# STEM Activity Calendar

### **Offline STEM learning at home**

# **12** weeks of daily STEM activities

VIVIFYSTEM.COM

⊘ivify

STEM EDUCATION

# **Thank You!**

Thank you for downloading a Vivify product! If you have any questions, please email us at <u>info@vivifystem.com</u>.

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#### **About Vivify**

Vivify is a team comprised of two Aerospace Engineer friends, Natasha and Claire, who live in Texas. We met as college classmates and roommates at Texas A&M University and later left engineering careers in the Department of Defense and Air Tractor to pursue our passion for STEM education. Learn more of our story <u>here</u>.

Our goal is to bring engineering to life—to vivify learning—for kids of all ages. Please connect with us so we can learn how to better serve your students!



- Natasha & Claire, The Vivify Team

#### Connect with us for free STEM resources!

Subscribe to our newsletter and receive access to a library of <u>free</u> STEM resources through <u>www.vivifystem.com</u>. Follow us on social media or listen to "The STEM Space" podcast for more resources and ideas. We also welcome you to join <u>"The STEM Space"</u> Facebook group to connect with other educators across the world.









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Math Monday	Outdoor Tuesday	Science Wednesday	Engineering Thursday	Fun Friday
Play some basketball! Measure how many baskets you make out of 10. Calculate your percentage accuracy.	Time to explore the night sky! Download a star app like Star Walk. Can you find a planet or constellations?	Scientist want to understand the world around us. Ask 5 WHY or WHAT questions to learn more about something in nature.	Engineers solve problems to improve our lives. Brainstorm an invention that can improve your life.	Play a family game like Monopoly that uses critical thinking and math skills.
Help your family with grocery shopping. Determine the budget and select items without going over. Don't forget about tax!	Can you cook using the heat of the sun? Learn how to build a solar oven: <u>bit.ly/vivifysolarove</u> <u>n</u>	Create your own experiment using baking soda and vinegar.	Use different materials to protect a water balloon from popping. Go outside and test by throwing against a wall or tree.	Draw out your ideal future city. What areas will keep citizens healthy and happy? What laws would you enact?
Help an adult with dinner by measuring ingredients. How would you double of halve the recipe?	Find a quiet place in nature. Bring a journal and record everything you see.	Place a small ball on top of a large ball and drop them together. Watch how energy is transferred!	Design and build a catapult with household items. Test your accuracy and power by knocking over a tower of cups.	Make a greeting card using 3-D popup art.
Make a floor plan of your room and draw items to scale. What percentage of your room is your bed?	Go outside and take a picture of as many different birds, insects, and mammals as possible! How many types can you find?	Build a window greenhouse and watch your plants grow. Learn more here: <u>bit.ly/vivifylifescien</u> <u>Ce</u>	Design and build a roller coaster from paper, paper plates, and tape. How long can you keep a ping pong ball moving?	Make a piece of artwork using reflection and rotation symmetry.
Measure your heart beat for 10 seconds. Convert to beats per minute. Run around and then measure again. What is the percentage increase?	Design and build a bee hotel. Learn more here: <u>bit.ly/vivifylifescien</u> <u>ce</u>	Turn on the water slowly. Brush a plastic comb through your hair 10x. Slowly bring the comb close to the water. What is happening?	Find your favorite doll or action figure and design a zip line to help them travel down from a height of at least 4 feet.	Create an obstacle course outside. Calculate your average time to complete the course over a series of 5 attempts. Get a friend to try!
Measure the length of your hand. Now you have your own personal ruler! Go out and measure everything	Create your own ant farm! Find a diagram at m.wikihow.com/Buil d-an-Ant-Farm. What do you observe?	The tongue map theory states that different areas of your tongue sense different tastes. Look-up this theory. Create an experiment to prove or disprove it.	Image you only have one leg. Design a prosthetic leg using household items. Test it out! How do you make it comfortable? How would it attach to your body?	What is your ideal STEM job? Take a quiz to find out! <u>bit.ly/stemtypequiz</u>

Find editable calendar here: https://docs.google.com/prese ntation/d/1AAu5fZqaY9vtaLpG HSCWhMYstWCnH6r156qxUBj d47A/edit?usp=sharing

# Want more stem?

For a complete list of all of Vivify STEM resources broken down by standards, topics, and grade levels, go here: <u>http://bit.ly/VivifyResourceGuide</u>



#### Vivify's Overview of STEM Education

Successful STEM education is an empowering interdisciplinary approach that brings math and science concepts to life through problems that mimic the complexities and excitement of the real world. STEM revolves around the Engineering Design Process that embraces failure, relies on teamwork, and requires critical thinking and creativity. While exciting, educators often become intimidated as a search for curriculum leads to an overwhelming range of activities from index towers to robotics competitions. At Vivify, we believe that not all STEM is created equal. Educators should adopt a <u>3 Stages of STEM</u> approach by progressively building towards more complex projects.

To learn more about the 3 Stages of STEM, go here: http://bit.ly/stemstages