



# The Perfect Selfie

Topics: Geometry, Trigonometry & Coordinate Geometry

Students are challenged to develop and articulate mathematical approaches to understanding this spacial problem in context.

Year Group: 5<sup>th</sup> Year

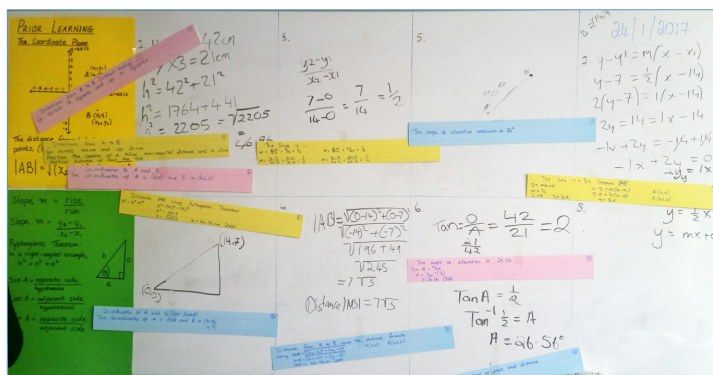
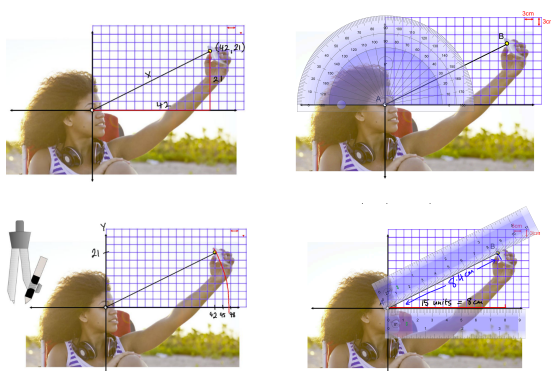
Level: Mixed Ability

## Posing the Problem



Kylie Jenner gives advice on taking the best selfie: "Always try to position the camera above you and as far away from your face as your arm will reach." Find as many different ways as you can to mathematically describe the "perfect selfie" taken by the model above.

## The Board Plan



Prior Knowledge & Posing the Task  
10 minutes



Students working on the problem  
10 minutes



Presentation of Solutions & Ceardaíocht  
20 minutes

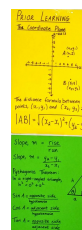


Summing up & Reflection  
5 minutes

## Reflecting on the Lesson

Several of the anticipated responses were attempted by students with most favouring the use of the coordinated points and Pythagoras' Theorem. Few measured the angle or length while the application of trigonometry ratios caused difficulties for students. The important roll of carefully preparing the students with the appraite prior knowledge was evident from the lesson.

Students were engaged, actively learned, became critical thinkers and during the course of the lesson they became more comfortable giving contributions. Following this lesson students had a better understanding of links between various strands of the Curriculum.



Developed by Fiona Friel, Bella Glackin  
MDT (Deele College), Síobhan Uí  
Shearcaigh and Leanna Ni Bhaoill,  
(Pobalscoil Ghaoth Dobhair), with thanks  
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To download this lesson plan visit [www.projectmaths.ie/mc2017](http://www.projectmaths.ie/mc2017)

