

QAST Weekly Challenge



Water Clock

Introduction: People often need to measure time for a great many reasons, in cooking, the duration of a lesson, in an athletics challenge to give some examples. Boiling an egg is a common use for a timer, typically a soft boiled egg takes two and a half minutes to cook.

Your challenge: to create a simple, reusable timing device that measures exactly two and a half minutes using 200ml of water. Research water clocks to give you some ideas

Grading Criteria: You will be graded on the following standards

- Eng 0 Academic Rigour
- Eng 1.05 creativity and Innovation and
- Eng 3.03 Communication and Collaboration

Resources: For this task you may use

Plastic cups or small disposable water bottles

Straws

Plasticine

String

A timer

Skewers, pencils or chopsticks or similar to act as a stand

Scissors

Tape

Drawing pins

Process:

Devise a method of transferring 200ml of water from one container to another which takes exactly 2 and a half minutes. You will need to use a timer to observe and measure time accurately and make changes depending on your results. The size and position of the holes, the number of cups the water passes through, the angle of straws and flow rates will all affect your design.

Submission: You may submit your work in google classroom work in any of the following forms:

- A video in mp4 format of you performing the task to completion.
- A power point or slides presentation containing still images of the challenge with some annotation.
- A series of still images with a voice over commentary.

Submit your work online and tag us so we can see it!

@QAST_QF
#EngineeringChallenge