



**Ebook Code:
REUK0014**



Book 1

Key Stage 1 - Ages 5/6

Measurement in Mathematics Series

**Practical measuring activities for the
classroom.**

Written by Jane Bourke. Illustrated by Rod Jefferson.

© Ready-Ed Publications - 2010

This version published by Ready-Ed Publications (2014) P.O. Box 276 Greenwood W.A. 6024

Email: info@readyed.com.au Website: www.readyed.net

COPYRIGHT NOTICE

Permission is granted for the purchaser to photocopy sufficient copies for non-commercial educational purposes. However this permission is not transferable and applies only to the purchasing individual or institution.

ISBN 978 1 86397 178 9

Contents

Page Title	Curriculum Reference	Page
Maths Activities Roster		4
Length: Teachers' Notes		5
How Long is Larry the Lizard?	Problems involving measures (length)	6
Larry the Lizard 2	Problems involving measures (length)	7
Meet the Lizard Family	Problems involving measures (length)	8
Larry's Length Graph	Problems involving measures (length)	9
Lizard Trails 1	Problems involving measures (length)	10
Lizard Trails 2	Problems involving measures (length)	11
Larry's Long Leaves	Problems involving measures (length)	12
Area: Teachers' Notes		13
Clowning Around	Problems involving measures (area)	14
Make a Clown	Properties of 2D shapes	15
Finding a Home 1	Properties of 2D shapes	16
Finding a Home 2	Properties of 2D shapes	17
New Clothes for Ziggy	Problems involving measures (area)	18
Ziggy's Shapes	Problems involving measures (area)	19
Ziggy's Tricks	Problems involving measures (area)	20
Volume and Capacity: Teachers' Notes		21
Plasticine Puzzles	Properties of 3D shapes	22
Sammy's Sand Castles	Problems involving measures (capacity)	23
Sammy's Bath Time	Problems involving measures (capacity)	24
Sammy's Super Lunch	Problems involving measures (capacity)	25
Mass: Teachers' Notes		26
Balancing Bertie	Problems involving measures (mass)	27
Bertie's Bowling	Problems involving measures (mass)	28
Which is Heaviest?	Problems involving measures (mass)	29
Marble Magic	Problems involving measures (mass)	30
Fruit Time	Problems involving measures (mass)	31
Time: Teachers' Notes		32
My Day	Problems involving measures (time)	33
My Shadow	Problems involving measures (time)	34
What I Like To Do	Problems involving measures (time)	35
Birthday Graph	Problems involving measures (time)	36
Beat The Time	Problems involving measures (time)	37
Magic Minute	Problems involving measures (time)	38
Come in Spinner	Problems involving measures (time)	39

Length: Teachers' Notes

The concept of length is based around the adventures of Larry the Lizard and his friends. Skills to be developed include: comparing, measuring using arbitrary units, sorting, seriating, alignment and estimating.

Materials required for this section:

- | | |
|---|--|
| <input type="checkbox"/> bottle tops | <input type="checkbox"/> counters |
| <input type="checkbox"/> pencils | <input type="checkbox"/> straws |
| <input type="checkbox"/> ice cream sticks | <input type="checkbox"/> crayons |
| <input type="checkbox"/> coloured rods | <input type="checkbox"/> linking cubes |
| <input type="checkbox"/> rubbers | <input type="checkbox"/> scissors |
| <input type="checkbox"/> marking pens | <input type="checkbox"/> sticky tape |
| <input type="checkbox"/> blocks (1cm blocks to be used wherever blocks are needed). | |
| <input type="checkbox"/> different sized leaves | <input type="checkbox"/> split pins |

Notes:

Sheet 1: Encourage children to make a pattern when colouring Larry in.
For instance, squares of green, brown and yellow repeated in a pattern.

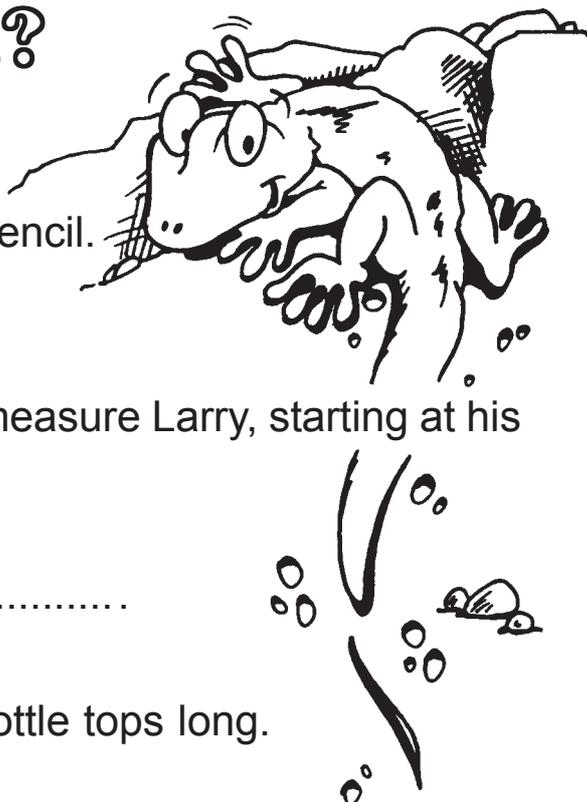
Sheet 3: Ask children to number the objects in order from longest to shortest. They can write the number in the space under the graph.

Parent helpers may be useful for the more practical activities.

How Long is Larry the Lizard?

You will need:

Some bottle tops, some counters and a pencil.



Here's what to do:

Find out how many bottle tops it takes to measure Larry, starting at his head. Use the picture on the next page.

1. What is your guess?

Larry is bottle tops long.

2. Now try measuring Larry with counters. What is your guess?

It takes counters to measure Larry.

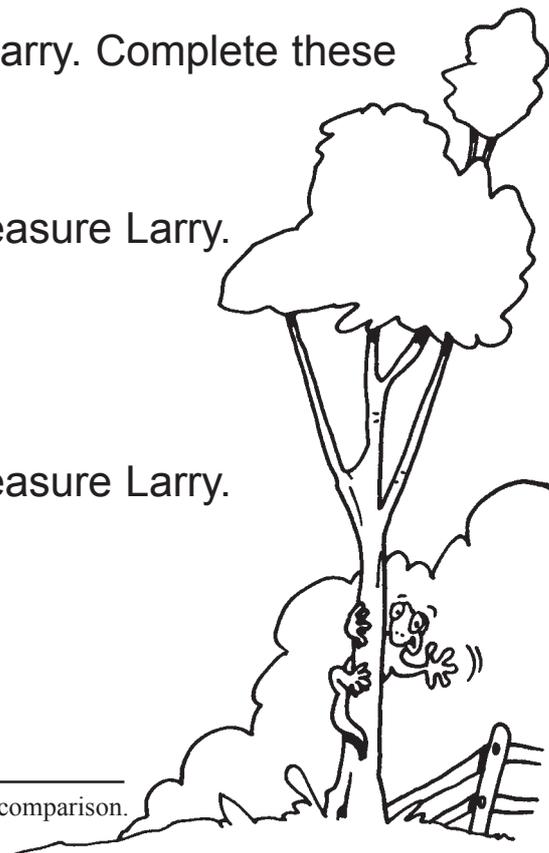
Choose two other objects and measure Larry. Complete these sentences.

3. I used to measure Larry.

I needed

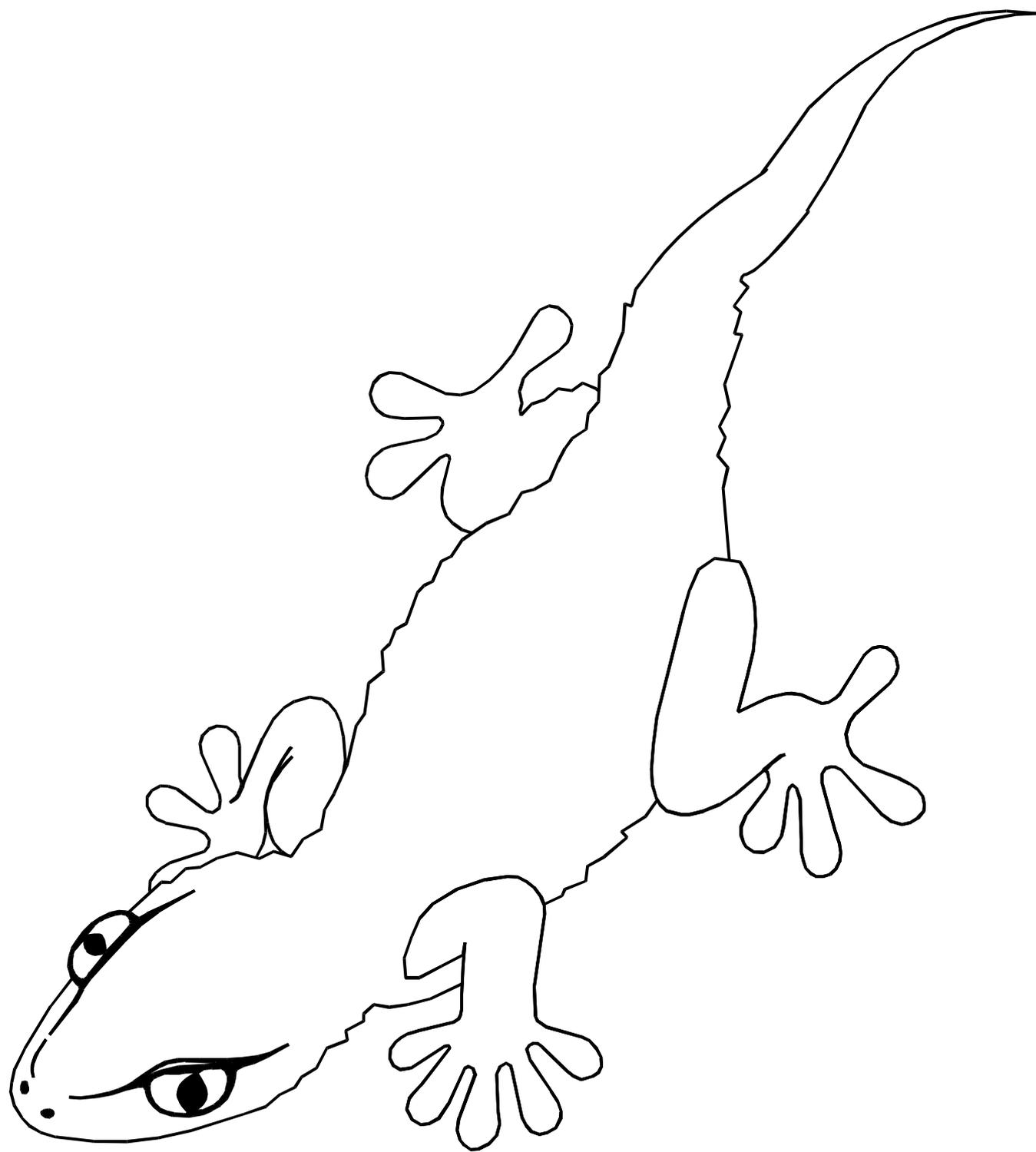
4. I used to measure Larry.

I needed



*Measurement: Length: Carry out activities requiring indirect arbitrary comparison.

Larry the Lizard 2

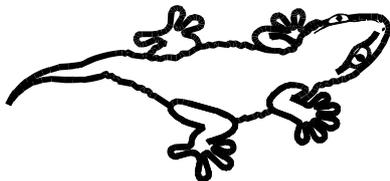


Colour Larry in using three colours.

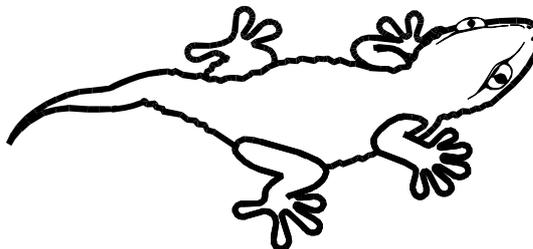
*Measurement: Length: Carry out activities requiring indirect arbitrary comparison.

Meet the Lizard Family

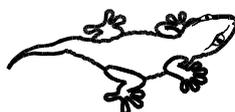
Leo Lizard



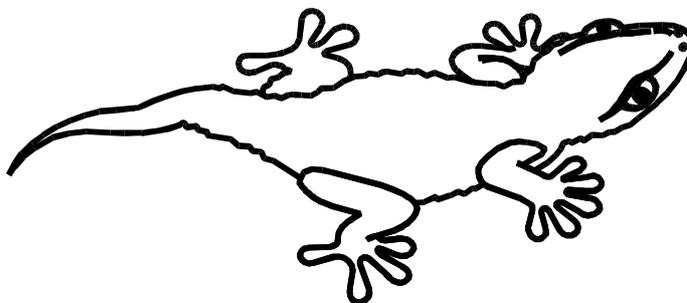
Lucy Lizard



Loretta Lizard



Lenny Lizard

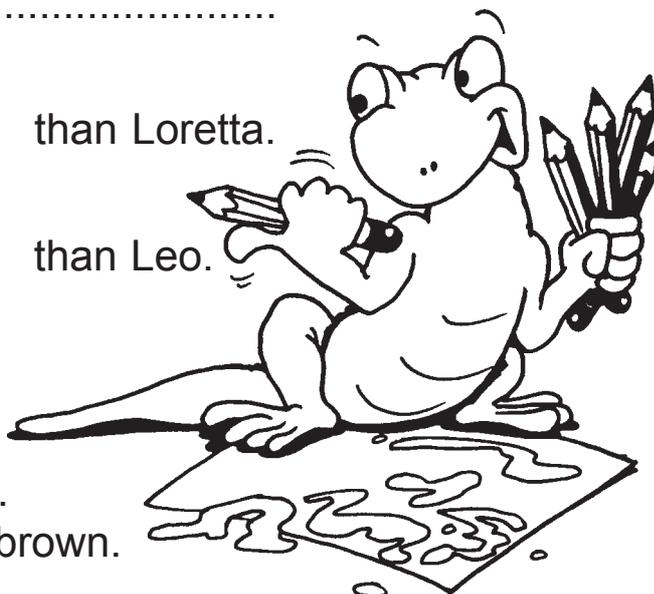


Look at the lizards and answer these:

1. Who is the longest lizard?
2. Who is the shortest lizard?
3. Lenny is than Loretta.
4. Lucy is than Leo.

Larry's Last Look:

Colour the shortest lizard dark brown.
Colour the second shortest lizard grey.
Colour the second longest lizard light brown.
Colour the other lizard black.



*Measurement: Length: Carry out directed activities such as sorting and seriating according to length.

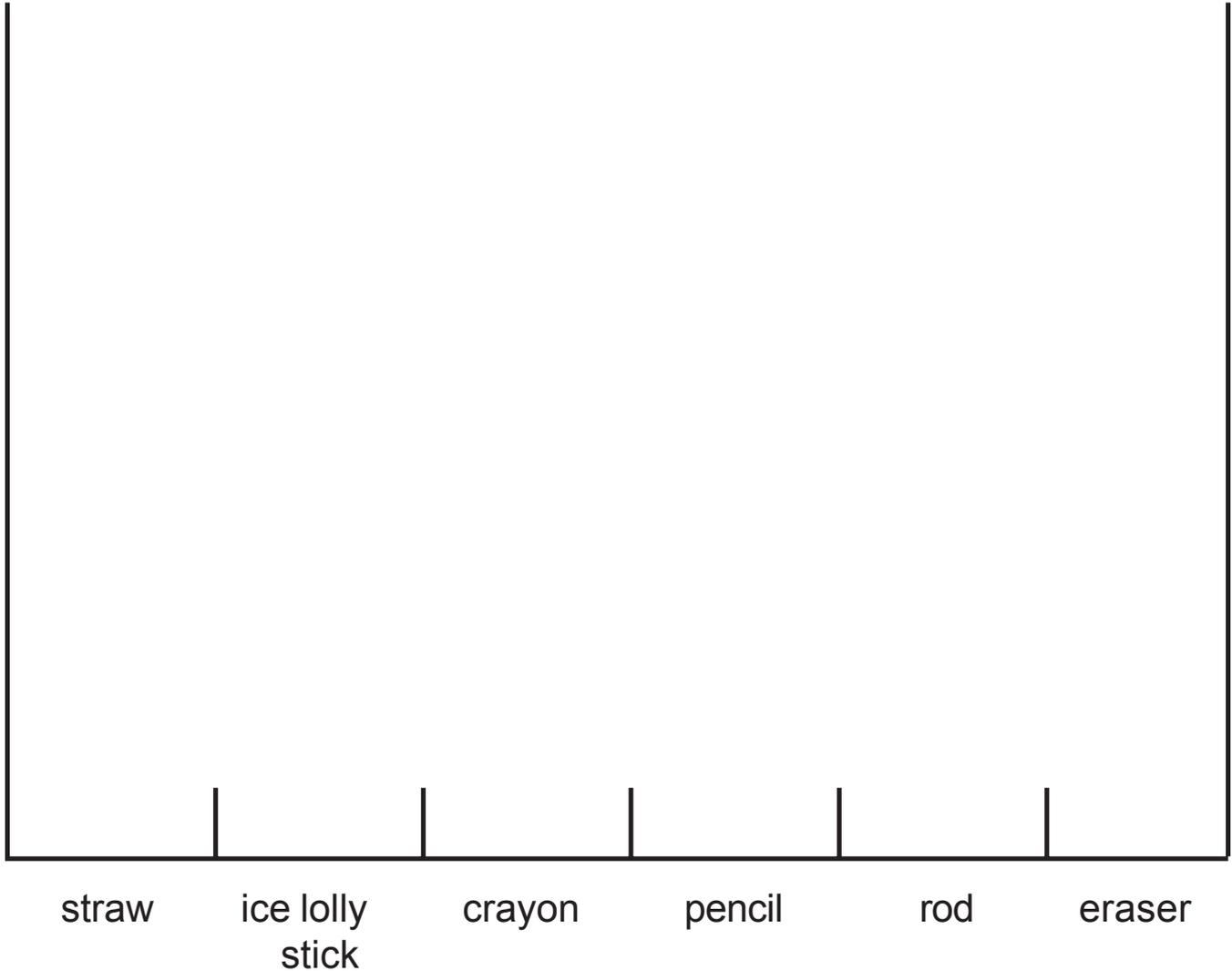
Larry's Length Graph

You will need:

straws, ice cream sticks, pins, eraser, pencils, crayon, rods and linking cubes.

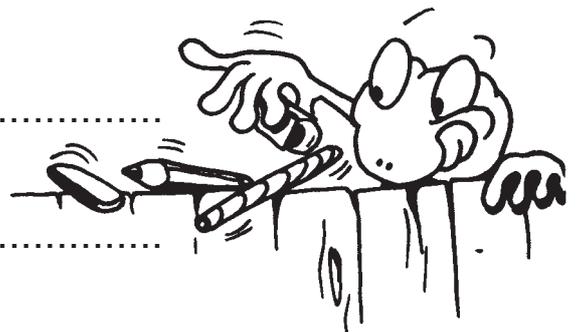
Here's what to do:

Line up your objects on the line below.



Which one is the longest?

Which one is the shortest?



Trace around your objects, using a different colour for each one.

*Measurement: Length: Carry out activities requiring direct comparison of objects. Developing the skills of alignment.

Volume and Capacity: Teachers' Notes

It is very difficult to explore the concept of volume and capacity using two dimensional objects. This section involves water play and time in the sandpit to develop the skills of estimating, pouring, measuring, comparing, filling, emptying and building.

The topic is introduced through the use of Plasticine. Children will create a range of shapes and models using the same amount of Plasticine each time.

Through such activities, students will develop the skills of moulding, kneading and shaping.

Materials used in this section:

- | | |
|--|--|
| <input type="checkbox"/> Plasticine (or play dough) | <input type="checkbox"/> Plasticine boards |
| <input type="checkbox"/> pencils | <input type="checkbox"/> sandpit |
| <input type="checkbox"/> plastic bath or unused fish tank | <input type="checkbox"/> bucket, jars, jugs of different sizes |
| <input type="checkbox"/> rice | <input type="checkbox"/> dessert spoon |
| <input type="checkbox"/> an assortment of containers - see illustrations | |

Notes:

Sheets 2 and 3: The sheets are best completed in small groups with a helper.

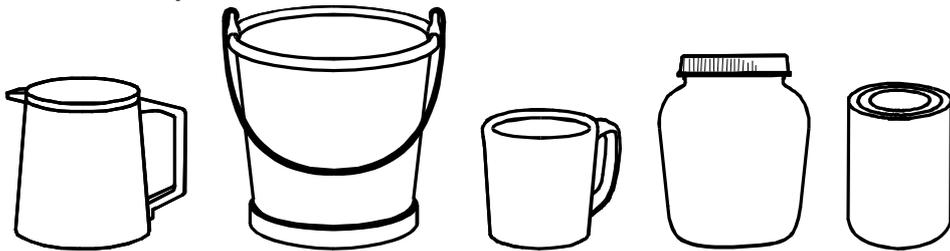
Each person in the group should record the answers on their own sheet.

Sammy's Sand Castles

Sammy wants you to help him build a sand castle.

You will need:

A sandpit.



Here's what to do:

Fill up different containers with the sand and pour the sand into other containers.

Circle the container in each pair which holds the most sand.

1.  
2.  
3.  
4.  



Sammy's Star Quiz:

Which container holds the most sand?

Which one holds the least?

Draw the container that Sammy should use to build the biggest sand castle.



*Measurement: Volume and Capacity: Carry out directed activities such as building, filling, emptying, pouring.

Sammy's Bath Time

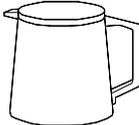
Sammy Seal loves splashing about in his bath. He needs you to fill up his bath with water.

You will need:

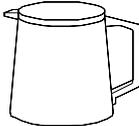
A large container (plastic bath), water, a bucket, a litre jug, a jar and a cup.

Here's what to do:

Fill the bath with two buckets of water. Use the water in Sammy's bath to find the answers to these:

1. How many  of water will be needed to fill the  ?

My guess: Number:

2. How many  of water are needed to fill the  ?

My guess: Number:

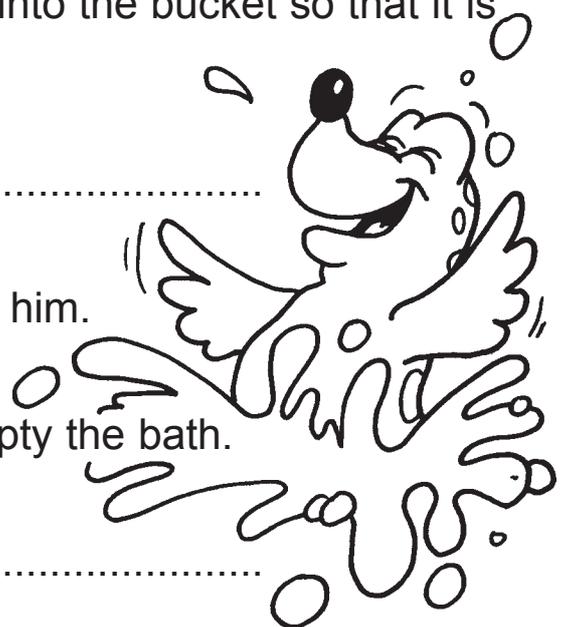
3. How many cups of water can you pour into the bucket so that it is full?

My guess: Number:

4. Use the jug to empty Sammy's bath for him.

Guess how many jugs it will take to empty the bath.

My guess: Number:



*Measurement: Volume and Capacity: Comparing capacity of different containers.