

Vocabulary of capacity and volume

National Curriculum attainment target

- Compare, describe and solve practical problems for capacity and volume [for example, full/empty, more than, less than, quarter]

Lesson objective

- Use mathematical vocabulary to describe and compare capacity/volume

Previous related lessons

None

Prerequisites for learning

Pupils need to:

- have experience of filling a variety of containers with different amounts of liquid
- order two items by capacity

Vocabulary

capacity, full, empty, more than, less than, half, quarter, most, least, fewest

Future related lessons

Unit 8, Week 3, Lesson 2; Unit 8, Week 3, Lesson 3; Unit 8, Week 3, Lesson 4

Success criteria

Pupils can:

- make direct comparisons about the capacity of containers using correct vocabulary
- check the capacity of containers by measuring



Getting Started

- Choose an activity from Measurement (volume and capacity).

i Volume and capacity can be difficult concepts for young children as the vocabulary related with it can be confusing. The terms 'volume' and 'capacity' are used interchangeably throughout the curriculum in Key Stage 1. Volume is the amount of space that a substance or object occupies. Capacity is the amount that a container can hold. Use both terms so that children become familiar with them.



Teach

Resources

three empty everyday classroom containers (different volumes) (per class); selection of objects in different containers, e.g. paper clips, rice, pencils, dried pasta (include full, three-quarters full, half full and quarter full containers) (per class)

- Show children the three empty containers and the containers with objects in them.
- Ask: **Which of these are full and which are empty? Are any of them half full, a quarter full, or more than half full?**
- Discuss answers and check that children are using the correct mathematical vocabulary.
- Ensure children understand and can identify half full and quarter full containers.
- Hold up one of the full containers and one of the empty containers. Ask: **Will the contents of this full container fit into this empty container? Will there be too much or too little to fill it?**
- Pour the contents from one to another (on a tray if it will overflow). Compare with children's predictions.
- Repeat with different containers and different objects, making sure that correct vocabulary is used to make the comparisons.
- Ask: **Can you put all of these containers in order based on their capacity (what they will hold)?**
- Discuss answers and check that children are making estimates based on what they can see.
- Check the suggested order by pouring objects from one of the smaller containers into a larger container and then topping up the larger container.

Collins
Connect
Year 1, Unit 8,
Week 3

Individualised Learning

Refer to Activities 1 and 2 from the Learning activities on page 336.

Pupil Book 1B – Page 46: Full or empty?
Progress Guide 1 – Support, Year 1, Unit 8, Week 3, Lesson 1:
 Full or empty?

Plenary

Resources

variety of containers (per class); lentils (or similar) in a jar (per class); spoon (per class)



- Show children the containers and say: **Look at all these containers. I want you to help me put them in order, starting with the container that can hold the fewest lentils.**
- Check the order by scooping lentils into the smallest container, then pouring them into the next sized container and topping up (if it overflows, they are in the wrong order). Continue until the largest container is full of lentils. Discuss the method as you demonstrate.



Homework Guide 1

Year 1, Unit 8, Week 3, Lesson 1:
 Full or empty?