



Super Movers Shapes and Spaces – Live Lesson

Date: Wednesday, 19th September 2018

Time: 2pm

Duration: 35 minutes (approx.)

Location: bbc.com/livelessons

(Note: if you can't watch the programme live, you will be able to watch the recording on the Live Lessons website within half an hour of the live broadcast via BBC iPlayer)

Curriculum links

Key Stage 2 Mathematics (2nd Level in Scotland)

- Measure and calculate the perimeter of composite rectilinear shapes in metres
- Identifying lines of symmetry in 2D shapes presented in different orientations
- Completing the reflections of figures along lines of symmetry
- Plotting and describing positions on a 2D grid as coordinates
- Describing movements between positions on a 2D grid as translations of a given unit

Setup

How much space and equipment is needed?

The lesson can be viewed in a classroom with a large screen linked to a reliable broadband connection. Good audio equipment is not essential but will make the event more enjoyable.

As we'll be asking students to get involved in activities throughout the lesson, it would be beneficial if students had the accompanying worksheets to hand to guide them through the activities, as well as stationery such as pens, pencils and rulers.

We'll also be encouraging students to participate in physical activities during the lesson, so your class may enjoy it more if they have space to move around.

How many students can participate?

It's completely up to you how many students you have participating in the session. We want to get as many students as possible engaged in this Live Lesson. Space might be a consideration if you have a very large group.

How to prepare for the lesson

Section 1: Area and perimeter

The first section of the Live Lesson looks at area and perimeter. Your students will require the activity sheet for **Activity 1: Area and perimeter**, available on our website.

We'll be introducing students to the concepts of perimeter and area, how to calculate these for rectilinear figures and their applications in real world scenarios.

Students will be tasked with calculating the perimeter and area of a rectangular football pitch, based on the length and breadth of the pitch, which will be revealed live during the programme.

Section 2: Symmetry

In the second section of the programme, we will be looking at symmetry. Your students will require the activity sheet for **Activity 2: Symmetry**, available on our website.

Students will be introduced to the term and the applications of symmetry in the real world. They will also be introduced to finding lines of symmetry and creating symmetrical figures along a line of symmetry.

They'll be asked to complete symmetrical figures around a line of symmetry against the clock, with the correct answers revealed live during the programme.

Section 3: Coordinates

The final section of the Live Lesson introduces students to coordinate geometry, and you will need the activity sheet for **Activity 3: Coordinates**.

Students will be taught to understand and describe positions on a coordinate grid, and how to draw and translate simple shapes on the coordinate plane.

This activity requires your class to be in pairs, so you may want to split your class into pairs prior to the Live Lesson. Each person in the pair represents a team – Team Moonbeam or Team Moonchester – and they will be tasked with following along with the action in the studio live, taking turns to translate their team's shape to new positions on the full coordinate grid.

The positions that they are required to translate the shapes to for each turn will be determined live on air and will be announced as we go along during the programme.

Contact us

If you're planning on watching the Live Lesson, let us know. Email us with your school name and it could be featured on the Live Lesson.

Send in any questions or comments for our special guest experts on the subjects of shapes, symmetry, coordinates or even just getting active.

You can email us before and during the Live Lesson at live.lessons@bbc.co.uk, or get in touch by using the hashtag **#bbclivelessons**. We'll aim to answer as many of your questions as possible.

We'd also love to see examples of your students' work. If your classes have created any work or carried out any activities using the resources on our website, please do send it in to live.lessons@bbc.co.uk, and they could be showcased on the programme and on our website.

If you are sending in any images or videos that feature children, please ensure that you have parental permission, as they may be shown during the Live Lesson and on our website. Please be aware that the BBC

may ask you to demonstrate that you have received verifiable parental consent. **In the email, please confirm your official relationship to the child/children featured, e.g. teacher, Brownie group leader, sports coach etc. and confirm that you have sought prior parental consent.** Please also ensure the material is not sensitive or controversial. Read our [Terms and Conditions](#) for more information.