# Who Sank the Boat?

## Year 3 Maths – Using units of measurement

### Australian curriculum Learning objectives

* [ACMMG061](http://www.australiancurriculum.edu.au/Elements/ACMMG061):[[1]](#footnote-1) Measure, order and compare objects using familiar metric units of length, mass and [capacity](http://www.australiancurriculum.edu.au/Glossary?a=M&t=capacity)[[2]](#footnote-2)

### Resources required

* [*Who Sank the Boat?*](http://www.universalsubtitles.org/en/videos/7Z5LQz908F5B/info/who-sank-the-boat/)*[[3]](#footnote-3)* captioned online video story (Duration: 2:13)
* Aluminium foil (minimum 20cm sheet per student)
* Marbles
* Deep tray of water

#### Lesson outline:

1. Teacher introduces the book - *Who Sank the Boat?* and challenges students to uncover the reasons why the boat sank.
2. Teacher plays *Who Sank the Boat?* captioned video. When the video has finished the teacher asks students to explain why the boat sank and who is to blame.
3. After class discussion teacher explains that although it was an animal which eventually caused the boat to sink it was the combined weight of ALL animals that caused the boat to sink.
4. Teacher demonstrates how excess weight can cause a boat to sink using their foil boat and water tray.
5. Teacher shows students how to fold, bend and pinch aluminium foil to build a boat. Teacher pairs up students and asks them to use their 2x20cm sheets of foil to build a boat that will continue to float while holding 6 marbles. Students are reminded that if on first attempt their boat sinks they will need to review and adjust the plans.
6. Students should be allowed time to experiment and discuss the best possible designs.
7. Teacher and students place boats in order:
   1. Lightest to heaviest - haulage capability of boats
   2. Longest to shortest
   3. Skinniest to widest

### Homework/extension

Students are challenged to design and build a boat using aluminium foil. The boat should remain afloat while holding a minimum of 10 marbles.

### Opportunity for further activity

Students research and experiment to see which ‘homework’ boat design is able to carry the largest amount of weight. Students will create a poster advertising their heavy haulage foil boat - poster must explain WHY their design is able to carry heavy loads. E.g. flat base, tall sides, longer or shorter length etc.

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1. http://www.australiancurriculum.edu.au/Elements/ACMMG061 [↑](#footnote-ref-1)
2. http://www.australiancurriculum.edu.au/Glossary?a=M&t=capacity [↑](#footnote-ref-2)
3. http://www.universalsubtitles.org/en/videos/7Z5LQz908F5B/info/who-sank-the-boat/ [↑](#footnote-ref-3)