### THE INNOVATIVE THINKERS PROJECT

For Sycamore Middle School 8th Graders



Are you an innovative thinker? Perhaps you need a little explanation of what that actually means before you answer that question... Well, here are just a few of the traits that might describe an innovative thinker:

- 1. Continually curious
- 2. Creative
- 3. Good observer, listener
- 4. Confident, but not arrogant
- 5. Works with others
- 6. Takes Risks & Learns from Mistakes
- 7. Wants to help
- 8. Problem Identifier and Problem Solver



Sound like you? Even if you're screaming "NO!" right now, we would urge you to have caution before you jump to that conclusion. You see, middle schoolers are some of the most innovative people around. You guys are constantly thinking of cool new ideas for addressing problems in your everyday lives. You ask tough questions in class that need further investigation to answer. You know more about the latest technology than many well-educated adults do. You bring a uniquely new perspective to the world. And bottom line, you know how to have fun, laugh, and be creative better than many adults out there. Now, here's the most important thing. Are you paying careful attention? Okay, here it goes...

#### THE WORLD DESPERATELY <u>NEEDS</u> MORE INNOVATIVE THINKERS!

Did you catch that? Notice that the bold area above doesn't say anything about test scores. It doesn't bother to say that you must be knowledgeable in every field of science... or a master math expert... or an award winning writer. It simply says to practice innovative thinking. So try to summon up that inner creativity! Recruit a little extra enthusiasm! And put on your problem solving hats! This challenge needs your attention. The world needs YOUR help! Good luck!

# OKAY, SO... WHAT IS THIS PROJECT EXACTLY?

Now before you start getting all, "Just tell me what I need to do to get the award." it's first important to really think about the goal of this innovative endeavor. The purpose is for YOU to foster and practice thinking innovatively by tapping into a few key areas:

#### **PERSONAL REFLECTION:**

- 1. What are my passions and ambitions?
- 2. What are my unique strengths, skills, and talents?
- 3. How do I want to see my world improved?
- 4. What kind of a learner am I?
- 5. What kind of teacher am I?
- 6. What does it mean to think like a scientist?
- 7. What kind of communicator am !?



#### WE BELIEVE THAT INNOVATION IS NOT ABOUT THE "STUFF". BUT A WAY OF THINKING.

Let's say it louder for the people in the back... INNOVATION IS NOT ABOUT THE STUFF, BUT A WAY OF THINKING. It's a mindset. In other words, it's not the iPhone that's innovative- it's the thinking that went into creating the iPhone in the first place. Innovation is the process, not the product. We want you to push yourself outside of your own box. That's the big idea here - challenging you to expand your thinking limit.

Depending on which route you take, you will either conduct an experiment addressing a testable question, design something that solves a problem that you define, or teach an audience a concept having to do with science. In other words... you are (in a sense) the scientist, teacher, or engineer... just without the credentials.

### READY TO GET STARTED?

We've thought through several options you could choose from. Take some time to read about each one and decide which option would be best for you. If you feel stuck, go back and consider the list of reflective questions.

- Project 1 The Scientist: create and do an experiment for science
- Project 2 | The Engineer: design, build, and test something
- <u>Project 3 | The Teacher</u>: Teach a scientific concept, process, or phenomenon

[Descriptions of these options are posted in your teacher's Canvas page as well as the SMS Science Google Site: <a href="sites.google.com/syc427.org/sms-science">sites.google.com/syc427.org/sms-science</a>]

### DEADLINE

\*\*\*Keep in mind that the ways to submit the project look a little different depending on which project you choose. Therefore, the due dates may vary!

The final due date is <u>WEDNESDAY</u>, <u>APRIL 26</u>, <u>2023</u>. However, you can submit your project at any time prior to that... even now! Important: When you turn in the final report, your science teachers will review together. We may ask questions of you or provide feedback.

Also note, if you choose to present/display your project at Science Olympiad, you'll need to have it finished by TUESDAY, MARCH 7, 2023.

OR, if you're thinking of actually teaching a live class, especially the elementary grades, you'll need to have that idea worked out by FRIDAY, MARCH 23, 2023.

## **AWARDS NIGHT**

Everyone who successfully submits a project will be called up and recognized at our end of the year 8th Grade Awards Night. This is similar to a graduation ceremony. Additionally, the 8th grade science teachers will review all the submissions for this project and select 1-2 lucky students as our Lab Coat Award winners, a prestigious honor that is awarded to the most interesting, intriguing, creative, disciplined, relevant, and ambitious idea submitted for the year. Just think, it could be you!



Tip: Print out. Cut out, Hang up for motivation. 👆