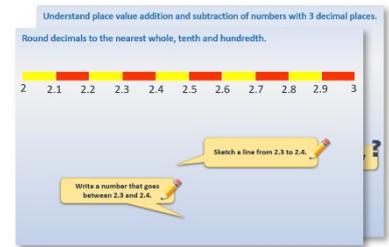


Week 12, Day 4

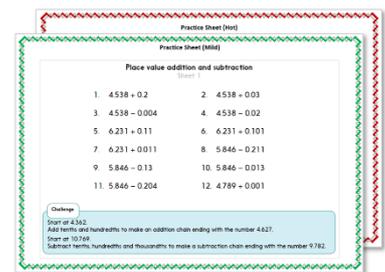
Capacity (1)

Each day covers one maths topic. It should take you about 1 hour or just a little more.

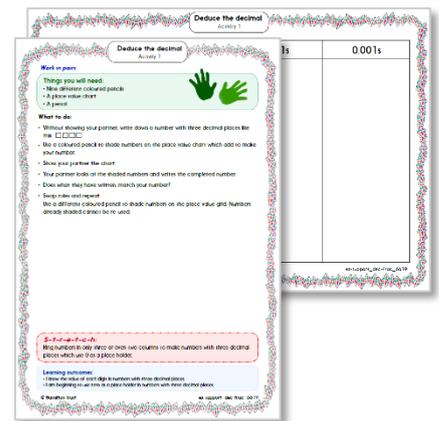
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation...**

Learning Reminders

Estimate, measure and compare capacities, using cups; Use a uniform, non-standard unit to measure capacity.

Find a container and a plastic cup.
*We're going to fill this container
with cups of water.*

How many cups do you
think we might need?
Fewer than 5? More than 5?
More than 10?

Fill the cup and pour into the
container over a washing up bowl
(use a funnel to help).

Repeat until the container is full,
counting the number of cups needed.
Write the number of cups on a Post-itTM
note and stick to the container.



Learning Reminders

Estimate, measure and compare capacities, using cups; Use a uniform, non-standard unit to measure capacity.

Find a different container. Do you think this will hold more or fewer cups of water? How could we find out?



Find out using the cups. Count the cups of water as they are poured in.

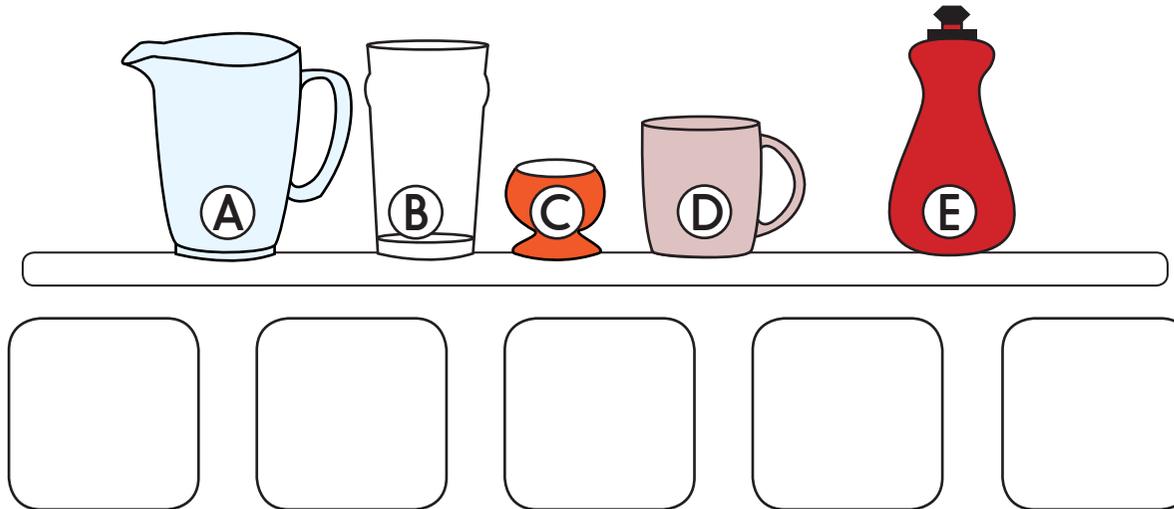
Repeat for two other containers and discuss which of these four containers holds **most and the least**.

Place the containers in order from the least capacity to the greatest capacity. It's much easier to compare them now we know how many cups of water each of them holds.

Practice Sheet for All

Comparing and ordering capacity

Order the containers from the one that holds the most to the one that holds the least.
Put the letters in the boxes below:



Now answer these questions:

Which containers hold more than the mug?

Which containers hold less than the pint glass?

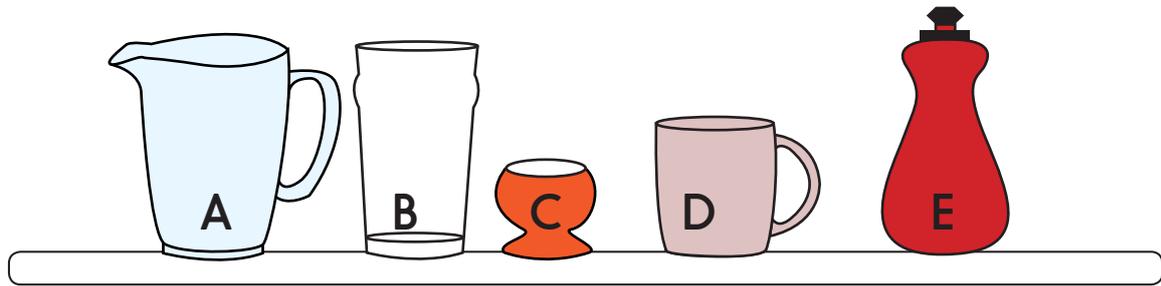
HOT: Now have a go at these last two questions:

Can you think of a container that might hold more than the jug?

Can you think of a container that holds less than the egg cup?

Practice Sheets Answers

Comparing and ordering capacity



Order from the most to the least capacity: **A, B, E, D, C**

Which containers hold more than the mug? **A, B, E**

Which containers hold less than the pint glass? **C, D, E**

HOT: Now have a go at these last two questions:

Can you think of a container that might hold more than the jug? **e.g. bucket**

Can you think of a container that holds less than the egg cup? **e.g. thimble**

A Bit Stuck? Don't drink the water!

Work in pairs

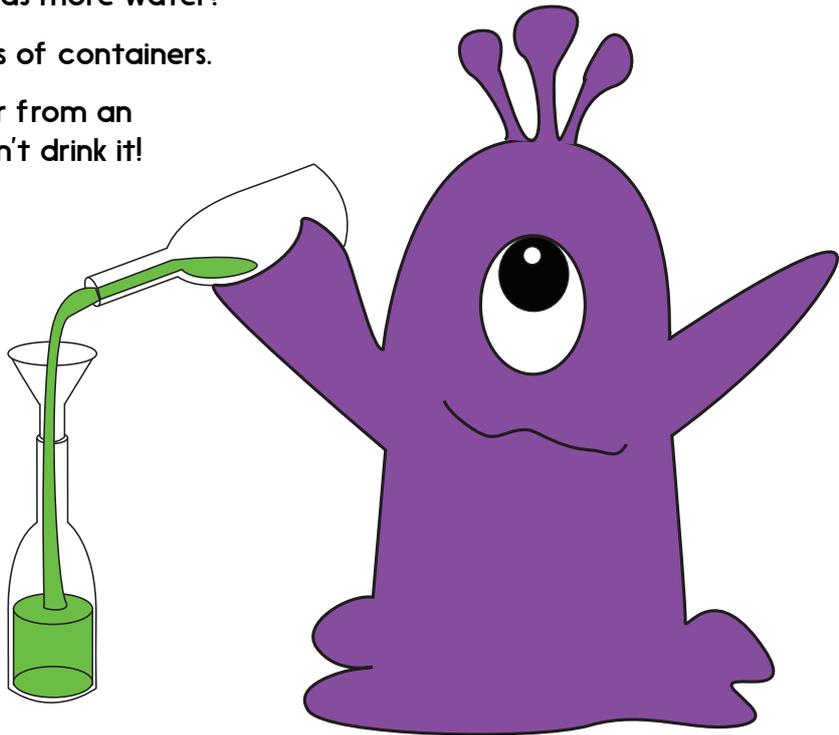
Things you will need:

- A jug of green water from an alien planet (water with green food colouring, check for allergies)
- Funnel
- Washing up bowl
- Range of containers (bottles and cups)



What to do:

- Choose two containers. Which do you think will hold more alien water?
- Put the two containers in the washing up bowl to catch any spilled water.
- Fill the bigger container with water.
- Now pour the water from the bigger container through the funnel into the small container. Is there room left or did it overflow? So, which container holds more water?
- Repeat with other pairs of containers.
- Remember, this is water from an alien planet – we mustn't drink it!



S-t-r-e-t-c-h:

Count how many small cups of alien water will fit into the biggest bottle.

Learning outcomes:

- I can compare the capacities of two containers by pouring water from one to the other.
- I am beginning to measure how much containers can hold using a cup.

Investigation

Fill the bucket

You will need:

- a large open container of water, e.g. washing up bowl, paddling pool
- a bucket (the larger the bucket the longer the games last)
- plastic cup
- paper and pencil for keeping score

You are going to have a water race! Play with anyone at home.

Here are your **three challenges**:

Challenge 1

When an adult says 'Go!' the game starts.

1. Fill a cup with water from the large container.
2. Run to your bucket.
3. Empty the cup of water into it.
4. Run back and hand the empty cup to the next child.
5. They do the same.
6. Keep going like this until the bucket is full.
7. As each cup is emptied into the bucket, draw a tally on the bottom of the scoreboard.
8. Keep these tallies for Challenge 2.
9. Add up your tallies to see how many cups filled the bucket.

Move on to Challenge 2

Challenge 2

1. Estimate how many cups of water you both think will fill the bucket.
2. Tell an adult so he/she can write down your estimate.
3. Measure the capacity of your bucket using the cup.
4. Compare your estimate with others.

The winning person gets 3 points.

The second person gets 2 points.

The third person scores 1 point.

Empty the water from the buckets back into the large container.

Move on to Challenge 3

Challenge 3

How much water did you spill?

Work this out.

1. How many times did you run up with a cup to fill your bucket? (In Challenge 1)
 2. How many cups did your bucket hold? (In Challenge 2)
- Calculate how much more the answer to 1 is than the answer to 2.

