

Name

Technology



Medicine



YSA Juniors

A journey into the world of STEMM

Engineering



Science

Maths



YOUTH
STEMM
AWARD

Do you think like a scientist?

If you like to ask questions, listen to others, notice changes or simply let your mind wonder... then you already are! Science isn't just a classroom subject, it's a way of exploring and understanding the world you live in and YSA Juniors is your perfect companion on this adventure!



Think of YSA Juniors like a curiosity diary. Go out and discover something new, ask lots of questions, have a go yourself and share your findings with a friend! Soon you'll have an activity sheet full of stickers to celebrate everything you've learnt and a brain bursting with ideas! Have fun and who knows what you'll discover next!

Maddie Moate

YSA Patron, YouTube filmmaker and BAFTA-winning presenter of CBeebies 'Do You Know'

Did you know ... ?

STEMM stands for Science, Technology, Engineering, Maths and Medicine.

Scientists study the world around them and try to understand how nature works.
What question would you ask a scientist to explore?

If you study technology you could become a computer programmer, an electrical engineer or a game designer. Which sounds most fun to you and why?

Engineers build, design and repair all sorts of things - do you know any engineers?

We all use maths everyday, can you think when you have used maths this week?

We are finding new medicines every day in the natural world. Where would you search for new medicines?

Four steps in discovering the amazing world of STEMM

1

Learn

There is lots to learn in each of the STEMM areas. You could read a book, take part in a lesson or listen to a talk - or do all of them!

2

Explore

Once you've learnt the basics it is time to explore. Search the internet, ask a friend, go to the library. Find out more than you knew!

3

Apply

Now show that you understand what you've learnt. Try to demonstrate what you've discovered or show off a new skill.

4

Explain

Finally you need to prove you really know your stuff. Can you explain an idea or concept to a friend or an adult? Do they understand what you tell them?

New message:
Turn the page
to start
recording your
YSA journey!

Science

Use this space to record what you **Learn**, **Explore**, **Apply** and **Explain** during your exploration of Science.






Technology

Use this space to record what you **Learn**, **Explore**, **Apply** and **Explain** during your exploration of Technology.

Activity sheet

As you work through activities and projects you can add your stickers below.
Fill every gap to become a YSA Junior and earn your badge and certificate!

Place
sticker
images
in boxes
below!

	Learn		Explore		Apply		Explain	Completed!
<div> Science</div>	<div></div>		<div></div>		<div></div>		<div></div>	<div>Place sticker here</div>
<div> Technology</div>	<div></div>		<div></div>		<div></div>		<div></div>	<div>Place sticker here</div>
<div> Engineering</div>	<div></div>		<div></div>		<div></div>		<div></div>	<div>Place sticker here</div>
<div> Maths</div>	<div></div>		<div></div>		<div></div>		<div></div>	<div>Place sticker here</div>
<div> Medicine</div>	<div></div>		<div></div>		<div></div>		<div></div>	<div>Place sticker here</div>
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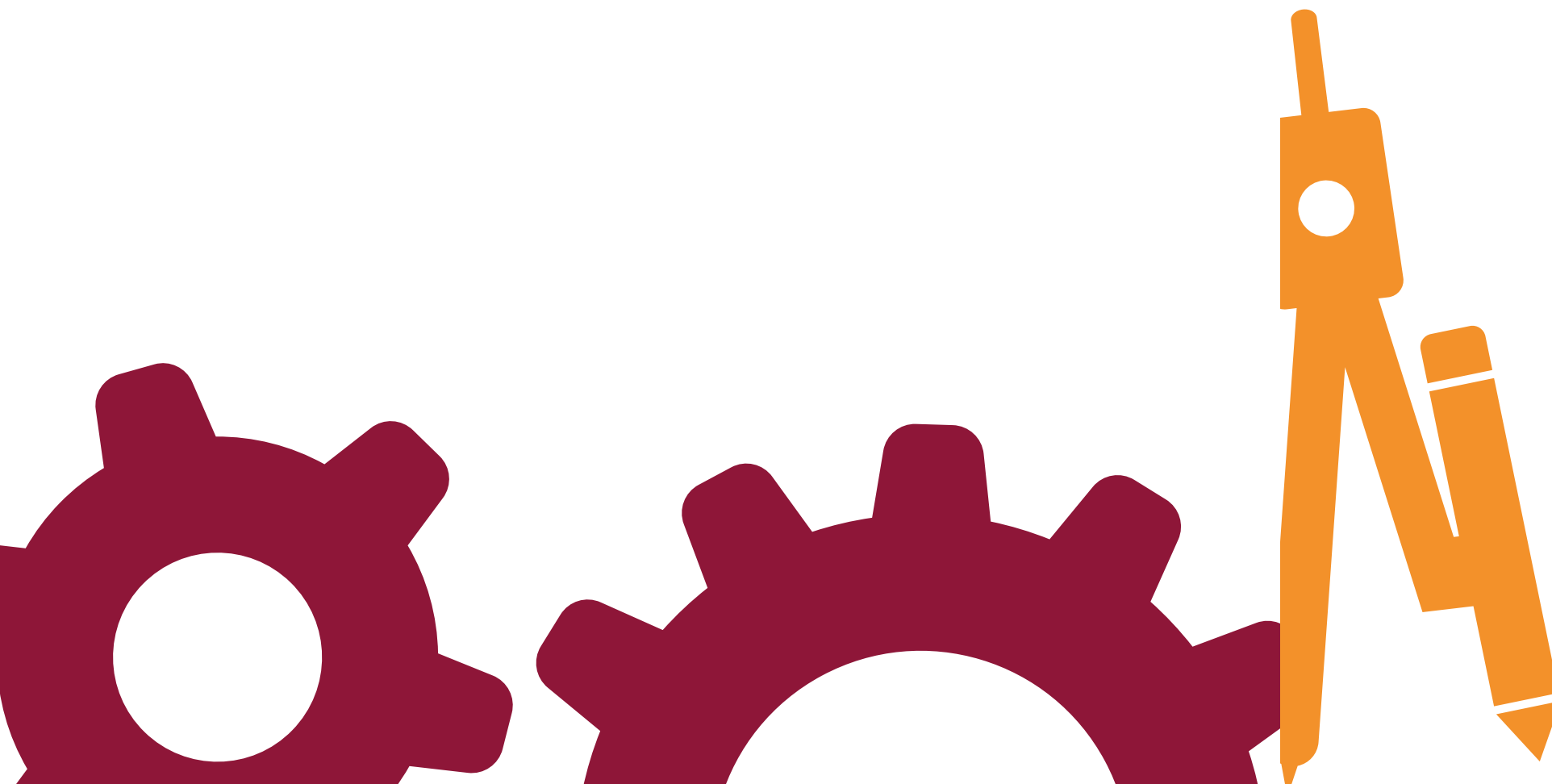
Engineering

Use this space to record what you **Learn**, **Explore**, **Apply** and **Explain** during your exploration of Engineering.



Maths

Use this space to record what you **Learn**, **Explore**, **Apply** and **Explain** during your exploration of Maths.



Use this space to record what you **Learn**, **Explore**, **Apply** and **Explain** during your exploration of Medicine.

Some ideas to help you get started!

Examples of activities

Here are some ideas of activities you can do, but don't forget, the only limit is your imagination – let us know about the amazing ideas you come up with.

STEMM area		Activity idea	Learn	Explore	Apply	Explain
Science	Sink or swim		Learn what the word density means	Explore which objects float and which ones sink in water	Predict which objects will float and sink	Explain why, using the idea of density
			Learn what a computer is	Try to count the number of computers in your house	Work out how many computers there might be in your street	Explain the things computers have in common
Engineering	Building bridges		Learn about the different types of bridges	Find out all the ways you can build bridges with straws and sellotape	Try to build the longest bridge you can between two books	Explain how you would make your bridge even better
			Learn about the Fibonacci sequence	Explore the relationship between the circumference and height of drinking glasses	Estimate the height of Big Ben – see how close you can get	Explain what a prime number is to a family member
Medicine	Saving lives		Be taught how to do CPR	Find out why CPR saves lives	Show you can do CPR	Teach a friend how to do CPR



In partnership with



Connect with us to find out more about the
Youth STEMM Award for students in years 9-13



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