# **Connecting Curious Minds to Modern Agriculture**

At Monsanto, we engage and collaborate with people who want to build things, explore the unknown, and solve challenges in modern agriculture. You teach your students about the skills of science and engineering. You help them create experiments to discover the world around them. You teach them how to build robots and write the computer code that controls them. You encourage them to study math and to uncover just how beautiful precision can be. Together, we want to inspire students to solve the world's most pressing challenges by developing new products and technologies that will help farmers use the natural resources required to grow our food more efficiently.

#### STEM Based Lesson Plans

Are you in need of quick, STEM based lessons? Check out these mini lesson plans. *Brush Bots* is a lesson focused on the engineering process. Students will build mini insect robots using toothbrushes and other inexpensive materials. Check out the link below for more STEM based lessons.

To view our collection of STEM based lesson videos, visit **Monsanto.com/STEM** 

## Access to Genetically Engineered Soybeans

We have received numerous requests from students and teachers asking for access to genetically engineered seeds. Monsanto's STEM Education Team has come together to create a glyphosate-tolerant soybean kit. This lesson plan consists of five modules ranging from a weed pressure simulation to polymerase chain reaction (PCR) testing. Each lesson is aligned with the Next Generation Science Standards (NGSS).

For more information, please email **Stemeducation.outreach@monsanto.com** 

#### **Grant Options**

The Monsanto Fund works to substantially and meaningfully improve people's lives around the world. As the philanthropic arm of Monsanto, they are focused on one goal – strengthening both farming communities and the communities where we live and work.

To view out grant options, check out Monsantofund.org/grant-programs

# **Tour Opportunities**

Monsanto knows the value of connecting our science and technology to the classroom and opening up our doors to educational tours. We are proud to offer students\* and teachers an opportunity to explore a site near them. In the event a Monsanto site is not in your area, you are always welcome to tour our headquarters in St. Louis, MO.

To schedule a St. Louis Tour, please email **Tour.request@monsanto.com** 

### Farmer Chance Game

Farming is a rewarding profession, but it also comes with challenges. The Monsanto STEM Education Team designed a game which allows the students to experience what it's like to farm in different parts of the world. The game is usually completed in 30 to 50 minutes, but this depends on how many people are playing, and if you decide to have the your students switch regions after each game. Agriculture is an interdisciplinary area of study, so whether you're covering economics, business, agriculture, or science, this game can be an exciting way to teach the concepts of modern agriculture.

For more information, visit Monsanto.com/company/outreach/education-outreach/research-resources/farmer-choices-game/



## Give It a Minute Video: Climate Change

As the world's population continues to grow, so does the conversation around climate change. What is climate change? And what role can agriculture play in mitigating climate change? Give it a minute. Farmers can drive climate-smart agriculture with the wider use of modern farming techniques and technologies. This enables the production of more crops from existing farmland while reducing GHG emissions.

Check out this video at Youtube.com/watch?v=tCoUPctz\_pE



## Modern Agriculture

Farmers and the agricultural industry are making a concerted effort to keep Mother Nature's gifts right where they belong. We strive to use less. And data is helping the leaders of modern agriculture create the techniques and technologies to reduce our impact on the environment. Perhaps the most exciting sector of modern agriculture involves creating a range of digital tools that help farmers make informed decisions and further reduce their impact on the environment. From weather-forecasting systems that offer unprecedented detail and accuracy, to software platforms that guide farmer decisions about their use of water, soil, and energy— digital technology is changing the way we farm.

Learn more at ModernAg.org | #ModernAg







