

Toys STE[A]M

Pre-visit resource



Museum
Gallery
Archive

Toys: STE[A]M

Key Stage 1

About this pre-visit resource

This pre-visit resource gives you detailed information about the session you are attending with your class, as well as some extra tips about our venue, so that you can be well prepared for your visit to The Box.

About this workshop

This workshop takes place in the **Simmons Learning Room** at The Box. It explores the science, technology, engineering (design), art and maths behind toys, old and new.

Students will participate in a range of activities to make their own toys, discovery STEM and STEAM skills and ideas along the way.

Curriculum links:

[S] Working Scientifically: Observing over time, Pattern seeking, Identifying classifying and grouping, Comparative and fair testing, Researching using secondary sources.

[T] [E] Design and Technology: Designing, Making, Evaluating, Developing technical knowledge

[A] Art: Use of a range of materials creatively to design and make products. Use of colour, pattern, texture, line, shape, form and space.

[M] Maths: Measurements, Geometry



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Detailed Workshop Outline

1. The session begins with the Schools Learning Facilitator introducing that a lot of STEAM - and the Science, Technology, Engineering (Design), Art and Maths behind them – goes in to making toys. The facilitator explains the format of the session, and sets the challenge for students to work out the different types of STEAM behind different toys.
2. Students are introduced to a range of modern and historic toys, including toys from The Box's handling collection of objects.
3. Students then split into groups, to rotate around different stations in the room. At each station, students will be presented with a toy. They are challenged to make their own, and consider the STEAM behind the toy.
4. After exploring the different stations, students are challenged to decide which STEAM is behind which toy, and then to consider additional toys that also use this. For example, a Weeble uses gravity.
5. Students then find out how toys can be used to widen horizons, by considering the impact of role play toys on how they view the world. This is explore via the Barbie and Ken dolls, and the range of professions that these toys have represented over the years.
6. Finally, the students have an opportunity for free-play, to explore all of the toys, and what they have made. The Schools Learning Facilitator will bring the group back together to reflect on what they have discovered during the session.

The stations explore:

- Moving and balance (Weeble and spinning tops toys)
- Design and construction (Meccano)
- Scale models (toy soldiers)
- Light and movement (kaleidoscope and view master)

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Key themes

Key themes of the workshop include:

- Toys
- Games
- Science
- Technology
- Engineering
- Maths

Key vocabulary

Key and new vocabulary covered in the workshop includes:

- Gravity
- Construction
- Scale
- Light
- Kaleidoscope
- Sensory play

Preparing for your session

Ask students to bring in or talk about a toy that they like to play with. Invite them to think about how the toy works, and the types of jobs that people do to make this toy. Try researching and making some toys with your class – this could be related to a topic you are looking at in school, or a historic period of your choice.

Plan a pre-visit to The Box before you come with your class, so you are familiar with the environment and spaces before your visit.

Visit the galleries

The galleries at The Box hold objects and archives about the topic you have explored in this session, as well as other fascinating subjects. To find out more about this topic, visit these galleries at The Box:

Memory Box

Risk assessment

To help you to write your risk assessment for your visit, we have created a Teachers Hazard Assessment which holds common risks and solutions that you might want to include. Visit this page <https://www.theboxplymouth.com/schools/school-visits> for the Hazard Identification Sheet.

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