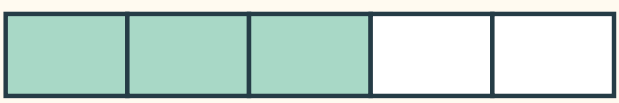
MATHS FIELD GUIDE · GRADE 1

Compare how much containers hold

OPENING PROBLEM

A jug holds five cupfuls. How much room remains?



3 cups

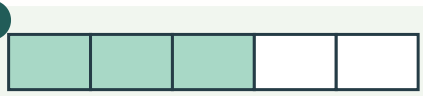
02 How much room is left?
03 Rules and worked cases
04 Fill two jugs
05 Use one unit for a fair comparison
06 Check your reasoning

ILLUSTRATED PROBLEM SHEET

How much room is left?

Count equal units from empty to full. Name what each unit measures.

1

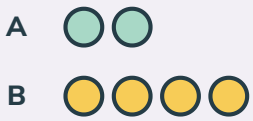


3 cups

A jug holds five cupfuls. How much room remains?

Two cupfuls. Three plus two fills the jug.

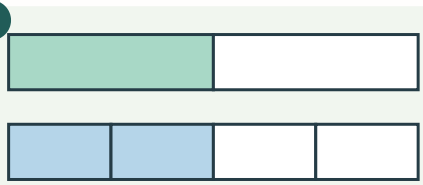
2



Jar A fills two cups and jar B fills four of the same cups. Which holds more?

Jar B holds two more cupfuls.

3



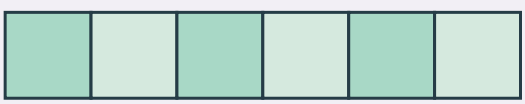
half full

half full

Can a jug be half full when its marks are quarters?

Yes. Two of four equal parts make half.

4



A strip is six hand-widths long. A second covers half as many widths. How long?

Three of the same hand-widths.

Five-cup jug holding two cups
room for three.

Five-cup jug holding five cups
no room left.

CHAPTER PROBLEM

A container holds six scoops. Another holds four of the same scoops. Which has more capacity?

The six-scoop container.

MATHS REFERENCE · GRADE 1

Compare how much containers hold

Capacity is how much a container can hold when full.

The amount inside now is not always its capacity.

Four cases to recognise

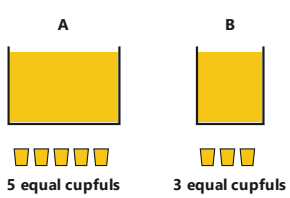
Situation	What to do and why
A jar holds four equal full scoops	Four scoops measure its capacity when filled to the same level.
A narrow tall cup and a short wide one	Pour from one into the other to compare the space inside.
A jug takes six small cups or three large ones	One large cup holds two of those small cups.
A five-cup jug already contains two cups	Three more equal cupfuls fill it.

Read the model

Count equal cupfuls

Use the same cup to fill each container to its full level.

A needs five cupfuls. B needs three. A has greater capacity.

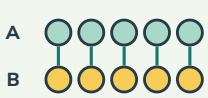


Same scoop, same rule

Fill each scoop to the same level.

Different scoop sizes would make the counts unfair.

capacity How much a container can hold when full.
full Filled to the agreed level.
scoop A small container used as a measuring unit.



Which row has more?

Every counter finds one partner. The rows are equal.

WORKED INVESTIGATION

Fill two jugs

Use one small cup to fill an empty jug to the brim. Count only full cups. A jug holding five cups has a capacity of five of those cups.

Look at this part	What it tells you
Jug A	5 cupfuls
Jug B	7 cupfuls
Difference	2 cupfuls

Work it through

Pour the five cupfuls from A into empty B. There is room for two more. The amount poured stayed the same.

Catch the mistake

A half-full tall jug may contain less water than a full short one. Capacity tells how much fits when full.

Compare the cases

A partly filled container

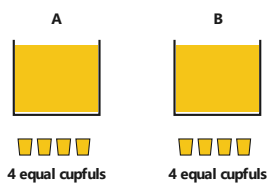
A large jug with one scoop inside is not full.

That one scoop is the amount inside now, not the jug's full capacity.

Same amount to fill

These containers each need four of the same cupfuls.

Their capacities are equal. Count what fills each container, not just how high the water looks.



Change one condition

Try a larger measuring cup. You may get a smaller count for the same jug. Keep the measuring cup the same when comparing.

Do not judge height alone

A tall narrow container may hold less than a short wide one.

Fill and compare safely rather than guessing from height.

Try a safe fill test

With a teacher, use water, a tray and two containers.

Count equal cupfuls to fill each. Wipe up spills and keep water away from devices.



How many extra are in A?

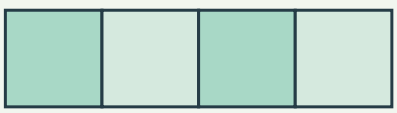
Match four pairs. Two in A are left.

ILLUSTRATED PROBLEM SHEET

Use one unit for a fair comparison

Equal blocks measure length, equal weights measure mass, and equal cupfuls measure capacity.

1



A pencil is four identical blocks long. A crayon is three. How much longer?

One block length.

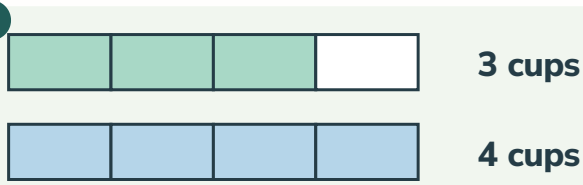
2



A bag balances three equal weights and a box balances five. Which is heavier?

The box, by two of those weights.

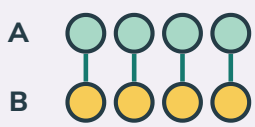
3



Two identical jugs are divided into cups. How much emptier is the first?

It holds one cup less.

4



Two bags balance four unit weights each. What if one bag looks bigger?

Their masses are equal. Their sizes can differ.

Different-sized blocks
counts alone cannot compare length.

Equal-sized blocks edge to edge
counts compare length.

CHAPTER PROBLEM

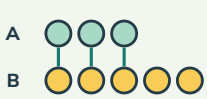
A jug has two scoops inside but can hold seven. Is its capacity two scoops?

No. Its capacity is seven scoops.

QUESTION BANK · FOLD OR COVER THE RIGHT COLUMN

Check your reasoning

Try the problem	Solution and reasoning
01 A wide bowl and a tall jar both fill four identical cups. Which holds more?	They hold the same amount despite their different shapes.
02 Can five tiny cups be compared with four big cups just by counting?	No. Use the same cup to measure both amounts.
03 May we use a tiny scoop for A and a big scoop for B to compare their scoop counts?	No. Use the same-sized scoop and the same fill level.
04 A jug holds eight cups. Three cups are already inside. How many more full cups will fit?	Five. Count on from three to eight, or check that three and five make eight.
05 A jug takes eight scoops. Three are already in it. How many more?	Five scoops complete eight.
06 Two children use different cups to measure a bucket. Must the counts agree?	No. A larger cup needs fewer full cupfuls for the same bucket.
07 How many equal cupfuls will fill the empty part of this jug? 	Two white bands remain. Three cupfuls are already in the five-cup jug.



How could you make A equal B?

Add two to A, or take two from B.

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