**Discussion GUIDE: Science, Technology, Engineering, & Mathematics (STEM) Careers**

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| **TEACHER DISCUSSION LEADERS:**  1. Lead a class discussion about Science, Technology, Engineering, and  Mathematics (STEM) careers using the Proposed Student Discussion  Questions and Prompts.  2. Discuss which high school CTE courses help students get ready for a  STEM career.  3. Key STEM introductory concepts include: a) Science, b) Technology,  c) Engineering, and d) Mathematics.  4. Find additional STEM resources on the TREES website at  <https://www.cteintrees.org/career-exploration-resources>. | **STUDENT OPTIONS:**  1. Take the Career Assessment in the *TREES Career Guide for Students*. Then,  review STEM job titles on pages 40 and 41.  2. Take the *True Colors Personality Quiz* at  <https://www.ira.esc14.net/upload/page/0255/True%20Colors.pdf>.  3. Watch the 3-minute *STEM Career* video at  <https://www.youtube.com/watch?v=XZvU_FASw7E>.  4. Do your own research about STEM careers to learn more.  5. Participate in a class discussion. |

Proposed Student Questions and Prompts

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| Q1a. What do people in STEM careers do? Which STEM jobs (page 40 of the *Career Guide for Students*) are most interesting to you? Characteristics of STEM professionals include:  ***Creators*** are enthusiastic, curious, analytical, and must communicate a message clearly. ***Thinkers*** solve problems, make decisions, and organize tasks well.  Q1b. What strengths did *True Colors* identify about you? | **In a STEM career** you may solve future problems that impact our earth, develop new construction concepts, or create energy-efficient equipment. You may create artificial limbs, study DNA, or do audio or video production work. You could become a doctor, a mathematician, or a civil engineer.  What skills might you need to improve to be successful in a STEM career? Skills are the ability to do something well. |
| Q2. What did you learn from the *STEM Career* video? | What skills do the careers discussed in the STEM video need? Which of those skills do you already have? What skills might you need to improve for a STEM career? |
| Q3. Do you know someone who works in the STEM industry such as an  Electrical or Biochemical Engineer, Doctor, Project Manager, Forensic  Scientist, Mathematician, etc.? | What do they do at work?  What high school courses would help you get started in a STEM career? |
| Q4. What STEM employers are in your local area? | *RHO Chemical in Joliet, IL* is one local STEM employer. Can you list 3 more employers?  1.  2.  3. |