

**For advice on STEM Clubs**, including how to set one up, interesting activities to run, competitions and funding opportunities, please contact South East of England STEM Club support on 01273 644178 or <a href="mailto:Stemclubs@brighton.ac.uk">Stemclubs@brighton.ac.uk</a>

**For all your other STEM-related needs**, including involving a STEM Ambassador in your Club, or getting information, advice and guidance on science, technology, engineering or maths, please contact your local STEMNET contract holder – details at the bottom of this page.

# **Top 10 Maths Activities for use in STEM Clubs**

## A Scale for the Solar System

http://nrich.maths.org/5634/clue

Suitable for: Key Stage 4

Challenge: To find the ratios between Earth, Venus, and the Sun.

#### **Around the World**

http://faraday.theiet.org/resources/overview/around-world.cfm

Suitable for: Key Stage 3

Challenge: Use the speed equation to calculate how long it takes to travel to destinations around the globe.

## **Attracting the Customer**

http://www.nationalstemcentre.org.uk/elibrary/resource/1061/attracting-the-customer

Suitable for: Key Stage 3-4

Challenge: Explore how retailers and product manufacturers persuade customers to buy more of their product.

#### **Attractive Rotations**

http://nrich.maths.org/6987 Suitable for: Key Stage 3

Challenge: To create attractive patterns using rotations.

#### **Dance is Electric**

http://faraday.theiet.org/resources/overview/dance-electric.cfm

Suitable for: Key Stage 3

Challenge: understand how dance floors can generate electricity and consider how output is linked to activity.

## **Healthy Childhood**

http://www.nationalstemcentre.org.uk/elibrary/resource/121/healthy-childhood

Suitable for: Key Stage 3-4

About: Work with complex charts, used by professionals who monitor the physical development of children.

#### **Reacting Times**

http://www.nuffieldfoundation.org/applying-mathematical-processes/reaction-times

Suitable for: Key Stage 3-4

Challenge: To design an experiment to measure reaction times and use it to test people's reaction times.

## **Sewage Tunnels**

http://faraday.theiet.org/resources/overview/sewage-tunnels.cfm

Suitable for: Key Stage 3

About: Move past an 'out of sight, out of mind' approach to sewage, and develop mathematical process skills.

#### **Stretchiness**

http://www.nationalstemcentre.org.uk/elibrary/resource/355/stretchiness

Suitable for: Key Stage 3-4

Challenge: Investigate the stretchiness of jelly sweets, consider material, length of time and type of sweet.

## **Supermarket Car Parks**

http://www.nationalstemcentre.org.uk/elibrary/maths/resource/1060/supermarket-car-parks

Suitable for: Key Stage 3-4

Challenge: Explore the efficient use of space in car parks with two-dimensional 'best fit' problems.

## **STEMNET** regional contract holders:

Hampshire and Isle of Wight: Winchester Science Centre, Stuart Parks: <a href="mailto:stuartparks@winchestersciencecentre.org">stuartparks@winchestersciencecentre.org</a>
Kent and Medway: Canterbury Christchurch University, Tsige Sherington: <a href="mailto:tsige.sherington@canterbury.ac.uk">tsige.sherington@canterbury.ac.uk</a>
Oxfordshire, Buckinghamshire, West Berkshire: Science Oxford, Olivia O'Sullivan: <a href="mailto:olivia.osullivan@scienceoxford.com">olivia.osullivan@scienceoxford.com</a>

Surrey and Berkshire: University of Reading, Julie Smith: julie.smith@reading.ac.uk

Sussex: STEM Sussex at the University of Brighton, Daniel Hawkins: <a href="mailto:STEMsussex@brighton.ac.uk">STEMsussex@brighton.ac.uk</a>