

HOW TO CREATE TEACHABLE MOMENTS FOR KIDS

A teachable moment is an unplanned, or intentionally placed, learning opportunity. These can happen anywhere and at anytime. They provide parents, guardians, and teachers the chance to help children learn new concepts and deepen their understanding of previously acquired knowledge. This can also be very useful when considering the design process as students can be more informed as they develop future iterations.

Parents, guardians and teachers have learned to watch for these moments. They listen and pay close attention ready to pounce with questions or thoughtful discussion at any time. We can create these moments especially when kids are working on a project or doing their homework by asking open ended questions. More importantly we need to be ready to explain and discuss the 'why' behind the child's answer and encourage them to research and dig deeper. This 'why' is the key to creating the teachable moment to better decode the world they live in.

Sometimes these questions and discussions can lead to questions that adults can't answer and this is the golden opportunity to model how to learn instead of what to learn! When you don't have the answer it gives kids the chance to learn alongside you: "That's a great question! Let's look it up together!" This builds confidence because it's ok that we don't always have all the answers. More importantly, it gives kids the sense of pride to learn that we are all life-long-learners.

UNPLUGGED CODED TREASURE MAP TEACHABLE MOMENT QUESTIONS

What is the area of your treasure hunt in metres²?
How long is one step?
How many degrees in a right or left turn? What is an average step length between an adult and a child?

What kind of an adventure can you create for your coded treasure hunt?
Convert your coded treasure hunt into written directions. Can you create a story around your treasure and the treasure hunt?

GPS (global position system) can locate objects on earth that contain GPS receivers. How does a GPS work? What are some examples of where GPS devices are used?

How can you add some extra physical activity to your coded treasure hunt? What coded symbols could you use to represent jogging in a spot or doing jumping jacks?

Get some exercise during this coding challenge! Add some physical activity by adding fitness stops throughout the journey. Create your own 'code blocks' to have your treasure hunter run, jump, and move in fun ways.

Geocaching is a high tech treasure hunt that uses a GPS device or app to find caches hidden around the world. Research and find answers to the following questions:

Give someone your coded treasure hunt and get them to draw a map based on those codes.

Written music is similar to code in that each note represents a certain sound. Rewrite your coded program to be a piece of music. What different notes would represent steps, turns, ups and downs?

How can families get started in geocaching?

What special equipment or app is required?

What safety procedures must be followed?

What rules need to be followed when hiding and registering a geocache?

If two people followed the exact same code, how will their results differ and why? What are some examples of coding languages? Who invented the first coding language and when?

