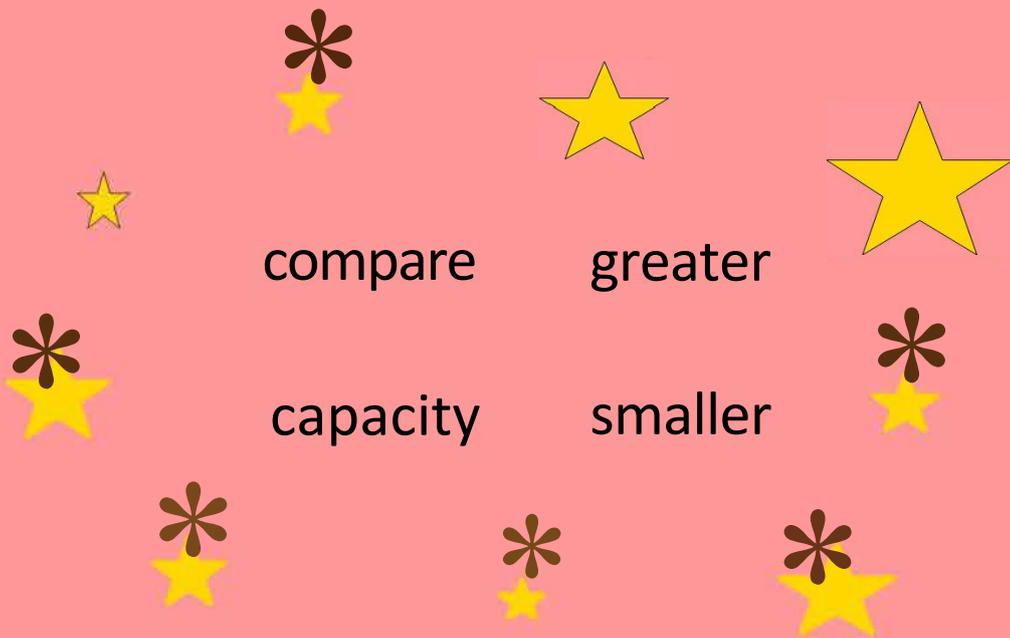


**Lesson 1**  
**WALT**  
**Introdu.ce**  
**capacity /**  
**volu.me**

**Star Words**



compare      greater

capacity      smaller

The image features a pink rectangular background. In the top-left corner, the text "Star Words" is written in a bold, black, sans-serif font and is underlined. Below this, the words "compare", "greater", "capacity", and "smaller" are arranged in two rows. Each word is centered within a light gray rectangular box. The layout is decorated with yellow stars and brown flower-like symbols. Above "compare" is a small yellow star with a brown flower-like symbol above it. Above "greater" is a medium yellow star. Above "capacity" is a large yellow star with a brown flower-like symbol above it. Above "smaller" is a very large yellow star with a brown flower-like symbol above it. Below "compare" is a small yellow star with a brown flower-like symbol above it. Below "greater" is a medium yellow star with a brown flower-like symbol above it. Below "capacity" is a large yellow star with a brown flower-like symbol above it. Below "smaller" is a very large yellow star with a brown flower-like symbol above it.

The **capacity** of each cup is the same. They can all hold the same amount of liquid.

The **volume** in each cup is different as they all have different amounts of liquid in.

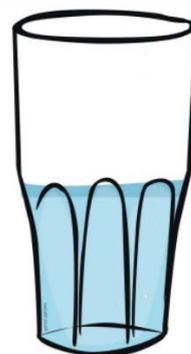
**Empty**



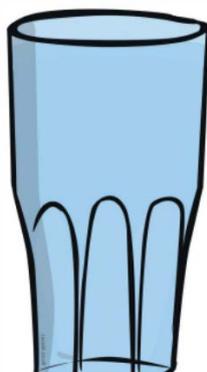
**Nearly Empty**



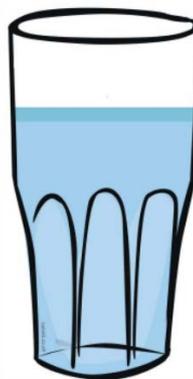
**Half-Empty**



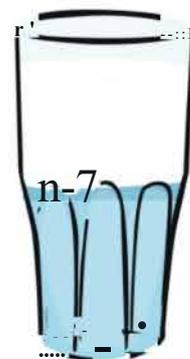
**Full**



**Nearly Full**



**Half-Full**



## Talktask

**Model first then allow children to explore.**

Provide a range of different containers for children to explore practically using water or sand.

Show me full containers.

Show me empty containers.

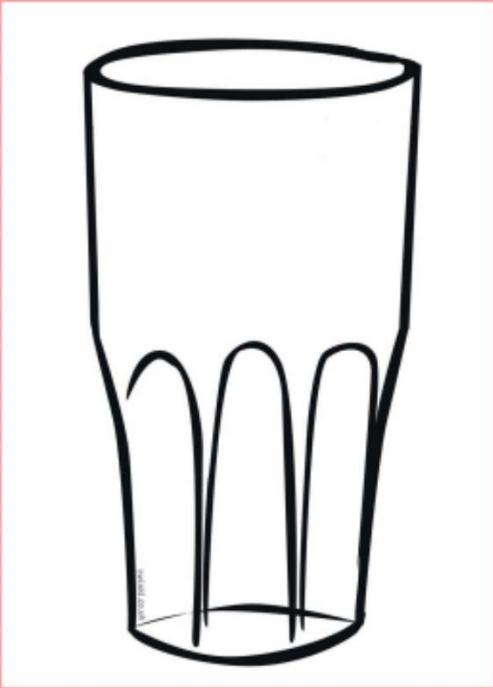
Show me almost full.

Show me almost empty.

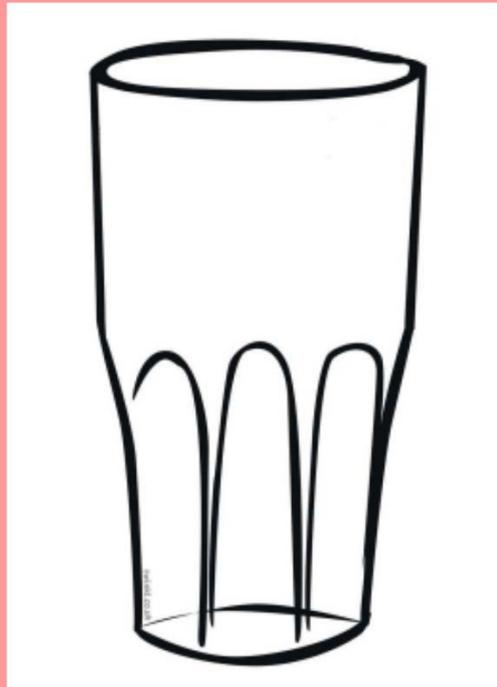


Shade the glasses correctly to show ...

Nearly full



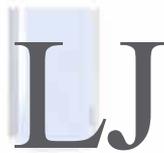
Nearly empty



Put these in order from empty to full.



A



B



C



D



empty



full

Can you add in the missing labels in the order?

Use the words 'more' or 'less' to compare the containers.

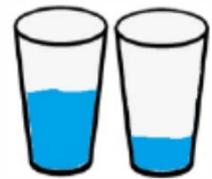


A

B

A has --- than B.

A has --- than B.



A

B

## Independent task

Pick a label and fill the cup to match. Match each label with a cup filled to the correct capacity.

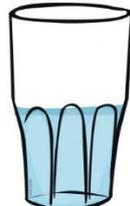
Empty



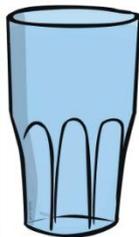
Nearly Empty



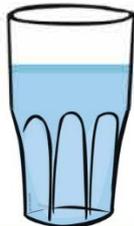
Half-Empty



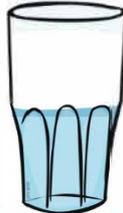
Full



Nearly Full



Half-Full



Empty

Full

Half empty

Half full

Nearly empty

Nearly full

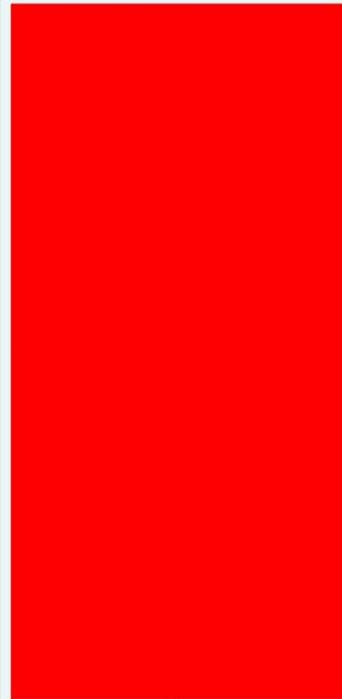
## Plenary

### Always, Sometimes, Never?

The tallest container holds the most liquid.

Identical containers can have a different capacity.

Show me.



## Plenary

### Always, Sometimes, Never?

The tallest container holds the most liquid.

Identical containers can have a different capacity.

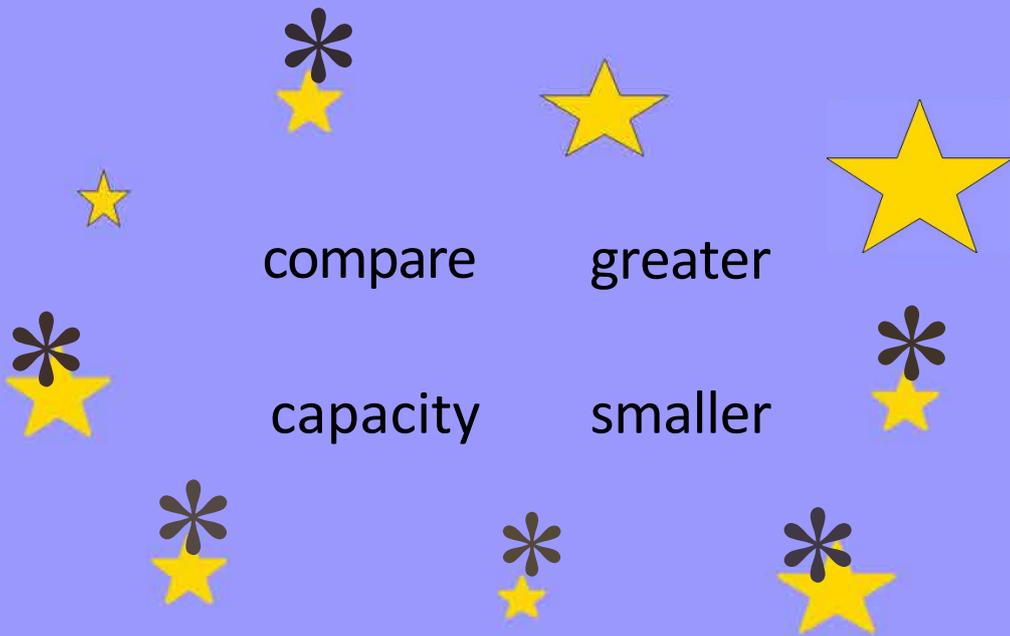
Show me.

Sometimes.

Never - If the containers are identical they will have the same capacity but they can have different volumes of liquid in.

**Lesson 2**  
**WALT**  
**Mea.su.re**  
**capacity**

Star Words

A collection of yellow stars and black asterisks scattered across the page. There are four large yellow stars, one of which is highlighted with a light blue square. There are also several smaller yellow stars and black asterisks, some appearing in pairs (one star above one asterisk).

compare

greater

capacity

smaller

Show two different containers.

How can we measure which container has the biggest capacity?

We can measure using a non standard unit.

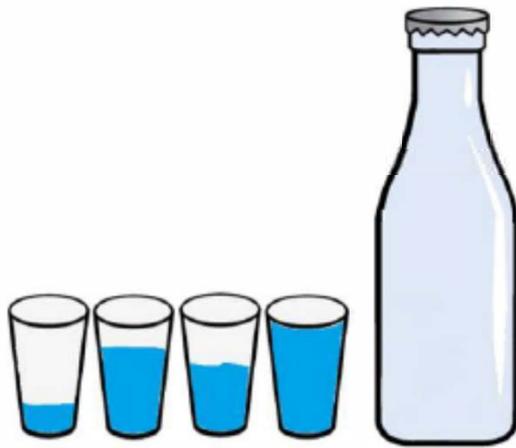


**Choose a non standard unit and model measuring the capacity of a range of containers.**

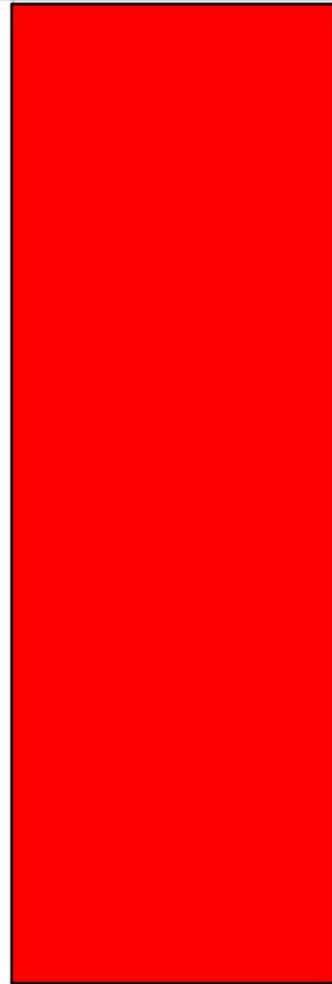
Discuss how each unit used for measuring has to be filled to the top to make it accurate.

You have to use the same unit to measure both containers to make it accurate.

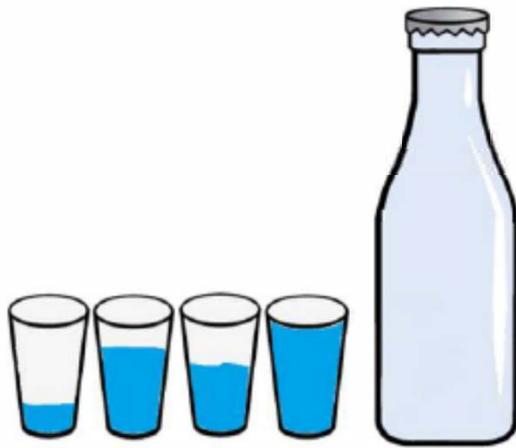
Whitney pours her cups into the bottle and they fill it exactly.



She says the bottle has a capacity of four cups. Do you agree?



Whitney pours her cups into the bottle and they fill it exactly.



She says the bottle has a capacity of four cups. Do you agree?

Whitney is wrong. She has not filled the cups to the top so her measuring is inaccurate.

## **Independent task**

Pick a container and a non standard measure.  
Measure the capacity of the containers.

Repeat with different containers/non standard  
measures and compare the different between the  
different measures.

The container has  
a capacity of \_  
cups.

The container  
has a capacity  
of \_\_ pots.

## **Challenge**

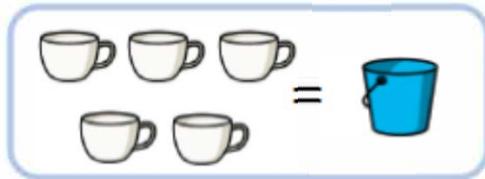
Choose a container and a non standard measure.

Fill the container and predict/estimate how many cups/pots you can fill using the containers full capacity. Once you have made a prediction pour the containers contents into cups/pots until it is empty and check your estimation.

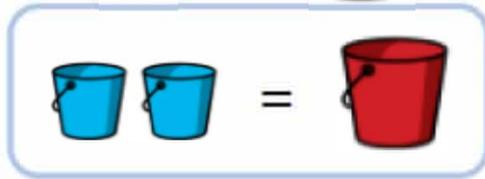
Remind children to use prior knowledge of the rough capacity of the different containers.

# Plena.rM

It takes 5  to fill 1 

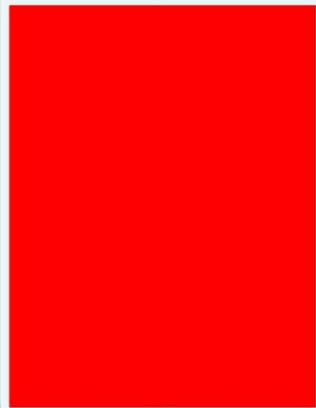


It takes 2  to fill 1 



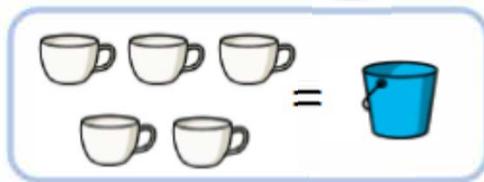
How many  will fill one  ?

What else can you find out?

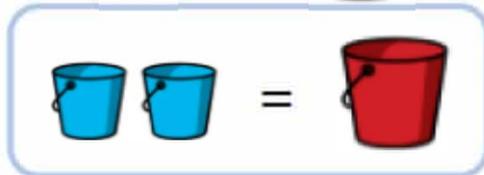


# Plena.rM

It takes 5  to fill 1 



It takes 2  to fill 1 



How many  will fill one  ?

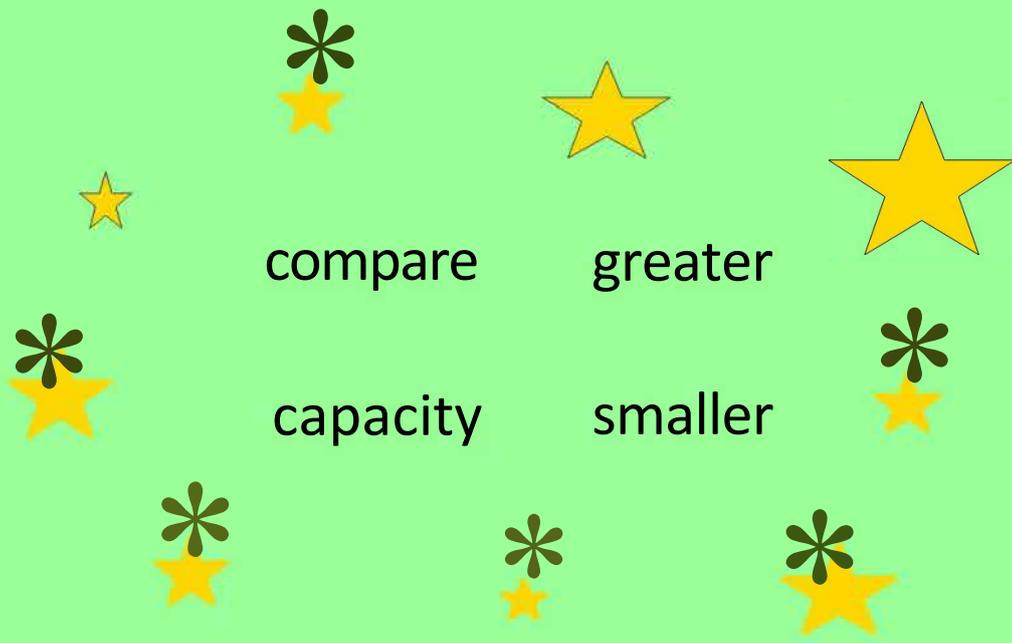
What else can you find out?

10 cups will fill one red bucket.

The children may also find that it will take 20 cups to fill 2 red buckets etc.

**WALT**  
**Compare**  
**capacity**

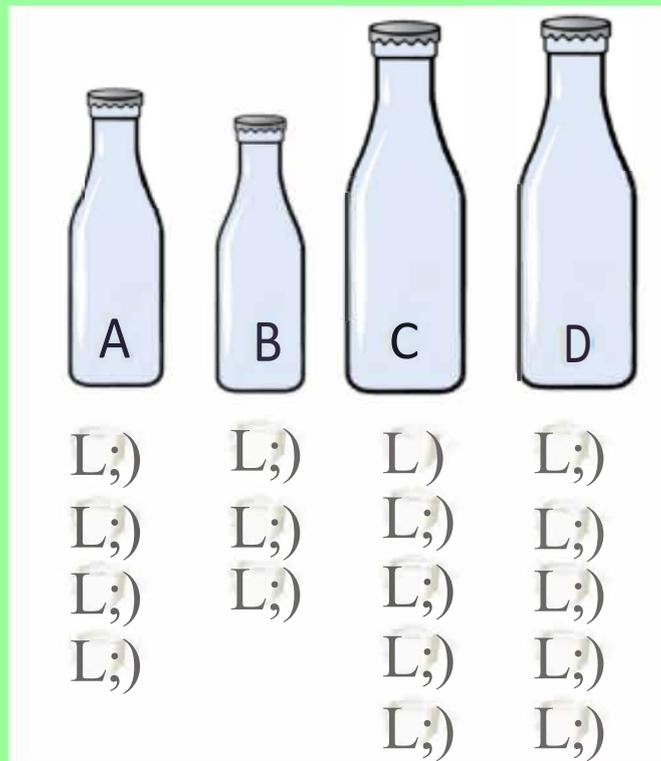
**Star Words**



compare      greater

capacity      smaller

Which container has the greatest capacity?  
Which container has the least capacity?  
How do you know?



Choose a non standard unit and model measuring the capacity of two containers. Record the results

Which container has the greater capacity ?  
Which container has the least capacity ?

Container \_\_\_ has the greatest capacity because it can hold 4 cups and container \_\_\_ can only hold 2.

Container \_\_\_ has the least capacity because it can only hold 2 cups and container \_\_\_ can hold 4.

Model a few times inviting children to come and help.  
Model moving onto 3 containers.

## **Independent task**

Record on whiteboards

In small groups invite children to choose 2/3 containers and compare them using a non standard measure.

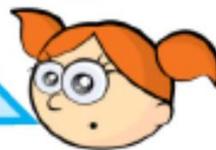
Once they have measured all of the containers order them from the greatest / least capacity.

## Plenary

Alex has a bottle of juice. She pours three glasses of juice.



The bottle holds exactly three glasses of juice.



Do you agree? Explain why.



## Plenary

Alex has a bottle of juice. She pours three glasses of juice.



The bottle holds exactly three glasses of juice.



Do you agree? Explain why.

I disagree. Alex has filled three glasses exactly but there is still juice left so she could have filled more than 3

WALT

Explore capacity  
by making  
potions

**See\_document\_4**

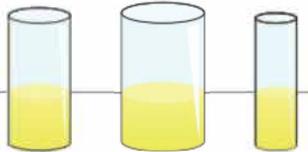
# Harder

## Mastery

### CAPACITY

Captain Conjecture says, 'All of the glasses contain the same quantity of lemonade.'

Do you agree?



Explain your reasoning.



## Mastery with Greater Depth

Dave has a 1 litre and a 2 litre bottle. He pours the water from the small bottle into the large bottle.

Mark where the water comes to on the large bottle.



## Mastery

Sid has a full bottle of drink. He pours it into a jug.

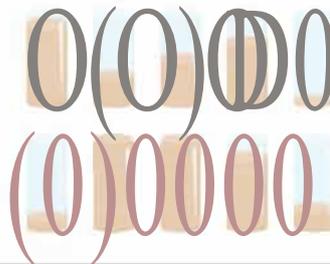
Which has the greater capacity, the bottle or the jug?



.....

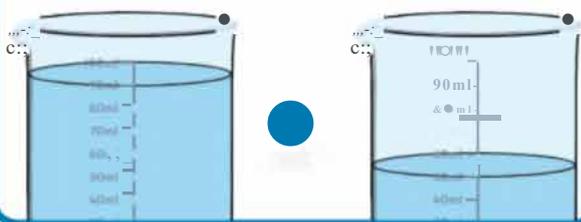
Point to a glass which is about half as full as the glass in the red oval?

Can you point to a glass which is about twice as full as the glass in the blue oval?

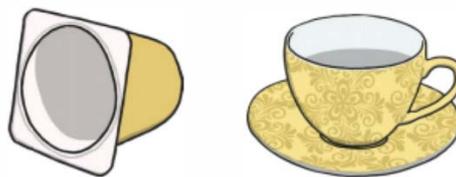


# ttarder

## Capacity Challenge Cards



1. Choose 3 containers. Take a cup or a yoghurt pot and find out how many scoops it takes to fill each container. Line your containers up in order from smallest to largest.

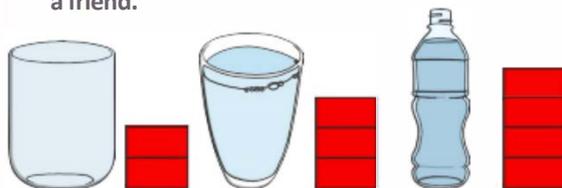


2. I fill my container with 5 cups of water. My friend's container takes 3 more cups to fill. How many cups does it take to fill my friend's container?

D

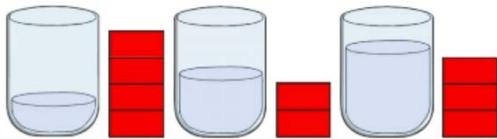


3. I fill some containers. I make a tower of bricks, one brick for each cupful of water I use. Which is the largest container? Which is the second largest? Which is the smallest? Try this with a friend.



# Harder

4. I fill some containers. I make a tower of bricks, one brick for each cupful of water I use. Which tower should go next to which container? Try this with a friend.



5. Choose some different containers. Does the tallest container always hold the most water? Why? Why not?



6. Have a race with a friend to fill a container each. One person use a spoon to fill, and the other use a cup. Who is the winner? Is this fair? Why? Why not?



7. Leo and Larry are racing to fill their containers. Who will be the winner? What would you do to make the race fairer?



# Harder

8. Which of the bottles looks the largest? Which is the largest? Find some bottles with measures on. Can you trick your friends?



9. Which of the jugs is the smallest? Can you find some different jugs and bottles with measurements on?



10. All the bottles contain the same amount of water. Do you agree? Why? Why not?



11. I buy 10 litres of milk. I use half of it. How many litres do I have left?

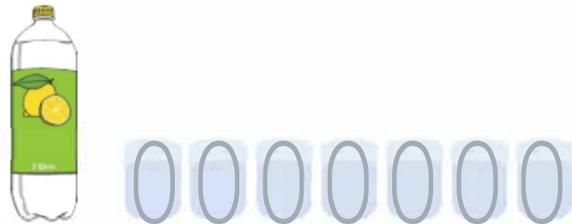


# Harder

12. Find 3 different shaped bottles. When you fill them to the same height with water, do they contain the same amount? Explain why or why not.



13. I fill my bottle with 7 cups of water, my friend's takes 2 fewer. How many cups does it take to fill my friend's bottle?



14. I buy 12 litres of milk in 2 litre bottles. How many bottles do I buy?



15. Cola comes in 2 litre bottles. I buy 7 bottles for my party, how many litres is that?



# Harder

16. I can fit 100ml of water in a cup. If it takes 7 cups to fill my bottle, how big is my bottle?



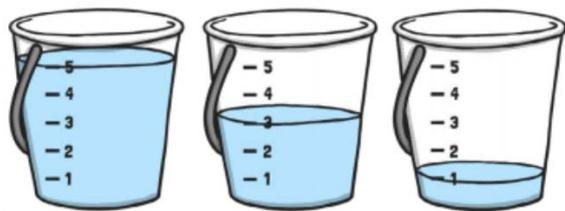
17. My bucket fits 800ml of water. If it has taken 10 cups to fill it, how big is my cup?



18. Can you fill some cups so one is half full, one is less than half full and the other is full?



19. Ellie is on the beach, she is filling buckets from the sea. How would you describe her buckets?



# Harder

20. I have 4 bucRets. One bucRet is nearly empty, another is full, one is more than half full and the last one is a quarter full. Can you order my bucRets from emptiest to fullest?

**almost empty**

**quarter full**

**more *than half* full**

**full**