

MASS STEM WEEK 2020 EVENT

# Are You Ready to “See Yourself in STEM”?

## Engineering Design Challenges for PreK – Grade 8

The Museum of Science and EiE are thrilled to support this year’s MASS STEM Week theme, “See Yourself in STEM.” We take great pride in our mission, “To inspire a lifelong love of science in everyone” and we believe that together we will create a generation of problem solvers for a better world. To allow educators and learners alike to see themselves in STEM as engineers, the Museum of Science and EiE have developed three engineering design challenges for educators and learners across the state.

**Want to learn more?**  
**Join us online!**

**PreK–Grade 2: Tuesday, October 13**  
**3:30–4:00pm ET**

**Grades 3–5: Wednesday, October 14**  
**3:30–4:00pm ET**

**Grades 6–8: Thursday, October 15**  
**3:30–4:00pm ET**

Register to participate and get access to educator and learner resources.

**Engage your learners virtually in an engineering design challenge**  
**created by the Museum of Science and EiE.**

Grade Level	Engineering Design Challenges
<b>PreK–2</b>	PreK through grade 2 learners, as engineers, will learn about the needs of an animal that is native to Massachusetts. What does it need to live? How do humans impact its habitat? What can be done to protect it? Can we use the Engineering Design Process to find a solution?
<b>G3–5</b>	Learners, as engineers, in grades 3 through grade 5 will research various animals to identify and analyze what they need in order to survive within a local ecological network. As their investigation begins, students will be alerted about an increase of pollution in local waterways! How has this human impact affected our food web ecology? What can we do to help? Maybe we can use the Engineering Design Process!
<b>G6–8</b>	Learners, as engineers, in grades 6-8 will identify and research the different water and wastewater systems in their own neighborhoods and investigate the human impact on their local environment. How does a wastewater system work? How do humans impact the quality of water? What can we do to help?

Register through Eventbrite at <https://tinyurl.com/MASTEM20>

## Stay engaged with the Museum of Science and EiE team all week long!

Day	What?	How?
Monday	<b>Design Challenge Launch</b>	Watch a video to learn more about the challenge.
Tuesday	<b>STEM Board Interactions</b>	Follow Museum of Science, Boston and EiE on social media, and share photo or video evidence from the STEM choice board below.
Wednesday	<b>Flipgrid</b>	Visit <a href="https://flipgrid.com/mosstem">https://flipgrid.com/mosstem</a> Teachers and students can post photo or video evidence from the STEM choice board below.
Thursday	<b>Office Hours</b>	Educators can join these informative sessions for support, advice, or opportunities to share and learn from other participating educators.
Friday	<b>Submissions Collected</b>	Share your photos and videos with Museum of Science, Boston and EiE through social media with hashtag #MASTEMEiE.

Follow us and use the hashtag #MASTEMEiE



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Draw and share a <b>plan</b> or <b>blueprint</b>	Show us your <b>materials</b>	Learn about the Sustainable Development Goals and <b>post your findings</b>	Demonstrate how you used <b>critical thinking</b> to break down your challenge
Post your best design <b>failure</b>	<b>Imagine multiple solutions</b> and share at least two	<b>Communicate</b> with peers by creating and sharing a process	<b>Ask and investigate</b> by researching engineering schools in your state
Share how you are <b>improving</b> your design	Research <b>female engineers</b> and share what you learn	Post about the <b>fields of engineering</b> that interest you most	Capture evidence while you <b>test</b> your design
What does an engineer look like? Remember, <b>we are ALL engineers!</b>	<b>Ask and investigate</b> environmental engineers	Share how you are using math and science knowledge to <b>design a solution</b>	Ask and investigate <b>famous engineers</b> in your state

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Have a question? Please email [eie@mos.org](mailto:eie@mos.org).