The DuPage ROE STEM Team invites you to participate in its first...



Calling all DuPage middle school/junior high STEMsters! How would you like to create a public service video to offer your solutions for and thoughts about some national concerns?



Bees Please!



Rethink Rubbish

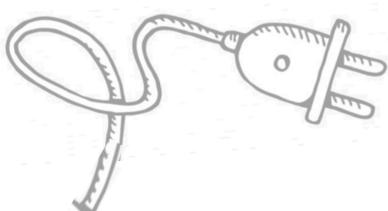


Learning, Forward

What solutions do you have for protecting or increasing our pollinator population?

What solutions do you have for using, reusing, or responsible disposal of resources?

What solutions do you have to improve virtual education?



# Get Plugged in!

Form a team.

Select a sponsor and register by March 26. Review topic options and select one.

Think! Create! Have fun!

Submit the entry by April 27.

See your teacher for more information.



The three topics chosen for the Solutions Showcase are national concerns that need viable solutions. Remember, good solutions are the result of gathering accurate information, creating reasonable alternatives, and clearly communicating ideas.

### **Plan Ahead**

- ☑ Your team should consist of 3-5 students from your school and a teacher sponsor (also from your school). Schools may sponsor multiple teams, and teams can consist of students from multiple grade levels between 5<sup>th</sup> and 8<sup>th</sup> grades.
- ☑ Your video format must be able to be posted to a website.
- ☑ The video must be three minutes or less in length.
- ☑ Content that in any way promotes illegal activity or actions that violate federal, state, or local legislation or law is strictly prohibited.
- ☑ Videos must be submitted by your sponsor, who will be given a link where they will remit the video.
- ☑ The sponsor of each team will be asked to complete a registration form on behalf of the team and each team member must submit a media release form completed and signed by a parent or guardian.
- ☑ If your video is done in a language other than English, include a translation.

Your video can be acted out, sung, done as an interview or any other creative way you can imagine! Can you speak another language? Your video can help people in your own ethnic community understand this problem and how they can make an impact.

However you choose to communicate, your message must be clear. In addition to your sponsor, it would be a good idea to have someone outside of your group check your script, as well as the video, before you submit it.

## **Bees Please!**



Honeybee populations are declining worldwide, and this is worrisome. Scientists have uncovered several causes for the decline in honeybee numbers; you can read about these causes in "A Sampling of Internet Resources" below.

It is not just delicious and nutritious honey we will lose; these bees pollinate over one hundred important crops both for people and for livestock. Billions of dollars of farm products are at stake in the United States alone!

Pollination occurs as the bees move from flower to flower in search of pollen for their colony's use. During this process they inadvertently spread large amounts of pollen that has become attached to their bodies. This pollen, moving from one flower to another, can result in flower fertilization which creates seeds, fruits, and nuts.

#### Challenge

If you choose "Bees Please" as your challenge, your mission will be to inform your audience of the honeybee population decline, by way of a public service message. In addition, you will propose specific actions your viewers can take to help solve the problem. You will find a multitude of solutions in your research, yet feel free to propose your own ideas. Think about which ideas make sense for your location and community.

#### A Sampling of Internet Resources: Look for others, too!

- <a href="https://www.sciencenewsforstudents.org/article/why-are-bees-vanishing-pesticides-disease-other-threats">https://www.sciencenewsforstudents.org/article/why-are-bees-vanishing-pesticides-disease-other-threats</a>
- https://www.planetbee.org/colony-collapse-disorder
- <a href="https://www.un.org/press/en/2019/dsgsm1282.doc.htm">https://www.un.org/press/en/2019/dsgsm1282.doc.htm</a>
- Bees and other insects declining: <a href="https://www.businessinsider.com/insects-dying-off-sign-of-6th-mass-extinction-2019-2">https://www.businessinsider.com/insects-dying-off-sign-of-6th-mass-extinction-2019-2</a>
- Video: <a href="https://illinois.pbslearningmedia.org/resource/vtl07.la.rv.text.beesdisap/disappearance-of-the-bees-whats-the-impact/">https://illinois.pbslearningmedia.org/resource/vtl07.la.rv.text.beesdisap/disappearance-of-the-bees-whats-the-impact/</a>
- Video: https://illinois.pbslearningmedia.org/resource/87109198-e073-4b31-8a04-695071535bac/how-bees-pollinate-flowers-georgia-outdoors/

## **Rethink Rubbish**



By now we are all aware of the crisis we, as a global community are facing regarding our natural resources. The need to conserve water, decrease our carbon footprint and diminish our waste is reaching crisis levels. We all can do our small parts in helping to advance the cause.

Reduce, Reuse, Recycle. It all sounds so easy, but in practice, it can be confusing. "What do those numbers on the bottom of my plastic bottles mean?" "What are ways that I can conserve water?" "Can I really reuse water?" "Why can I recycle a plastic milk carton, but not a plastic bag?" "How do I keep my old computer out of landfill?"

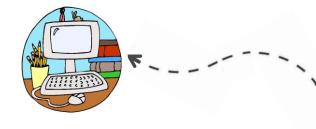
#### Challenge

Create a public service video to clarify what it means to use our natural resources responsibly in our own homes.

Your first step will be to decide what waste management problem(s) you will address. Ask your family, your friends, or your neighbors. What questions do they have? What solutions can you offer to help them overcome the obstacles in reducing their waste or conserving natural resources?

Next step will take a little research, a little creative thought and a little problem-solving. How will your team give practical advice or helpful lifestyle suggestions? What practices are helpful for you? Can you speak another language? Your video can help people in your own ethnic community understand the ins and the outs of local acts that make a global impact.

## Learning, Forward



Remote learning has created opportunities to understand more about the kinds of things that can make it a better experience for students. While it has been tough for some, it has been welcomed by others. Do you have any tips or ideas for helping other students get the most out of their remote learning experience, to keep learning, and to enjoy it more?

#### Challenge

Your challenge, if you choose this topic, is to produce a public service video aimed toward helping students better understand what they can do to make their remote learning experience a beneficial one during this challenging year. There are two choices for your team. Choose one of the two options below.

#### **Choice A**

How has remote learning been a positive experience for you? In what ways have you taken ownership and responsibility as a lifelong learner? Think about what works for you, what tools have been helpful and how you might share this with others.

#### **Choice B**

If you had the chance, how would you design lessons for remote learning, what would the lesson look like? What tools would you suggest that would enhance the experience during this hybrid and remote learning time? Share your tips and ideas about how remote learning might be redesigned.



Solutions Showcase is designed to engage students in a collaborative activity resulting in a public service, informational message.

#### **Participants**

- Solutions Showcase is open to students attending schools located in DuPage County.
- Teams of three to five students from the same school must be sponsored by a certified staff person from their school.
- Students must currently be in grade 5, 6, 7, and/or 8. Students from the same school do not have to be in the same grade.
- Schools may have more than one team with the same or different sponsors.
- Sponsors must submit a completed Registration Form for the team(s) they sponsor.
- Teams not registered by the required date will not be permitted to enter the Solutions Showcase.

#### **Entries**

- The public service, informational message produced by the students must be in a video format to be submitted via a link that will be provided at a later time to sponsors. Only registered sponsors may submit the final product.
- Official entries may not exceed three minutes, even by a few seconds.
- The content of the videos must relate to one of the approved topics. Entries on topics other than those on the approved list will not be accepted.
- The content of the message cannot in any way promote illegal activity or actions that violate federal, state, or local legislation, rules, ordinances, or other similar criteria.
- The DuPage Regional Office of Education STEM Team will review each entry to determine whether
  it qualifies. The decision of the STEM Team is final.
- Qualifying entries will be posted on the DuPage Regional Office of Education YouTube channel and/or the STEM Team website.
- Notification of approval will be sent directly to team sponsors.

#### **Timeline**

- Sponsors of teams must register their teams by 4:00 pm on Friday, March 26, 2021.
- Teams may start work on their project any time after their team registration has been approved, which will be done by email to the sponsor.
- All video entries must be delivered to the designated folder/link no later than 4:00 pm on Tuesday,
   April 27, 2021, at which time additional entries will be blocked.

#### **Additional Requirements**

- All sponsors and student participants must submit a signed media release form for videos to be posted.
- A copy has been attached. In addition, individual copies will be emailed to all sponsors and parents/guardians of team members.

#### Questions

• Email Patricia Zriny, <u>pzriny@dupageroe.org</u>.