

#### What is STEAM?

STEAM Education is an approach to learning that uses Science, Technology, Engineering , the Arts and Mathematics, as an access point for guiding pupil inquiry, dialogue and critical thinking. We weave STEAM concepts in and through the curriculum.

### STEAM-in-a-Box: Schools Edition:

A series of fun, hands-on programmes designed for approx. 9-11 year old, primary school children. Within each fully-resourced programme (supplied for an average class size of 30 children) are five, easy-to-follow, teacher-led lessons, providing an interactive and inquisitive introduction to science topics. We use real-world examples and a STEAM approach that ignites imagination, creativity and critical thinking,

The programmes were designed through collaboration of professionals from backgrounds in industry, academia and education. They are designed to support and enhance Key Stage Two (Primary 5, 6 and 7) *Science and Technology*, within the area of World Around Us, incorporating *The Four Strands:* Independence/Place/Movement & Energy/ChangeOver Time. Cross-curricular links include the Arts, Mathematics & Numeracy, History, Geography, Personal Development & Mutual Understanding.

# STEAM-in-a-Box: Schools Edition Programmes

#### **Available To Order Now!**

- Introduction to Understanding Human Biology [Interdependence/Place/Change Over Time]
- Building Blocks of Biology: Life on Earth [Interdependence/Place]
- Introduction to Engineering [Movement & Energy / Change Over Time] [Relevant to Scientific Skills Development & Progression, Design & Making; Arts]

## Coming soon:

- STEAM History of the Universe [Place/Movement & Energy / Change Over Time]
- FUNdamental Forces [Movement & Energy / Change Over Time]
- The Building Blocks of Matter: Atoms, Molecules, Physics & Chemistry [Movement & Energy / Change Over Time] \*This programme is beneficial for transition from primary to post-primary learning.

### Introduction to Understanding Human Biology

A 5-lesson (5 hours approx) programme introducing the human body. This includes an Introduction to basic human physiology and the main body systems, using a fun, practical, shared learning element. This programme includes a lesson on understanding your own vital signs - such as pulse, temperature, reactions, reflexes, indicators of health and the range of normal healthy physiological responses. We also study the importance of health and safety during COVID-19. Included as an extension to the curriculum, is a scientific introduction to genomics explained in a simple, practical way. That means we look at DNA, and how it contains instructions for all the physical traits of the human body. On a whole body scale, the entirety of a person's genes (their genome), interacting with their environment, influences health and wellbeing.





### Building Blocks of Biology: Life on Earth

A 5-lesson (5 hours approx) programme introducing the evolution of Life on Earth from the first microbial cells. We focus on developing and engaging children in understanding the building blocks of life, i.e. 3 basic cell types: Bacterial, Animal and Plant Cells. We explore their structure, function, incredible diversity, and how most life on Earth is "built" from these cells. Then we have viruses - we all know a bit more about one of those than we would like to, at the moment! So we will look at the broader context of viruses in the world.





## **□** STEAM Introduction to Engineering

A 5-lesson (5 hours approx) programme introducing the diverse fields of engineering. Using fun, practical, experimental elements, this programme introduces engineering and engineers as problem solvers in all kinds of interesting fields. We will use a child-friendly version of the engineering design process to engage the children in a series of design-build-test challenges that span multiple disciplines.





## **PROGRAMME ELEMENTS**

- Programme blocks in pre-made 5-lesson format. [Approx. 5 x 1-2 hour sessions]
- Teacher-led with support from experienced STEAM scientists and teachers. Suitable for teachers with an aptitude and interest in promoting science in the classroom.
- All STEAM programmes are curriculum-linked and provide guidance for teachers on learning outcomes, subject integration, and engaging science skills and competencies using STEAM approaches.
- Combination of Individual & team activities in bubble-friendly delivery format (Sufficient materials will be provided for each individual student, up to a maximum of 30 students per class)

### PROGRAMME COST: €500

- The programmes outlined above are available for purchase by the school, at a cost of €500 per programme, payable by cheque or bank transfer.
- Includes a free webinar for the teacher on 'STEAM approaches to Primary Science'.
- Fully resourced programme including lesson plans, PowerPoints, instructional videos, material for activities and fun age appropriate multimedia resources for the kids.
- Digital and laminated resources can be passed on to facilitate subsequent teachers and whole school learning - (physical materials are not all re-usable but easy to source for subsequent classes).
- STEAM facilitator available online (or in school if allowable) at additional cost.

Note: We also provide a STEAM-in-a-Box 10-week series of programmes supported by companies and other organisations, including their scientists facilitating the programme. If you are interested in this option please contact us.

# **EMAIL OR CALL US NOW TO ORDER!**

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