



8 WAYS TO BRING
STEM INTO YOUR
HOMESCHOOL

MAKERSPACE IDEAS

Things to include in your space:

- Straws
- Yarn
- Playdough
- Beads
- Rubberbands
- Popsicle sticks
- Pipe cleaners
- Paint

For advanced students:

- Wood
- Hammer and nails
- Wires
- Batteries
- Broken small appliances (like radios, calculators, clocks, lamps)

LINKS TO TOPICS YOU ARE COVERING

topic:

topic:

topic:

topic:

INTEREST TOPICS

topic:

topic:

topic:

topic:

WHERE TO FIND STEM/STEAM IDEAS

Books/Library

Some of our favorites:

- Making and Tinkering With STEM: Solving Design Challenges With Young Children BY Cate Heroman
- Real Engineering Experiments: 25+ Exciting STEAM Activities for Kids BY Anthony Tegtmeier
- One Minute Mysteries (STEM) BY Eric Yoder and Natalie Yoder

Pinterest

Some accounts to follow:

- From Engineer to SAHM | STEM, Math, & Science for Kids @fromengtosahm
- Team Cartwright | STEM, Science Experiments, Learning, and Twins @teamcartwright

Homeschool Resource Sites

Some of our favorites:

- Techie Homeschool mom
- The Homeschool Scientist
- Homeschool.com

STEM Focused Sites

Some of our favorites:

- Steam Powered Family
- Science Buddies
- Science Bob
- Science Kids

Museums And Science Center Websites

Some of our favorites:

- Museum of Science
- Cosi
- NYSCI
- Exploratorium

40 STEAM IDEAS TO GET YOU STARTED TODAY:

1. Make something that flies using 3 different materials.
2. Construct a musical instrument.
3. Create a pattern.
4. Build a nest that can hold at least 2 eggs.
5. Create a rocket you can launch with a straw.
6. Construct a parachute that can hold a basket and one object.
7. Build the tallest tower possible with one sheet of paper and a foot of tape.
8. Construct a boat that floats.
9. Make your own board game.
10. Build a bridge that is at least 10 inches long.
 11. Make a catapult to shoot mini marshmallows.
 12. Make a bird feeder.
 13. Create a vehicle that moves without being pushed.
 14. Make a shelter to keep a toy dry in the rain.
 15. Design a maze and see how many friends and family can solve it.
 16. Make an insect hotel.
 17. Egg drop: make a container to save an egg from a 6 foot fall.
 18. Build a house of cards try to get it as tall as possible.
 19. The ground is lava! How can you safely get across a space without touching the ground.
20. Make a cup tower! Can you get it taller than your head?
 21. Make the longest paper chain with one sheet of paper and tape.
 22. How many creations can you make using empty toilet paper rolls?
 23. Make your favorite recipe but half or double it!
 24. Test what sinks or floats in a tub of water. Change the amount of water and see what happens.
 25. Make pipe cleaners to make a new bubble wand.
 26. Go exploring and find 5 items to use as a paintbrush
 27. How many books can you hold up at least 1 inch off the ground with one sheet of paper?
 28. How many of you would it take to be the same height of a dinosaur (you pick the dinosaur)!
 29. Make a zip-line to help get items from one room to another.
30. Plant a butterfly garden and record the visitors you get.
 31. Paint with ice (no instructions...be creative!)
32. Make a pulley.
33. Construct a hill with different materials and see which material makes a toy car roll the fastest.
34. Can you stack rocks? How high?
35. How many shapes can you make with one pipe cleaner.
36. Construct a tower out of pennies.
37. What can you make out of toothpicks and play dough?
38. Construct a pyramid that can stand alone.
39. Make a paper chair to hold your favorite toy.
40. How fast can bugs eat an apple? Make a cage and set it out. Check in and record your findings.

WAYS A2Z HOMESCHOOLING CAN HELP:

- Get help with your makerspace with our free makerspace start list and engineering ideas here:
https://a2zhomeschooling.com/explore/physics_kids/engineering-activities-for-kids/
- We have lots of ideas on how to add some STEM to specific topics, search the site for your current topic and see what we have to offer.
- Ready to connect with a co-op or group? We have many groups listed for each state on our homeschool support groups page
https://a2zhomeschooling.com/support_groups/support_groups_homeschool_worldwide/
- Looking for a field trip? We have science centers, state and national parks and more listed on our field trips page for each state.
- Ready to get some STEM competition? Join us for our 2022 A2Z Homeschooling STEM Fair! We have information about when it starts here
<https://a2zhomeschooling.com/stem-fair/>