

A GUIDE TO...

EVERYDAY STEM TALK

Cultivate and encourage ALL young children (0-5; with and without disabilities) to explore STEM concepts through activities as independently as possible with adaptations in their natural environments.

Are you a family member? Are you interested in helping your child learn about STEM concepts in your everyday routines and activities?

Use these quick everyday STEM talk tips to encourage your child to think about their learning and to develop their STEM (science, technology, engineering, and math) knowledge. Consider asking open-ended questions, narrating your observations and actions, and adding STEM vocabulary to daily routines, such as bathtime, mealtime, storytime, or other everyday activities. Also consider extending playtime activities your child is interested in.



Everyday STEM Talk: Caring for Plants

Instead of just watering the plants, consider expanding the activity by using specific STEM vocabulary.

'Plants are living things, and most need sunlight and water to grow.'



Everyday STEM Talk: Cause and Effect

Instead of just turning on the light, consider holding baby while turning on light and modeling curiosity.

'What is going to happen when I press this?'



Everyday STEM Talk: Getting Ready

Instead of just getting dressed or having snack, consider exploring sequences during daily routines.

'We have to put socks on before putting on our shoes.'

'First, we wash our hands, then we eat!'



Everyday STEM Talk: Getting Ready

Instead of just getting dressed, consider asking your child what would come next if the pattern were to continue.

'Your shirt has stripes! Purple, white, purple, white, what comes next?'



Everyday STEM Talk: Getting Ready

Instead of teaching a new skill all at once by saying 'Here's how you tie your shoelaces!', consider modeling or using visual cues to break down tasks into smaller steps.

'First make an X with the laces. Second, pull one of the X arms underneath. Third, make a bunny ear out of one of the laces. Next, wrap the other lace around the bunny ear. Last, pull the lace through and pull tight.'



Everyday STEM Talk: Getting Ready

Instead of just diaper changing, consider describing what you are doing and what comes next.

'First, I'm going to lift your legs up, then I'm going to slide the clean diaper right under!'



Everyday STEM Talk: Getting Ready

Instead of just saying 'It's cloudy or sunny', consider encouraging making predictions.

'What do you think the weather will be like today? What evidence makes you think that?'



Everyday STEM Talk: Mealtime

Instead of just taking out the utensils and setting the table, consider posing a question or problem to solve.

'Grandma is coming for dinner! What do we need to do to set the table? How many pairs of chopsticks do we need?'



Everyday STEM Talk: Mealtime

Instead of just following a recipe, consider expanding and narrating actions.

'A recipe gives directions so we know in what order we should do the steps.'

'You can't scramble an egg until you crack the shell and get the egg out!'



Everyday STEM Talk: Mealtime

Instead of just picking up the object when a child pushes it off the highchair, consider describing what the child did.

'Uh oh! You pushed the spoon off the table.'



Everyday STEM Talk: Mealtime

Instead of just feeding, consider describing the texture and/or taste.

'Does the banana feel mushy? Mumm, it is sweet!'



Everyday STEM Talk: Mealtime

Instead of doing something new just once, consider doing things over and over again.

'Let's fill all of the muffin cups with batter. You pick where to start. Put one scoop of batter in each cup. Keep going until all cups have batter.'



Everyday STEM Talk: Playtime

Instead of leaving a puzzle unfinished, consider problem-solving.

'Hmm. The circle piece does not have a round shaped hole for it to fit. Let's look at the other pieces we already put in. These have a square shaped hole. Is there a different puzzle piece with a round shaped hole?'



Everyday STEM Talk: Playtime

Instead of just painting, consider narrating your observations.

'OOH! Look. If we add blue paint to the yellow paint and stir it really well, we make green paint.'



Everyday STEM Talk: Playtime

Instead of saying 'Good job', consider describing what the child did.

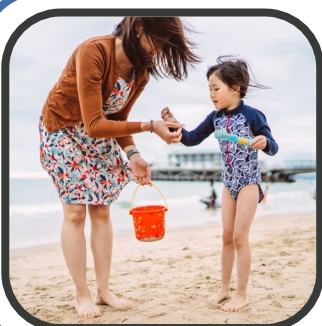
'You rolled that big red ball!'



Everyday STEM Talk: Playtime

Instead of saying 'Roll the ball there.', consider posing a problem.

'What do you think will happen if we roll the ball toward the blue block?'



Everyday STEM Talk: Playtime

Instead of saying 'Grab a bucket and go play with sand.', consider posing a problem.

'How can we make the sand stick together?'



Everyday STEM Talk: Playtime

Instead of just saying 'Good job' when child builds a tower, consider posing a problem.

'I wonder how we can continue to build/change the design of the structure so that it gets taller without falling over.'



Everyday STEM Talk: Playtime

Instead of saying 'That did not work' and giving up, consider encouraging trying new things.

'What is something we can do differently that might solve this problem?'
'I bet there are other ways to make this work. What else could we do?'



Everyday STEM Talk: Playtime

Instead of buying expensive building toys, consider using found materials (such as items from your recycling bin) to create something new by posing a problem.

'What can we use to build a skyscraper?'

'What will happen if we stack the milk carton on top of the paper cup?'



Everyday STEM Talk: Playtime

Instead of getting rid of empty boxes, consider using them in play.

'What can we build with a box?'

'What can be done to the box to turn it into something else?'





Everyday STEM Talk: Storytime

Instead of just starting a book, consider modeling curiosity and posing a question.

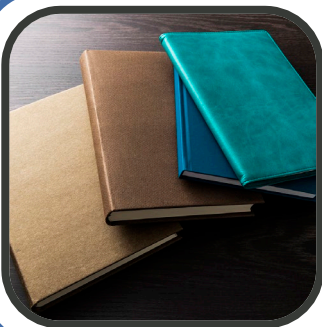
'I am noticing a dog and a tree on this book cover. What do you think might happen in this story?'



Everyday STEM Talk: Storytime

Instead of moving on after finishing a story, consider recalling the story.

'What is the first thing you remember that happened in the story? Next? Then what? How did it end?'



Everyday STEM Talk: Storytime

Instead of saying 'I don't know' and leaving it as that, consider making a plan to work together to discover the answer.

'That is a good question. Do you want to go to the library and see if we can find a book that will help us learn more?'



Everyday STEM Talk: Storytime

Instead of turning book pages quickly, consider waiting for the child to respond or letting them turn the page when they are ready.

'There are a lot of interesting things happening on this page. What do you notice?'





Everyday STEM Talk: On a Walk

Instead of just going for a walk, consider narrating observations and adding STEM vocabulary.

'That sound is a bird. Birds live in trees. And these are trees. Trees are plants.'



Everyday STEM Talk: On a Walk

Instead of saying 'Yes, it is a leaf.', consider demonstrating a sense of curiosity and extending the interaction.

'I wonder which tree this leaf is from?'



Everyday STEM Talk: On a Walk

Instead of just taking a walk, consider describing what you and/or the child might be experiencing.

'The warm wind is gently blowing on my face. It feels good.'



Everyday STEM Talk: On a Walk

Instead of saying 'See that snail?' and walking away, consider pausing to allow time for child to observe and use specific STEM vocabulary to describe the object.

'See how the snail has a soft body? It uses its shell as protection from other creatures.'



Everyday STEM Talk: On a Walk

Instead of saying 'Put the rocks back where they belong.', consider posing a problem.

'What would happen if you stack a bigger rock on top of a smaller rock?'