materials from my child.

Parent/Guardian Signature

Date

Please complete the Creators Competition Parental consent form and submit to marketing@samlabs.com.

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