



SO YOUR CHILD IS INTO STEM. What does that mean? It could mean that you have a little one whose constantly exploring the natural world around them or one who bubbles with questions at every opportunity.

Humans have a naturally occurring internal drive to investigate and answer important questions, and fostering an environment that encourages taking on the challenges they will face is vital in seeing them flourish in areas even beyond the scientific realm.

And while the curiosity comes naturally to all of us, the applications of what STEM (Science, Technology, Engineering, and Mathematics) subjects require...may not.

Even if you aren't STEM-minded yourself, or you feel a little clueless on how to support your child in their scientific endeavors at school or at home, just remember you're not alone and there are ways you can help your child succeed!

Here's a little secret that should be general

knowledge: *Not* having the answer is the perfect place to start when it comes to learning STEM. That cluelessness you feel? It's actually an asset.

As your childs parent and role model, the best thing you can do for them is to embrace the fact that you don't know the answer and be willing to say that to your child. There's no shame in not knowing the answer—in fact, that's where we all start when it comes to learning anything new. That's an important message to send because it empowers children by focusing on the fact that they have the ability to learn.

The other important concept to model is that it's always a good idea to double check your knowledge. You can do that by saying, "Even though I think I know the answer, let's check." It's an especially smart strategy since there's a good chance that new evidence, and possibly new understandings, have been discovered since you were in school.

HOW TO FOSTER PRODUCTIVE STEM TALK?

TALKING IS INTEGRAL to human learning, and "STEM Talk" provides a foundation for students to think in ways that can be engaged with, interpreted, built upon, and refined.

Giving your child the beginning of an academic response, *or sentence starter*, is an

COMMUNICATING IN SCIENTIFIC WAYS

Ask why and how questions, like...

How come ...? I wonder



WITH KIDS AT HOME, it's important to build time into schedules for focused brain breaks. But what exactly are brain breaks? And why is it so important to incorporate them into your child's daily schedule?

Brain breaks are mental breaks designed to help a student take a break and re-energize the brain to begin focusing again. According to research from the Watson Institute, many students can focus for a length of time that equals their age plus two minutes.

Here are some brain break exercises to try at home:

1. The Skipping Worksheets:

Tape your child's school worksheets to a wall nearby. When they finish one worksheet, require them to skip to grab the next! Incorporating movement is a quick way to get some energy out.

2. Go with the Flow: Similar for adults, yoga poses are one way to relax the mind. Consider including a routine of yoga-like stretching after each lesson. Print some poses on cards and have your child pull 3-4 to practice each time. This will keep things from feeling too monotonous, while also teaching some mindfulness! 3. Stir the (Gumbo) Pot: Have your child visualize they are standing in front of an enormous gumbo pot! Take hold of a large stirrer and slowly begin to stir in a clockwise direction. Have them use their whole body to help get a full range of motion in their elbows and shoulders. Instruct them to throw their hips into the action. Want to make it interesting? At random intervals, blow a whistle and tell them to change direction!

effective tool in engaging their STEM mind. Sentence starters help to focus attention on content-specific vocabulary and provide young minds with the language support they need to engage in discussions in more effective ways. Sentence starters help students communicate what they are thinking about, help many students with special needs, and provide focus for the lesson at hand.

If your students can talk about their thinking in mathematics or any other STEM subject, can you imagine what type of learning opportunities you are fostering outside of the classroom and in your own homes? Why ...? How do they know that ...?

Think of an idea, claim, or prediction, to explain your data and observations

My idea is

I think that

We could draw a picture to show I think it looks like this

Give evidence for your idea or claim

My evidence is The reason I think that is I think it's true because

Let your ideas change and grow

I think I'm changing my idea. I have something to add to my idea.

Resource: OpenSciEd

Need some more activities? Check out our College of Science coloring pages at Isu.edu/colorscience