

## Summary

The workshop aims to reinforce the skills taught through the Numeracy strategy and provides an opportunity for the children to apply their skills to practical activities. The activities cover data collection, measuring, capacity, counting, adding and problem solving.

## Workshop Contents

### **Education Centre (Museum Tutor led)**

- Pupils explore capacity using containers with varying volume and water to determine which holds more than less than or exactly one litre.
- Pupils have the help of a story about Giant Jim and his friends Francesca the frog and Duck to help them remember measurements.

### **Galleries (Museum Tutor led) *If you have previously booked a boat trip, it will replace this session.***

- Pupils use the galleries to find pictures of boats in the three main galleries.
- The pictures are contained in red and blue treasure boxes at the boat locations.
- Pupils return to the activity base to sort their pictures into chronological order by age, e.g. older to newest.
- Bridge Link: pupils estimate the length of the river, and its widest and narrowest crossing points.
- Pupils can use standard and non-standard measurements according to their ability.
- Rowing Gallery: pupils explore the trireme, estimating the number of oars used to row the trireme.
- Pupils then find out how many oars there are by counting lolly sticks, which equate with the number of oars.
- Rowing Gallery: pupils work on the Pulling Together activity, and think about simple halving and doubling.

### **Galleries (Teacher led)**

- Pupils then enjoy the shape trail, exploring the galleries, looking for different shapes.
- There is no recording in these activities.

## Learning Outcomes

- To understand what one litre of water looks like
- To practice estimation
- To practice and learn how to use standard and non standard measuring materials

## National Curriculum Areas Covered

### Problem solving Mathematics

- Using and applying number
- Shape space and measures
- Problem solving

### Science

- Investigative skills
- Useful Pupil Preparation
- An understanding of the word capacity and some experience of guessing and estimating.

## Pupil Preparation

*We recommend that the pupils have the following preparation:*

- It is useful for the children to have an understanding of the word capacity and to have some experience guessing and estimating

## Resources

**Treasure Hunt and Map:** for use during the Museum tutor led gallery session. Each adult will be given a copy to guide their group through the galleries.

**Shape Trail:** for use during the teacher led gallery session. Each adult will be given a copy to guide their group through the galleries.

## Follow-up Ideas

- Do a shape trail in your classroom. Which shape comes up most?
- Make a collection of bottles that would hold 1 litre. Decorate them and turn them into a litre creature!
- Make a chart of activities during your day that use water. Discuss which one uses the most.

**Large print versions of all teachers' and pupils' material are available. Please ask for these when booking.**

## The Treasure Hunt

These are the 5 boats you must find.

Collect a card from the treasure chest by each boat.

When you have all 5 come back to the rowing gallery and try and put the cards in the right place on the time line.

### In the Rowing Gallery



The Sydney Boat



The Greek Trireme

### In the River Gallery



The Saxon Log Boat



The Sailing Skiff

### In the Henley Gallery

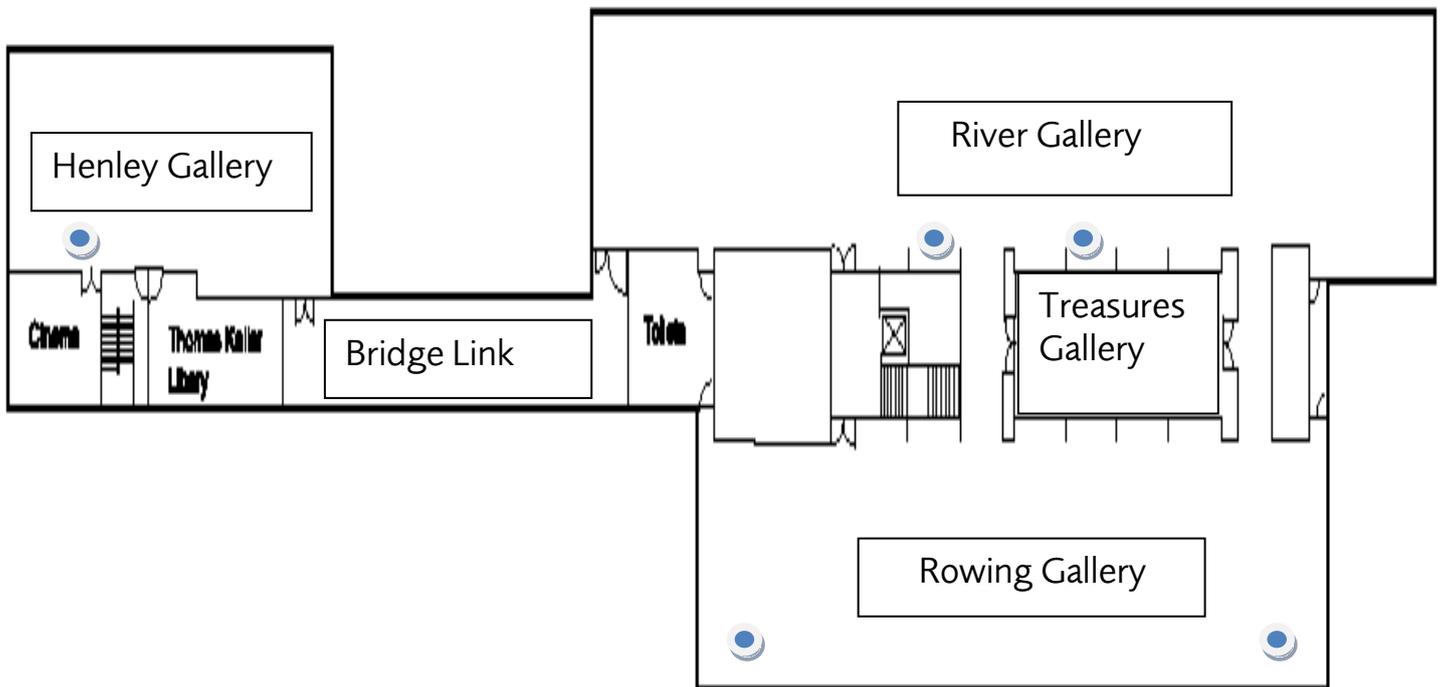


The Eva

## Treasure Hunt Map

### Can you find the boats?

Use the map to help you find the boat cards. You'll find the treasure by the blue spots.



## Shape Trail: Henley Gallery

**This trail does not involve any recording. The aim of this trail is for the children to talk about the shapes they find in the gallery.**

As the children walk through the gallery encourage the children to think about the shapes of the objects on display and other shapes in the gallery.

Explain to the children that in this gallery you will be concentrating on three shapes:

Circles

Spheres

Rectangles

See if you can find four examples of each shape. Can you find more than four?

(Hint:

**Circles:** Plates, tops of cups, buttons on blazers, medals, interactive buttons, etc

**Spheres:** Cannon balls, Musket shot

**Rectangles:** Books, pictures, programmes, slide show, etc

Can you find any other shapes?

Can you find a cylinder? (Hint: Funnel on Eva)

## Shape Trail: Rowing Gallery

**This trail does not involve any recording. The aim of this trail is for the children to talk about the shapes they find in the gallery.**

As the children walk through the gallery encourage the children to think about the shapes of the objects on display and other shapes in the gallery.

Explain to the children that in this gallery you will be concentrating on three shapes:

Circles

Squares

Triangles

See if you can find four examples of each. Can you find anymore examples of each shape?

(Hint:

Triangles: Try looking at the Trireme and outriggers.

Circles: Try looking at the looms and the seats

Squares: Try looking at the looms)

Are there any other shapes the children can find?

Look at the wire being used to hang the boats from the ceiling. Can you see any shapes in it?

## Shape Trail: River Gallery

**This trail does not involve any recording. The aim of this trail is for the children to talk about the shapes they find in the gallery.**

As the children walk through the gallery encourage the children to think about the shapes of the objects on display and other shapes in the gallery.

Explain to the children that in this gallery you will be concentrating on three shapes:

Circles

Squares

Rectangles

See if you can find four examples of each. Can you find any more?

(Hint:

**Circles** can be found: on the top of the Challenge cup, clock face, push buttons for interactives, dial for lock interactive, medals, life ring, fishing reels, dials on the water on tap exhibit, etc

**Squares** can be found: on the Sailing Skiff, books, information cards, wildlife information by window etc

**Rectangles** can be found: Display cabinets, photographs, books, TV screens, badge on swan uppers jacket, flags on boats, etc Can you find any other shapes?

Can you find an octagon (8 sides)? (Hint: Tops of metal signs on the wall just along from the Log boat)

Can you find a pentagon (5 sides)? (Hint: Bottle stop, centre cabinet in The Making of the River area)

Can you find a cylinder? (Hint: Water container and pipes in the Water on Tap exhibit)