

A locus is a set of points that obey a rule. In groups, position yourselves to show where you could be, following each scenario.

Scenario 1:

You are on a camping trip with your friends. It is the first time you have stayed in a tent, and it is much colder than you thought. After trying for a while, you manage to build a fire. How do you position yourselves in order that you all get equally warm by the fire?

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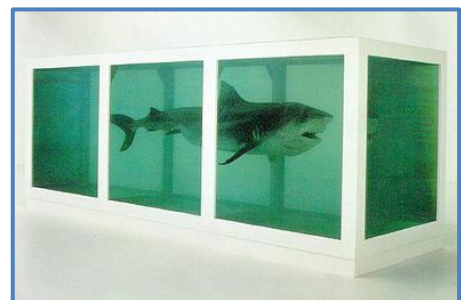
Scenario 2:

You are on a school trip and you are visiting the local wood. The day is warm and sunny and everything seems to be going very well. Suddenly there seems to be too much whispering and lots of worried looks. The wood is on fire! Everyone must get out safely and quickly. The closest gap lies between two trees that are both on fire, but just far enough apart for you to exit. Show how you position yourselves in order to minimise the danger of any one of you getting injured?

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Scenario 3:

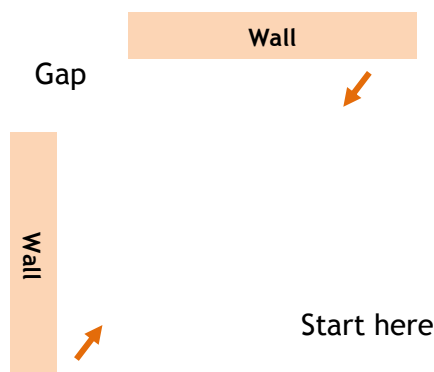
This time the trip is to the Tate Modern art gallery to admire Damien Hirst's shark, which is in a rectangular tank. The whole group must go in and out of the room quickly because it is very busy. You must all look at the exhibit at the same time and everyone needs to get an equally good look to get a photo. Show how you position yourselves in order to satisfy all of these requirements?



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Scenario 4:

You are on yet another day trip at a theme park. You decide to take one of the most challenging rides at the park with your friends. A part of this ride requires you to quickly walk through while two walls perpendicular to each other are closing up, threatening to crush you! How do you position yourselves to get out as soon as possible and minimise the danger of anyone getting trapped? The narrow exit is exactly where the two walls meet.



Teaching notes: answers

This lesson could take place in a large space, such as a hall, drama studio or even outside. You could assign different pupils to be the fire, the trees, the shark and the walls. If you have access to a camera, you could take photos of the students' positions to display in class while doing further work on loci.

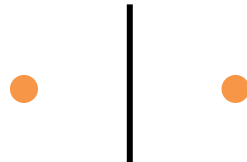
Scenario One

A circle.

Keywords: equidistant, one fixed point.

Scenario Two

A perpendicular bisector.

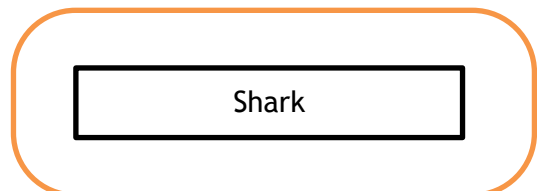


Keywords: equidistant, two fixed points, perpendicular bisector.

Scenario Three

Find an image of the artwork here:
www.damienhirst.com/the-physical-impossibility-of

Keyword: equidistant.

**Scenario Four**

An angle bisector

Keywords: equidistant, two straight lines.

