Seeds of STEM: Integrated STEM At-Home
Week 1: Problem Solving
Each activity can take anywhere from 10-30 minutes.

Day 1: What is a problem?
- Define "problem": a problem is something that is not right, not working, broken, not in place, not good, or troubling.
- Go on a *problem scavenger hunt* with your child. Find problems around the house – broken toys, hard to reach cabinets, torn artwork, messy toy bins – and in storybooks. Make a list of these problems, you'll solve one of them tomorrow.

Day 2: Problems and Solutions!
- Define "solution": an answer or fix to a problem
- Every problem has <u>multiple solutions</u>. Some real, some imaginary
- Help your child brainstorm solutions to a problem found in your home.
- Have your child pick one solution and draw it. This is a plan!

> Sing together:
> "The Problem Song"
> Problems here! Problems there!
> Problems, problems everywhere!
> Can we solve them? "YES WE CAN!"
> Can we solve them? "YES WE CAN!"

Day 3: Create and Test
- Engineers solve problems. Tell your child they will be an engineer and create the solution they drew.
- Review the plan your child drew yesterday.
- With your child, find materials around the house that they can use to create their solution. Recyclables work great!
- Test it out! Does it solve the problem? If not, try again and improve it.
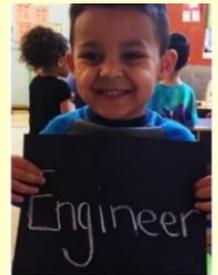
Day 4: Problems in Stories
- Any story involves a problem! Have your child chose their favorite storybook and help them identify the problem.
- Help your child brainstorm solutions, pick one, and draw a plan for how they would solve the problem.

Day 5: Creating Solutions At Home
- Have your child find their favorite toy. Tell them that after a fun day of playing together, their toy feels tired. They can help!
- They will be an engineer and create a bed or chair for the toy.
- Have your child use materials in your home like recyclables, craft materials, tape, and glue to build a bed or chair for the toy.

This child built a chair for his favorite stuffed panda!

Check out more Seeds of STEM home activities from at https://www.seedsofstem.org/products