

'Bad apples': Extension ideas for secondary students

 $\underline{http://topdrawer.aamt.edu.au/Reasoning/Big-ideas/Visualisation/Visualisation-of-information/Bad-apples}$

Change the position of the bad apple in the array.

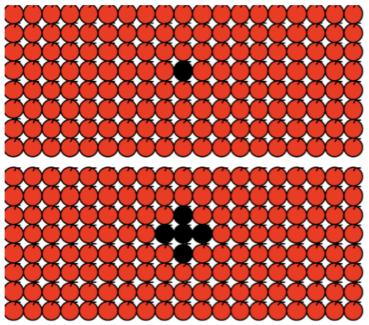


Image: M. Horne, for the 'In Teachers' Hands' project (AAMT Inc.)

What would happen if the problem were moved into three dimensions, with the bad apple halfway along one edge?

What would happen if the problem were moved into three dimensions, with the bad apple being one vertex?

What would happen if the problem were moved into three dimensions, with the bad apple in the middle of the middle layer?

These problems could be explored with geometry software. You can download *Geogebra* from http://www.geogebra.org or use other software packages such as *Cabri Geometry* or *The Geometer's Sketchpad* if your school has the necessary software and licence.



© 2013 Education Services Australia Ltd, except where indicated otherwise. This document may be used, reproduced, published, communicated and adapted free of charge for non-commercial educational purposes provided all acknowledgements associated with the material are retained.

