THE BATTLE OF GORESDALE

Brief summary of activity:

The trebuchet is widely reckoned to be the most devastating weapon of the Middle Ages. It was used to launch heavy objects vast distances through the air towards formerly impregnable fortified areas. In this task the user has to use the trebuchet to hit certain targets by applying their knowledge of kinetic energy.

Specific Curriculum Area:

Year 9 — Unit 9I: Energy and electricity, Section 1: a. How is energy involved in doing useful things?

Assessment method:

Teacher observation.

Differentiation:

There is no obvious area of differentiation within this task except for the increasing difficulty when levels are completed.

Learning objectives:

Children should learn: that useful changes usually involve energy transfers and transformations; that the terms 'kinetic', 'potential', 'radiation' and 'chemical' are useful when describing energy

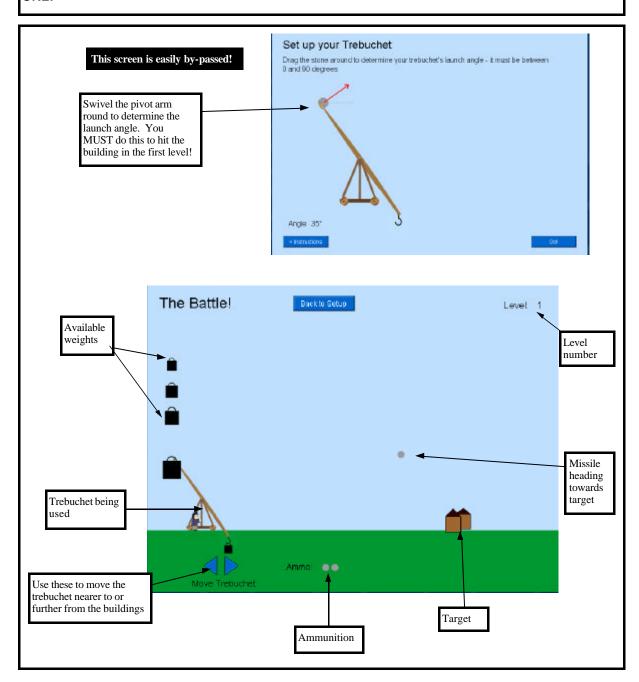
Use of Activity in a lesson:

This task could be set as a homework activity, assuming Internet access is possible. Alternatively, the teacher could demonstrate the task to the class (via an Interactive Whiteboard).

Hints and tips for teachers:

- 1. Tell pupils not to get frustrated if they do not succeed until having had many attempts—encourage trial and error.
- 2. Change the angle of the Trebuchet before you get to the main screen.
- 3. For the moving figures, do not rush into firing the trebuchet. Watch the pattern of movement to determine the best place to fire.

URL:



Troubleshooting:

If you cannot launch the missile far enough, you must alter the ANGLE of the trebuchet from the screen before the main screen.

Other links:

http://www.standards.dfes.gov.uk/schemes2/secondary_science/sci09i/09iq1b