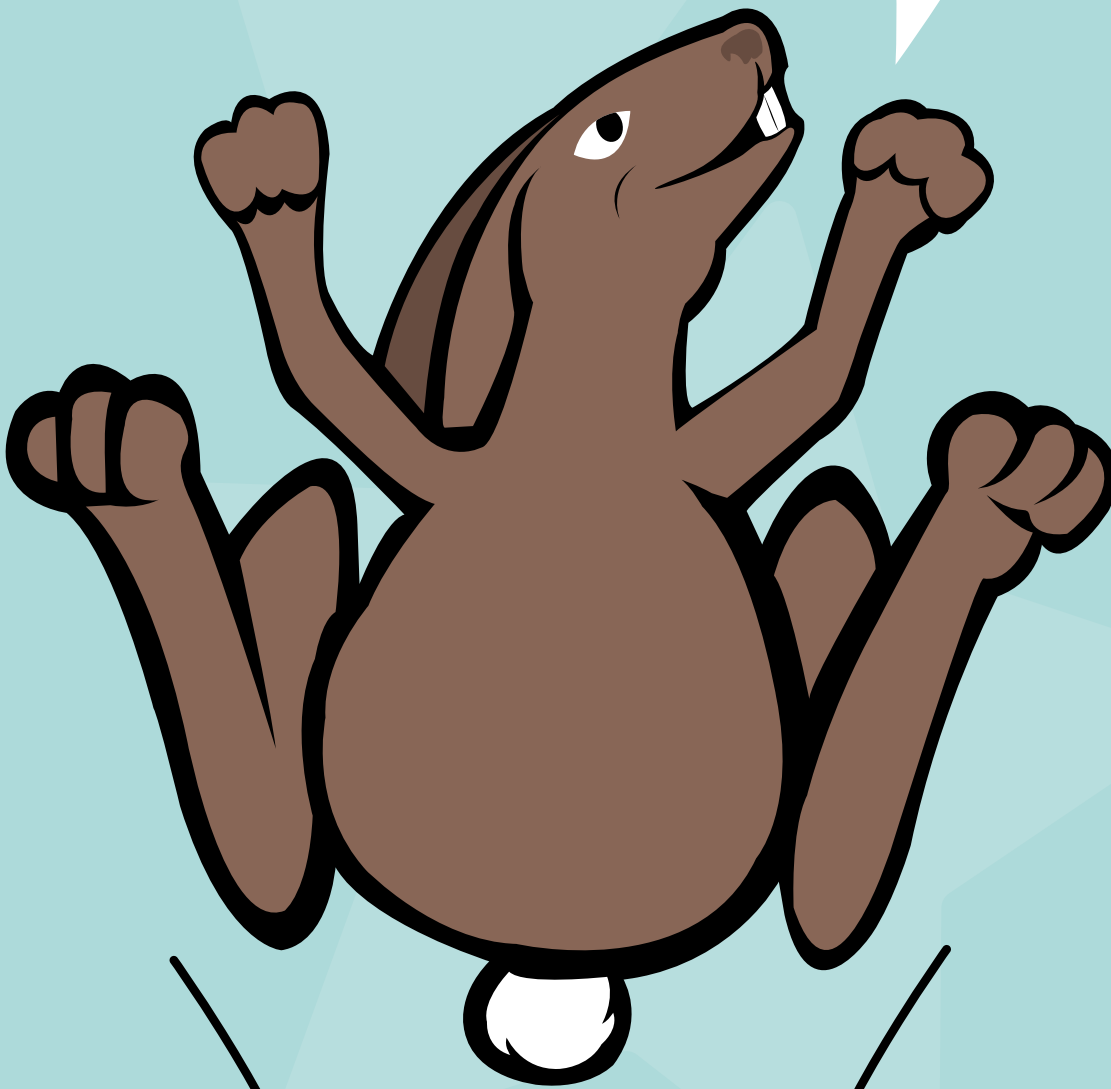
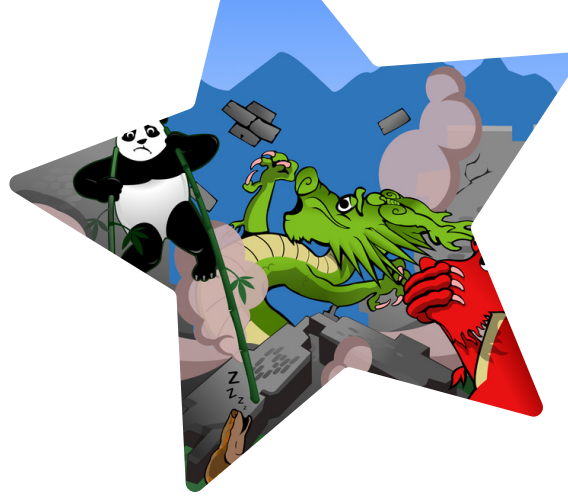




STEM
Don't forget the ARTS!



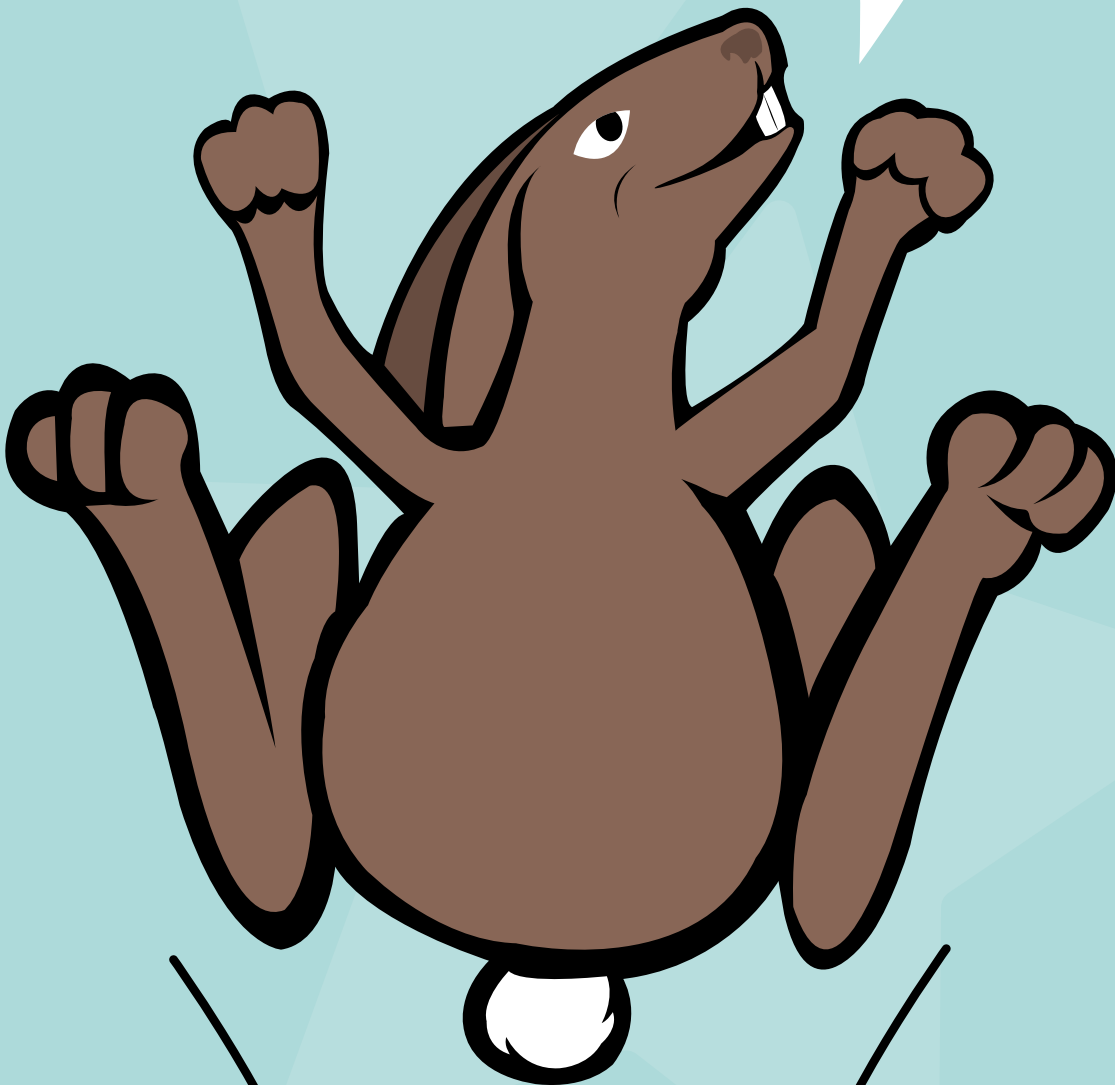


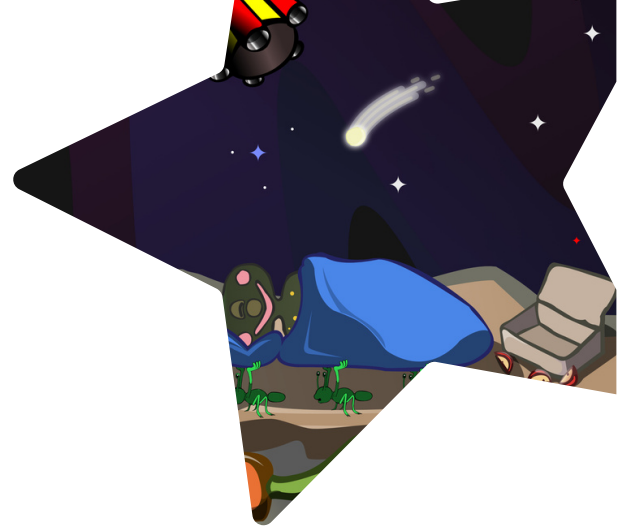
What's Inside...

Where would we be without imagination and creativity?	3
Great minds!	5
Developing their creativity and curiosity.	7
Imagination and Early Years STEM.	9
Your FREE Gift	13

Chapter 1

Where would we be without imagination and creativity?





Where would we be without imagination and creativity?

Creativity and imagination are not just for artists; the same level of openness to ideas and creativity is required for science, technology, engineering, and math (STEM). Without imagination and curiosity, we would not have built a rocket to explore space or discovered antibiotics.

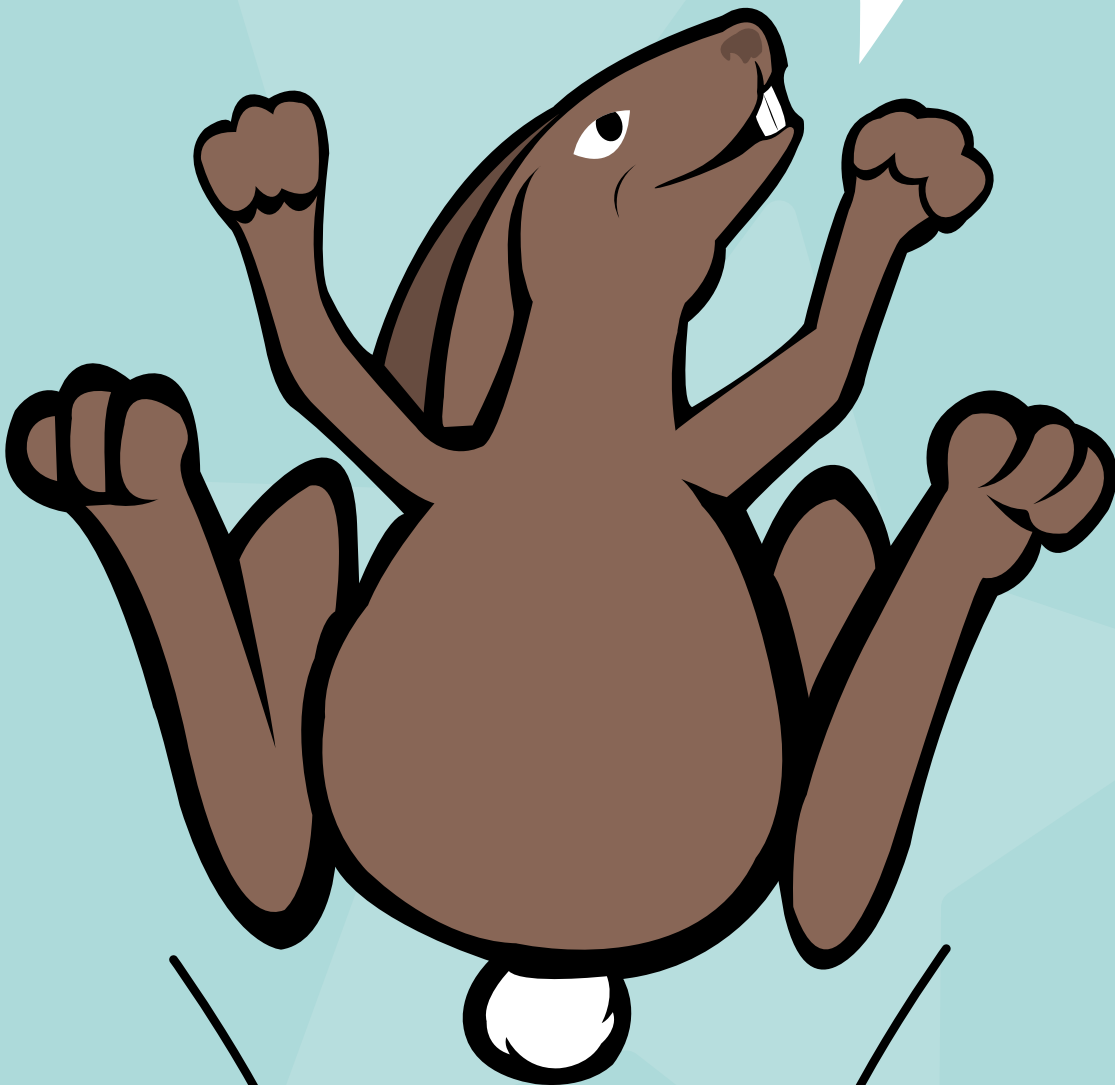
Creativity and imagination are the magical ingredients to STEM and our progress. Science, technology, engineering, and mathematics go hand and hand, but adding creativity and imagination to STEM elevates the ability for innovation. Just add the magical ingredients of art (creativity, imagination and thinking outside the box) to STEM and you have STEAM.

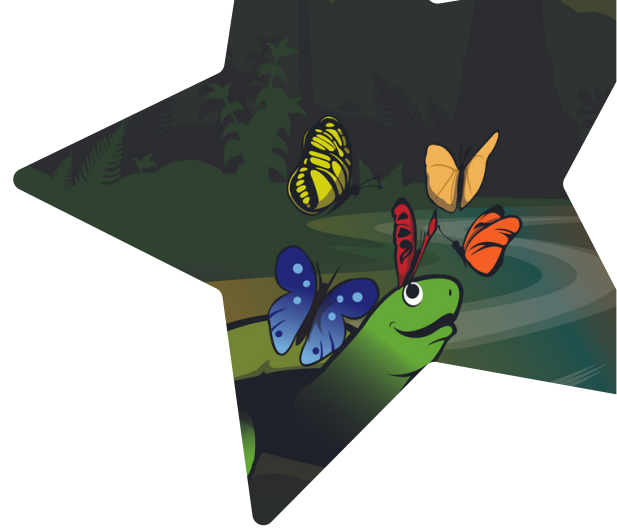
“Creativity breaks the ice to enable learning [...] the skills of the 21st century need us to create scholars that can link the unlinkable. These scholars must be willing to try many combinations before finding the right answer. They must be comfortable with concepts that they can play with in new ways. We want smart-thinking creative people. This is the formula for a better tomorrow.”

Ainissa Ramirez, PhD, author of the TED Book *Save our Science*, recipient of MIT's 'Top 100 Young Innovators Award'.

Chapter 2

Great minds!





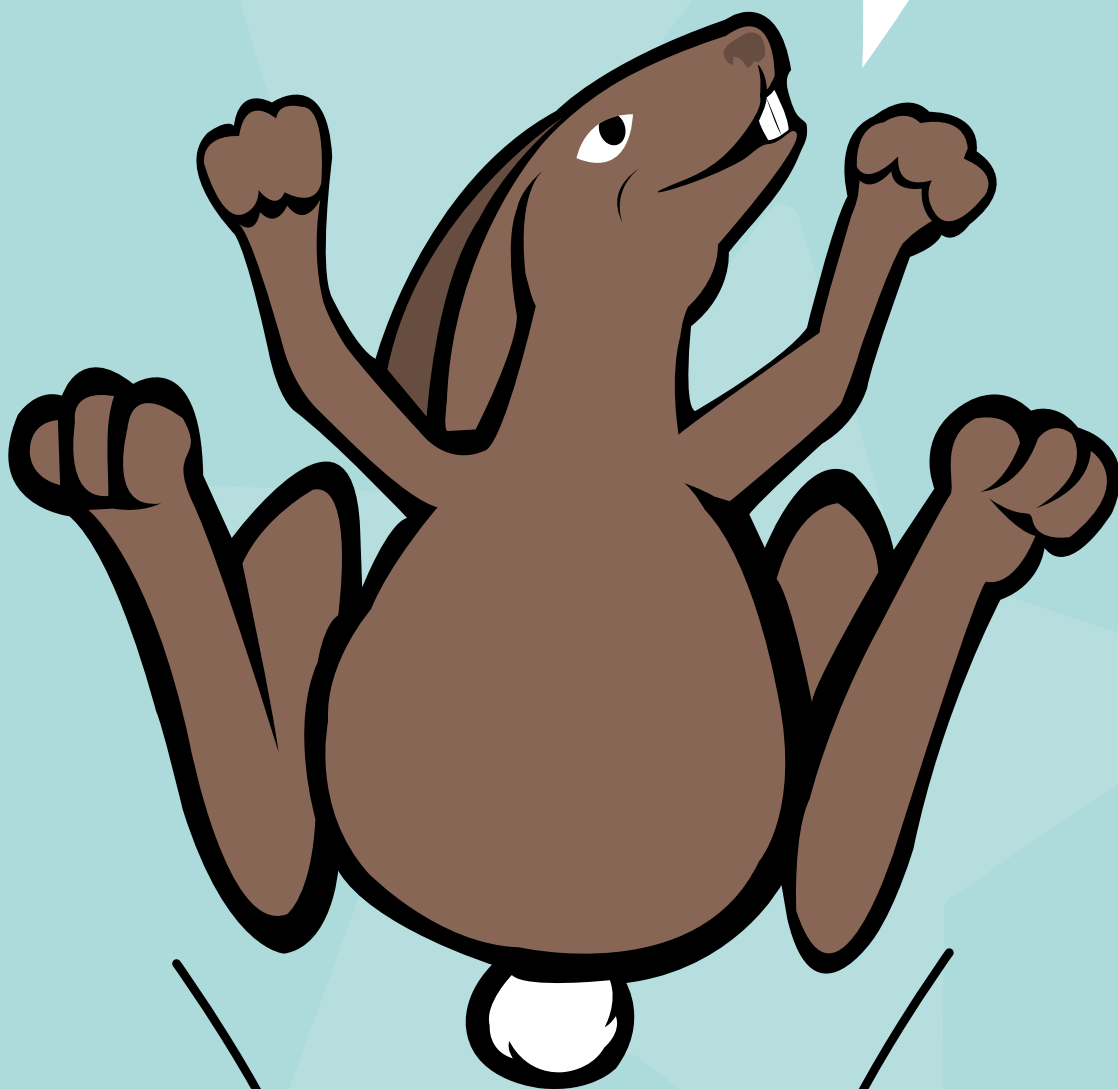
Great minds!

Great achievements have been by creative scientists thinking outside the box. They were clearly imaginative and curious to see what would happen if..... Take a look at this list of greatness and where would we be today without their creativity and imagination?

Albert Einstein
Frederick McKinley Jones
Hedy Lamarr
Nikola Tesla
Sir Isaac Newton
Tu Youyou
George Washington Carver
Marie Curie
Thomas Edison
Stephen Hawking
Alexandra Graham Bell
Charles Darwin
Raj Reddy
Rosalind Franklin
Steve Jobs
Elon Musk
Ada Lovelace

Chapter 3

Developing their creativity





Developing their creativity and curiosity.

No matter whether your little ones end up with a career in the arts or in the sciences, engineering, or maths, they will need openness to ideas, creativity, and imagination to discover what is possible.

Your little ones are naturally inquisitive and want to touch, feel, taste, and understand everything around them. Nurture that curiosity and creativity by feeding their imagination. Support and encourage openness to new ideas by helping them discover different solutions and answers to any problem they come across by developing their divergent thinking. Remember, if it's fun and engaging they will want to explore and find out more. Who wouldn't?

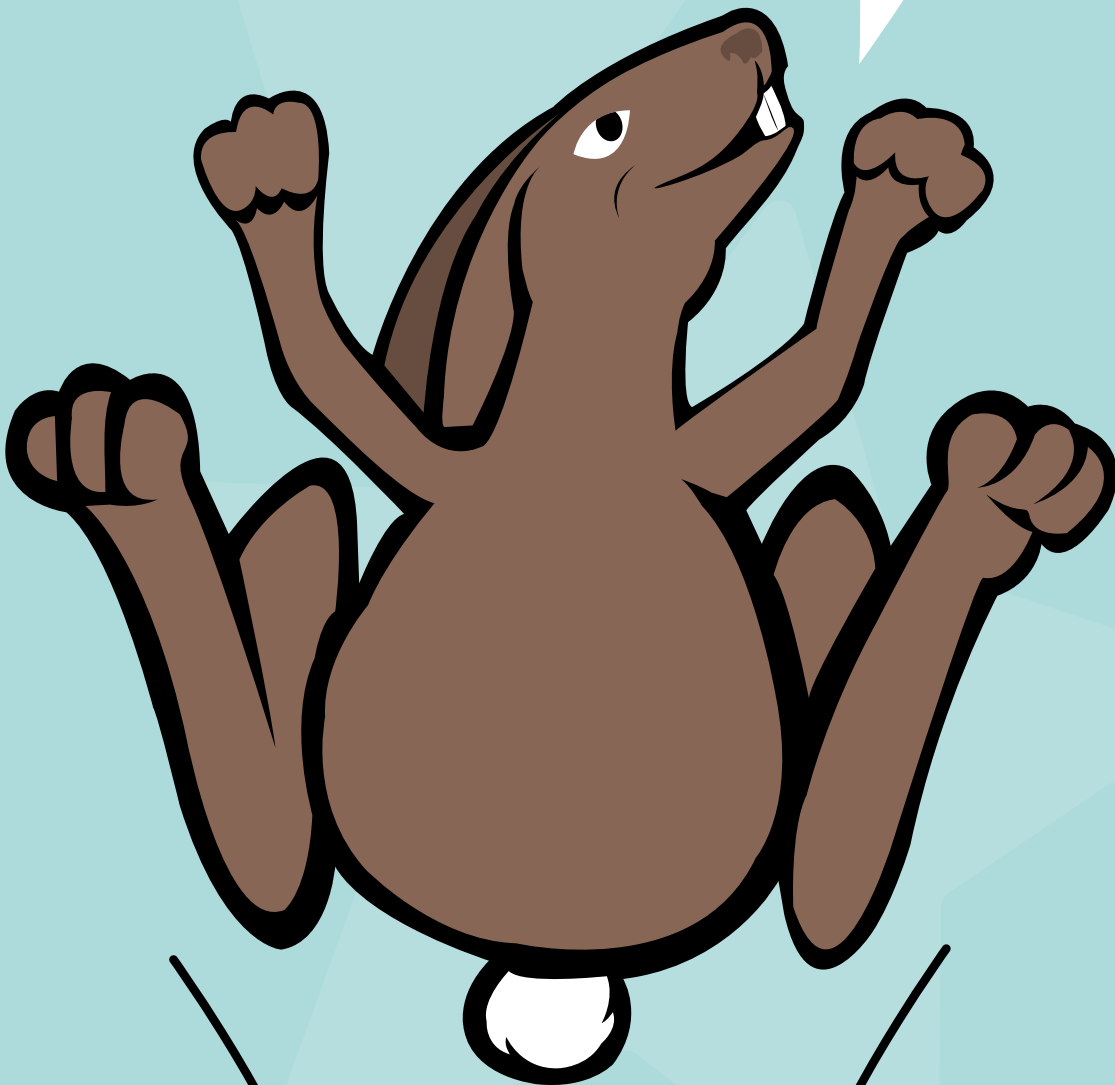
Develop their creativity through activities using imagination and role-play as this is a wonderful springboard for STEM activities. Be multi-sensory to ensure all your little ones are engaged and part of the creative process.

"The true sign of intelligence is not knowledge but imagination".
Albert Einstein

"Creativity allows people to be effective."
Bill Gates

Chapter 4

Imagination and Early Years STEM.





Imagination and Early Years STEM.

Some ideas to help stimulate their imagination and creativity whilst nurturing early math, engineering, and science and adding the A in STEM:

Jump on board a time travel machine and arrive in the land of the dinosaurs.

Early math

Discover a couple of Stegosauruses that have got stuck together and need help.

We pull them apart but, in the process, disaster as all their plates fall off. We need to pick up all their plates and pop them back. There are so many ways of doing this that will link to STEM.

You could just use imagination or create some paper/card plates in different colours and they have to find them in the right order and put them back on the Stegosaurus.

With masking tape create a spine on the ground with coloured or numbered plates as the guide. The children then search for and find the right colour or numbered plates and place them on the stegosaurus.



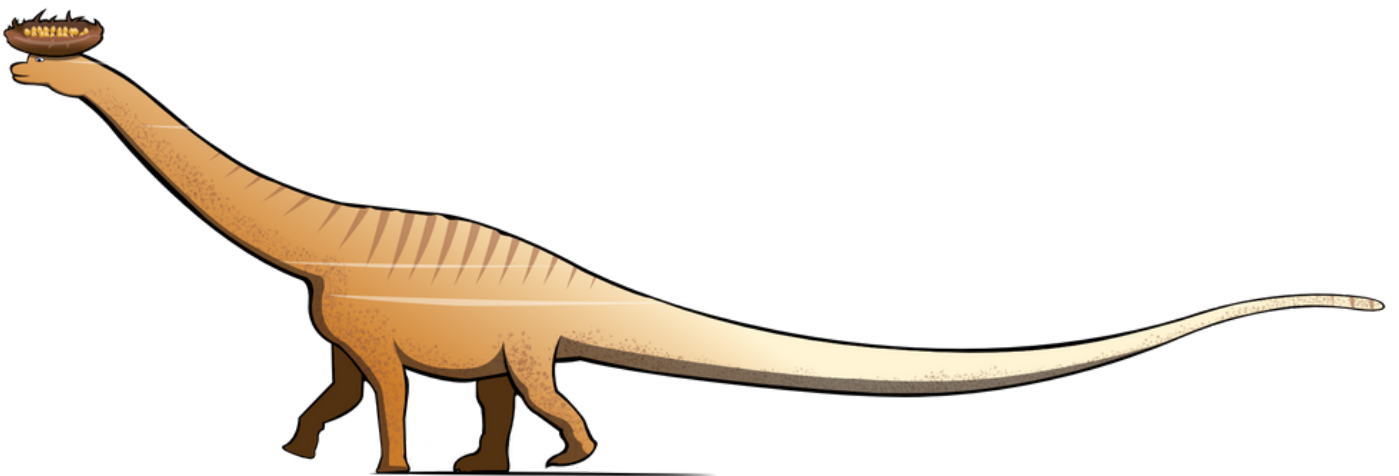
Early math and engineering

In our adventure back in the land of Dinosaurs, we must put the egg up high for the Titanosaurus to reach as she is so tall!

Time for block play (to represent boulders and rocks) to build a tower and place the egg on the top for her to reach.

This is a wonderful way to create little scientists as they experiment and observe their building efforts.

This process helps them learn about mass, weight, proportion, and balance as they plan and predict the outcomes of their efforts and most importantly help the mummy and baby Titanosaurus.





Early Science

What do we find in the land of the dinosaurs lots and lots of volcanoes?

Think of all the fun you will have to create eruptions together with your little ones.

Don't stop there you can have fun with meteors hitting the earth (poor dinosaurs) and they can see the damage when you show them images of the craters on the Moon.

Time for the trusty tuff tray or sand pit. If you are using the tuff tray fill it with smooth moon sand or sterilized flour.

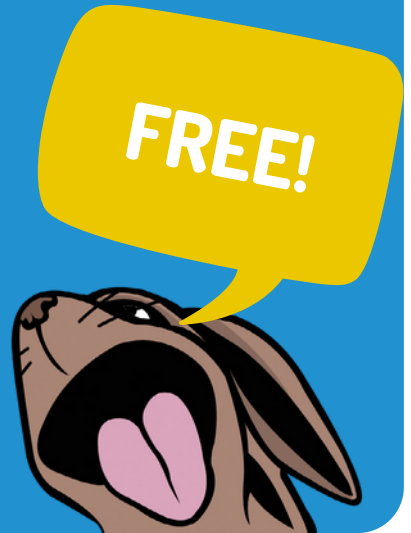
Get some small pebbles to represent the meteors and then have the children drop them from different heights and forces.

Compare the differences between the impacts made.

FREE ACTIVITIES!

Every other week you will receive our FREE activities ranging from sensory, speech and language, and STEM, to creative.

Check your inbox on Monday morning as they are sent out to you on Sunday at 18:00 hrs. What's not to love!



Gina has spent 30+ years teaching creativity and movement in mainstream early years and SEND settings.

Whilst teaching, Gina also found the time to create the 'Hi-5' dance programme to run alongside the Australian Children's TV series and the Angelina Ballerina Dance Academy for Hit Entertainment. Her proudest achievement to date is her baby Littlemagictrain. She created this specifically to help children learn in a multi-sensory way.



Gina

Gina Bale

Founder of Littlemagictrain



For more information about how we can help you
and your team, call: **01865 321 212**
or visit: **www.littlemagictrain.com**