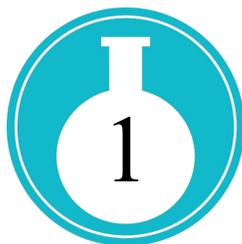
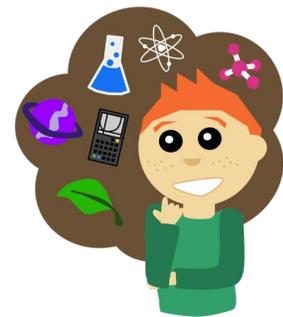


Unleashing the Inner Scientist and Engineer at Home



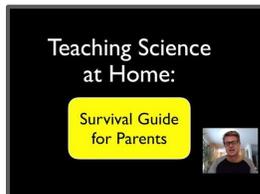
Drive Learning with Phenomena

Phenomena are everywhere! Phenomena are things in the natural and human made world that cause us to wonder. They makes us curious and helps create an authentic need to know to drive learning.

You won't need to look far for phenomena - get outdoors, look inside your house, or use pictures or videos. Spend time looking at phenomena together, ask questions, and try to figure out what's happening and why it happens that way. Start with noticing and wondering about the phenomenon.



Keys to Unlocking Everyday Phenomenon
bit.ly/2WLNyII



Teaching Science at Home: Parent Survival Guide
bit.ly/2TlvWRN



Phenomenon by Grade Level
bit.ly/3cPja61



Searchable Phenomena
bit.ly/3enpYbm



Do Science

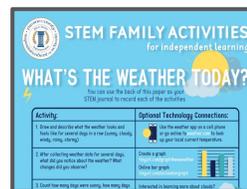
At the core of science learning is the experience of actually doing scientific work. Rather than reading or watching a video first, start with activity and experimentation, this allows learners to compare their experiences and observations to others. Inquiry based activities help to demystify the phenomenon and answer learners' questions.



Sensemaking Tasks
bit.ly/3c9AyBI



Observe like a Scientist
bit.ly/3eo81cD



STEM Family Activities
bit.ly/3e4tRSe



Phenomena based science activities
bit.ly/3ca3KrP

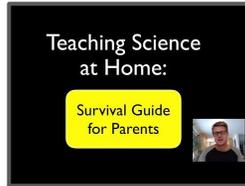


Talking (and Arguing) About Science

As we talk, we continue to deepen our understanding of our world, and our thoughts become clearer about what we do and do not know. Engage in family discussions about scientific topics, and encourage learners to use evidence when making arguments and claims. Challenge learners to make connections between the phenomenon and their experiments and research, push them to support their arguments with evidence. Help them to learn about real scientists, and find ways for them to interact with current scientists.



I notice, I wonder, It Reminds Me Of
bit.ly/3eo81cD



Parent Survival Guide
bit.ly/2TlvWRN



Scientists & inventors-history
bit.ly/36AwKYt

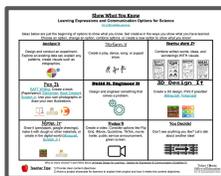


Science Stories Podcast
bit.ly/2AiYxR5



Document Learning

There are many ways students can document and present what they've learned. These include science notebooks, digital presentations, models, and physical representations. Invite learners to express their learning in creative ways that showcase their strengths. Provide an audience for learners to share their projects with others, possibly family members, teachers, or neighbors.



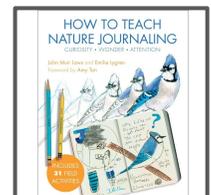
Learning Expressions Choice Board
bit.ly/2R8WGEf



How to Use a Science Notebook
bit.ly/3gwbO9B



Setting up a Science Notebook
bit.ly/2TleEEn



Nature Journaling Activities
bit.ly/2zrAv6H



Engineer Solutions

Engineering and tinkering are integral to modern science. It's important for students to engage in open-ended activities and challenges for which there is more than one solution. Engineering challenges offer learners an opportunity to solve real problems and express themselves through creative solutions.



Learn, Play, & Create Together
bit.ly/2M1BBIH



Engineering Project by Field
<https://bit.ly/2Zl3weB>

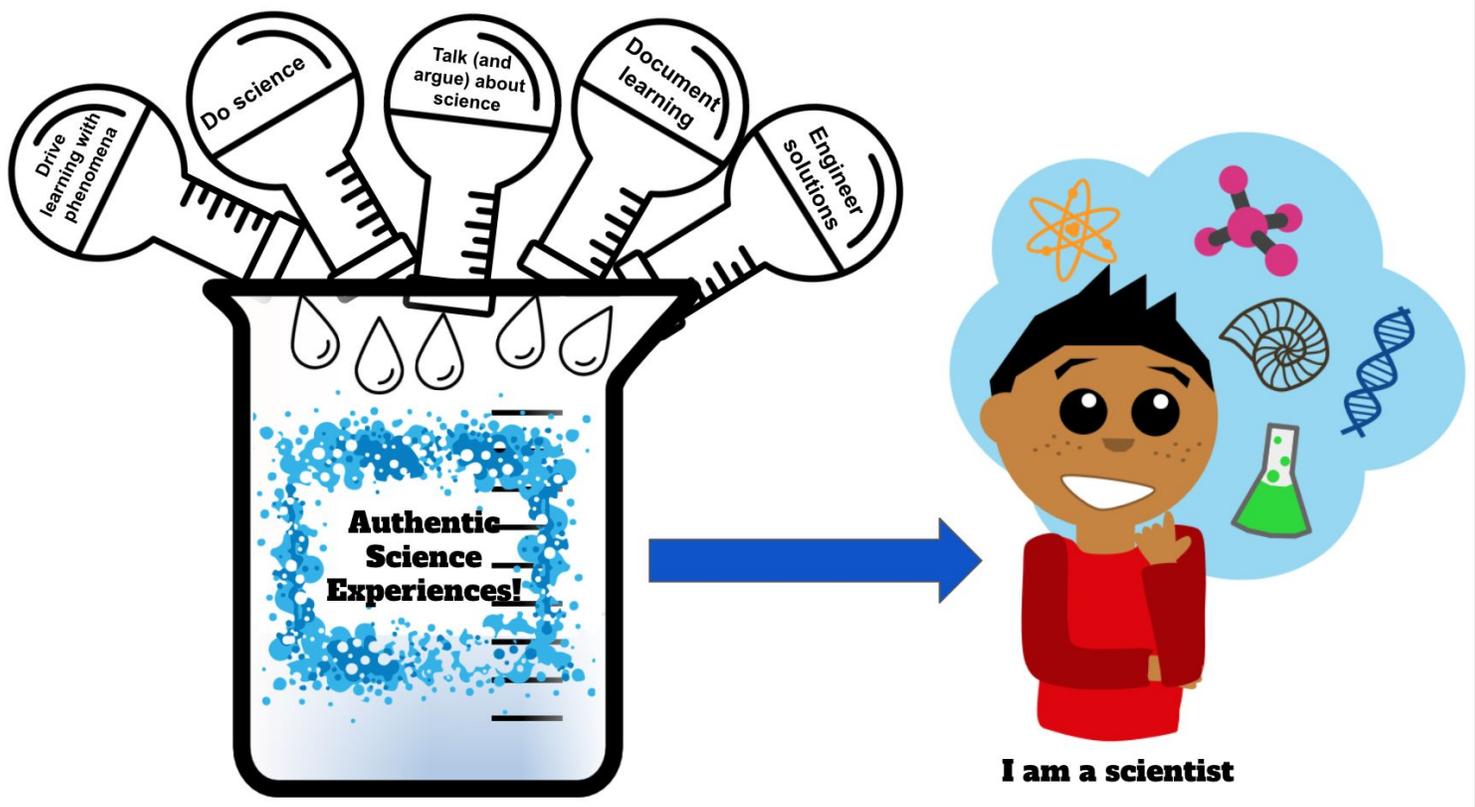


Engineering Project by Grade
bit.ly/2Ah0H3D



Activities for Kids and Families
bit.ly/36zeC1j

Unleashing the Inner Scientist and Engineer at Home



Use and combine the tips and resources in this document for authentic science experiences at home that will build interest in STEM and help children develop confident science identities.