



## 2021 K'Nex STEM Design Challenge Lancaster-Lebanon IU13 Virtual Information

Lancaster-Lebanon IU13 is thrilled to offer the 2nd Annual K'Nex STEM Design Challenge! Due to the pandemic, the challenge has been modified to take place virtually, and what a relevant challenge it is for our students!

We have all spent a lot of time at home lately, and perhaps during the quarantine periods, you have noticed a thing or two that could make life a little easier for you and your loved ones around the house. Following Thermo Fisher Scientific's mission to make the world healthier, cleaner and safer, students are asked to work together to invent something to do just that, make our lives easier while still being true to Thermo Fisher Scientific's mission.

---

### *How do I get my students set up?*

As a coach, you will be responsible for arranging and managing time, whether in person or virtual, for your chosen team of 2-4 students to collaborate with each other on their challenge.

### *How will my students be asked to submit their work?*

**ALL parts of the submission must be done electronically and concurrently.** Student will be asked to submit their work, as a team, no later than Wednesday, February 3<sup>rd</sup>, 2021. You may choose any form (or forms) that you are comfortable using to organize your work (i.e. google share, padlet, flipgrid, etc.)

### *How will my students work be judged?*

A timed event **will not** be a part of our challenge this year. Instead, students will be asked to have all parts of their work submitted concurrently no later than Wednesday, February 3<sup>rd</sup>, 2021. A team of judges will evaluate student work within one week of this due date, and feedback will be provided. In some cases, judges may need more information on a particular part of your project. We will coordinate with you as to whether this information can be given in writing via email, submitted via an additional recording, or if a virtual session between you and the judge would best explain what is requested.

A standard rubric for judging will be used and can be found on the padlet, linked for you [HERE](#). Additionally, we have outlined a few more details that are important to consider when composing and submitting the different parts of your design challenge:

## **Design/Prototype:**

- The design this year can be made up of K'Nex pieces AND/OR recycled materials.
- Groups will record the progression of their design, including all who were involved and how, in their "Design Notebook".
- You can view examples of different ways to record the engineering design process on the padlet, linked for you [HERE](#).
- Submitted electronically.

## **Blueprint:**

- Students provide a clear picture of the model/prototype created.
- Submitted electronically.

## **Teamwork:**

- Examples of collaborative efforts can be displayed through pictures of your process, in your Design Notebook, and through your final, recorded presentation to the judges.

## **Creativity:**

- The use of multiple materials and project design will be judged.

## **Presentation:**

- A two-minute pre-recorded presentation will be submitted to judges.

## ***What happens if my students win?***

First, second and third place winners will be announced at the end of February. First place winners will move on to the state competition, scheduled to be held in May. More details will follow regarding this event.