50 Science, Technology, Engineering, Art, and Math Activities for Ages 2-18

STEM (science, technology, engineering, and math) is a vital part of our world today. These fields are constantly evolving, and they offer endless opportunities for learning and innovation. STEM education is essential for preparing our children for the future. It helps them develop critical thinking skills, problem-solving skills, and creativity.



Simple STEAM: 50+ Science Technology Engineering Art and Math Activities for Ages 3 to 6 by Debby Mitchell

★★★★★ 4.5 out of 5
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Screen Reader : Supported
Enhanced typesetting: Enabled
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If you're looking for ways to get your kids interested in STEM, here are 50 activities that are sure to spark their curiosity.

Ages 2-5

1. **Build a bridge**: This classic activity is a great way to teach kids about engineering and physics. Use blocks, sticks, or even Legos to build a bridge that can support a toy car or truck.

- 2. **Create a robot**: This is a fun and creative way to introduce kids to technology and engineering. Use cardboard, tape, and other materials to build a simple robot that can move or make sounds.
- 3. **Make a volcano**: This activity is a great way to teach kids about science and chemistry. Use baking soda, vinegar, and food coloring to create a bubbling volcano.
- 4. **Grow a plant**: This is a simple but rewarding activity that is perfect for teaching kids about life science. Plant a seed in a pot or garden, and watch it grow into a beautiful plant.
- 5. **Explore magnets**: Magnets are a great way to teach kids about physics and science. Use magnets to make objects move, or to create patterns on a magnetic board.

Ages 6-8

- 6. **Build a solar oven**: This is a great way to teach kids about renewable energy. Use a cardboard box, aluminum foil, and plastic wrap to create a solar oven that can cook food.
- 7. **Make a wind turbine**: Wind turbines are a great way to teach kids about renewable energy. Use cardboard, tape, and a pinwheel to создать a wind turbine that can generate electricity.
- 8. **Build a water filter**: This is a great way to teach kids about science and engineering. Use sand, gravel, and activated charcoal to create a water filter that can clean dirty water.
- 9. **Create a model of the solar system**: This is a fun and educational way to teach kids about astronomy. Use Styrofoam balls, paint, and string to create a model of the solar system.

10. **Make a lava lamp**: This is a classic science experiment that is always fun to watch. Use vegetable oil, water, food coloring, and an Alka-Seltzer tablet to create a lava lamp.

Ages 9-11

- 11. **Build a roller coaster**: This is a fun and challenging engineering project that is perfect for older kids. Use cardboard, tape, and other materials to build a roller coaster that will send a marble or small toy car flying.
- 12. **Create a robot that follows a line**: This is a great way to teach kids about technology and engineering. Use a microcontroller, sensors, and motors to create a robot that can follow a line.
- 13. **Make a homemade battery**: This is a simple but educational activity that is perfect for teaching kids about science and chemistry. Use copper, zinc, and a lemon to create a homemade battery.
- 14. **Build a model bridge**: This is a challenging but rewarding engineering project that is perfect for older kids. Use popsicle sticks, glue, and other materials to build a model bridge that can support a weight.
- 15. **Make a catapult**: This is a fun and challenging engineering project that is perfect for older kids. Use wood, rubber bands, and a spoon to create a catapult that can launch projectiles.

Ages 12-14

16. **Build a solar-powered car**: This is a challenging but rewarding engineering project that is perfect for older kids. Use a solar panel, a motor, and other materials to build a solar-powered car that can race.

- 17. **Create a website or blog**: This is a great way to teach kids about technology and communication. Use a website builder or blogging platform to create a website or blog that they can share with others.
- 18. **Make a video game**: This is a fun and challenging way to teach kids about technology and computer science. Use a game development platform to create a video game that they can play with friends.
- 19. **Build a model rocket**: This is a classic science experiment that is always fun to watch. Use a model rocket kit to build a rocket that can fly up to 1,000 feet in the air.
- 20. **Make a homemade telescope**: This is a challenging but rewarding project that is perfect for older kids. Use lenses, cardboard, and other materials to create a homemade telescope that they can use to observe the stars.

Ages 15-18

- 21. **Build a robot arm**: This is a challenging but rewarding engineering project that is perfect for older kids. Use motors, gears, and other materials to build a robot arm that can be controlled by a computer.
- 22. **Create a 3D printed object**: This is a great way to teach kids about technology and design. Use a 3D printer to create a 3D printed object that they can use or display.
- 23. **Make a homemade drone**: This is a challenging but rewarding engineering project that is perfect for older kids. Use motors, propellers, and other materials to build a homemade drone that can fly.
- 24. **Build a computer from scratch**: This is a challenging but rewarding project that is perfect for older kids. Use computer components to build

a computer from scratch that they can use for gaming, programming, or other tasks.

25. **Create a mobile app**: This is a great way to teach kids about technology and computer science. Use a mobile app development platform to create a mobile app that they can share with others.

These are just a few of the many STEM activities that you can do with kids of all ages. By getting kids involved in STEM, you can help them develop the skills they need to succeed in the 21st century.



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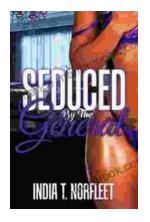
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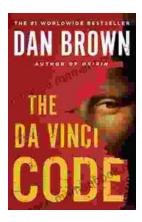
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