

Reasoning and Problem Solving

Step 4: Compare Capacity

National Curriculum Objectives:

Mathematics Year 2: (2M1) [Compare and order lengths, mass, volume/capacity and record the results using >, < and =](#)

Differentiation:

Questions 1, 4 and 7 (Reasoning)

Developing Explain which container has the largest capacity by counting the number of glasses it can fill. Whole measurements only.

Expected Explain which container has the largest capacity by counting the number of glasses it can fill. Whole and half measurements.

Greater Depth Explain which container has the largest capacity by counting the number of glasses it can fill. Whole, half, quarter and three-quarter measurements.

Questions 2, 5 and 8 (Problem Solving)

Developing Compare the volume of containers using more, less or equal. All containers are the same and use the same volume.

Expected Compare the volume of containers using $<$, $>$ and $=$ where one container is used to establish to capacity of other containers. Full and half measures included.

Greater Depth Compare the volume of containers using $<$, $>$ and $=$ where one container is used to establish to capacity of other containers. Full, half and quarter measures included.

Questions 3, 6 and 9 (Reasoning)

Developing Determine whether a statement about comparing capacity is correct based on information given.

Expected Determine whether a statement about comparing capacity is correct based on information given.

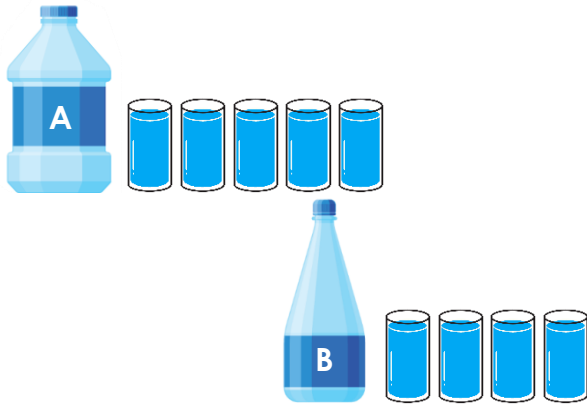
Greater Depth Determine whether a statement about comparing capacity is correct based on information given. Includes half and quarter measures.

More [Year 2 Mass Capacity and Temperature](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Compare Capacity

1a. Which container has the largest capacity?



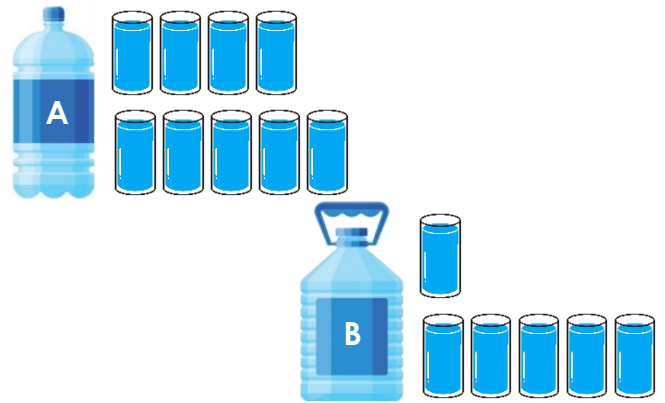
How do you know?



R

Compare Capacity

1b. Which container has the largest capacity?



How do you know?

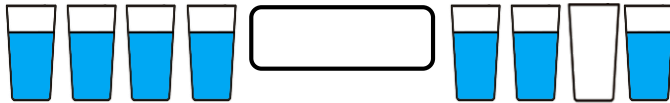
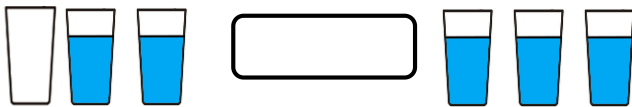


R

2a. Use the words more, less or equal, to compare the volume of column A with column B.

A

B

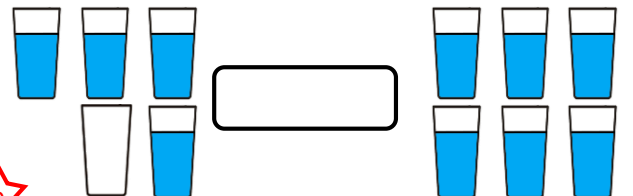
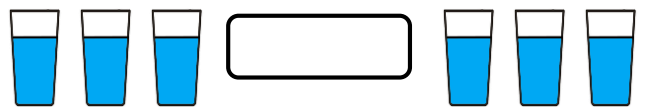


PS

2b. Use the words more, less or equal, to compare the volume of column A with column B.

A

B



PS

3a. Jackson knows it takes 5 glasses of water to fill a jug. He knows it takes 10 glasses of water to fill a bucket.



I think that the capacity of the jug is greater than the capacity of the bucket.

Is he correct? Explain your answer.



R

3b. Shelley knows it takes 10 buckets to fill a bath. She knows it takes 13 buckets to fill a paddling pool.



I think that the capacity of the paddling pool is greater than the capacity of the bath.

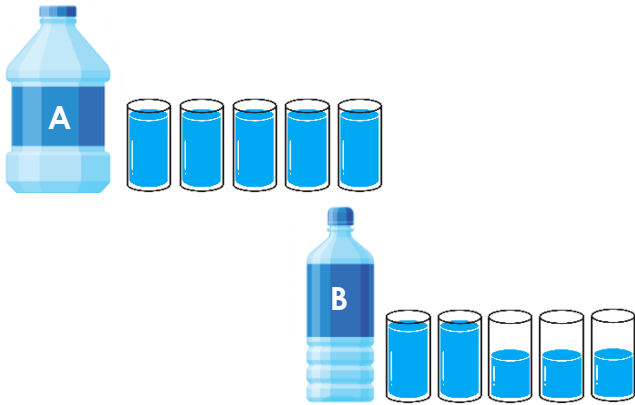
Is she correct? Explain your answer.



R

Compare Capacity

4a. Which container has the largest capacity?



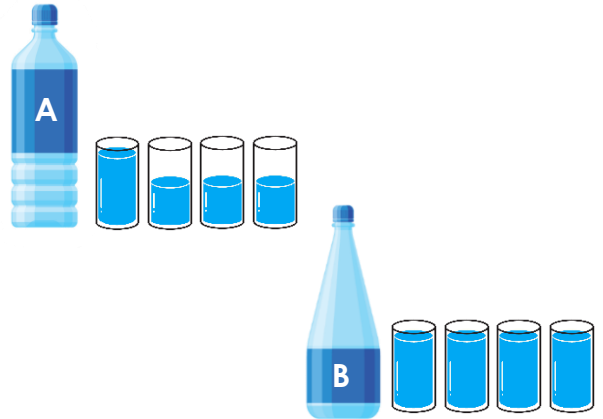
How do you know?



R

Compare Capacity

4b. Which container has the largest capacity?

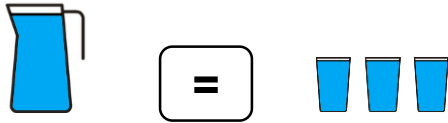


How do you know?

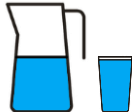
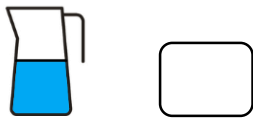


R

5a. Look at the comparison below.

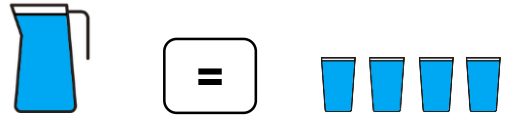


Complete these statements using $<$, $>$ and $=$ symbols.



PS

5b. Look at the comparison below.



Complete these statements using $<$, $>$ and $=$ symbols.



PS

6a. Jacinta knows that 12 glasses of water will fill 1 bucket or 2 jugs.



I think that the capacity of the bucket is greater than the capacity of the jug.

Is she correct? Explain your answer.



R

6b. Peter knows that 15 glasses of water fills three jugs or half a saucepan.



I think that the capacity of the jug is less than the capacity of the saucepan.

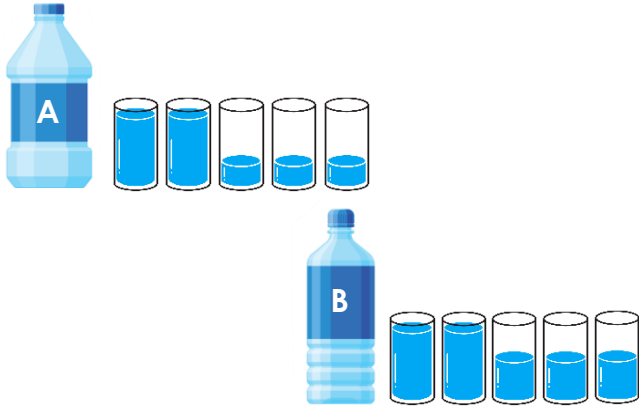
Is he correct? Explain your answer.



R

Compare Capacity

7a. Which container has the largest capacity?



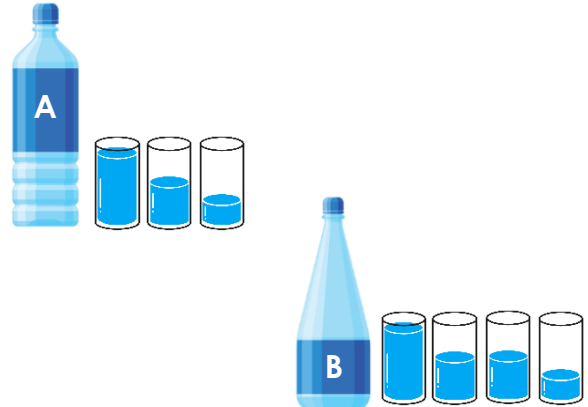
How do you know?



R

Compare Capacity

7b. Which container has the largest capacity?

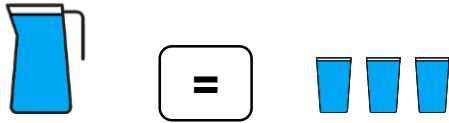


How do you know?

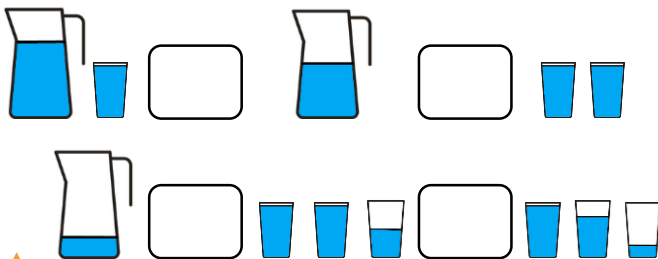


R

8a. Look at the comparison below.

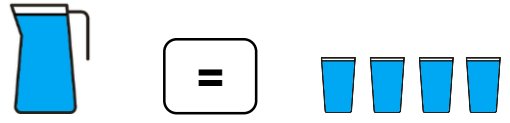


Complete these statements using $<$, $>$ and $=$ symbols.

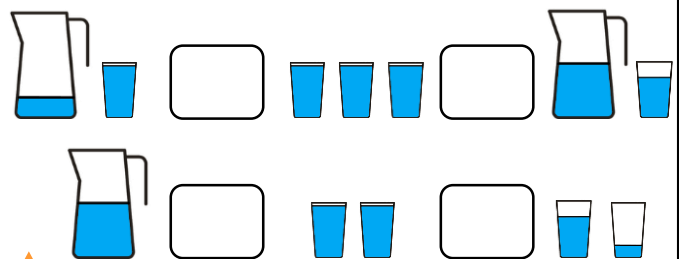


PS

8b. Look at the comparison below.



Complete these statements using $<$, $>$ and $=$ symbols.



PS

9a. Grace knows that 34 buckets of water will fill one paddling pool or three-quarters of a pond.



I think that the capacity of the pond is less than the capacity of the paddling pool.

Is she correct? Explain your answer.



R

9b. Sajid knows that 15 jugs of water will fill half a kitchen sink or 5 buckets.



I think that the capacity of the kitchen sink is greater than the capacity of the bucket.

Is he correct? Explain your answer.



R

Reasoning and Problem Solving Compare Capacity

Developing

- 1a. A because the container holds 5 full glasses. B only holds 4 full glasses.
2a. A is less than B, A is more than B.
3a. Jackson is not correct because the jug only takes 5 glasses to fill, the bucket takes 10 glasses.

Expected

- 4a. A because the container holds 5 full glasses. B only holds 3 full glasses and 1 half full.
5a. $<$, $>$
6a. Jacinta is correct because with the same amount of water, more jugs than buckets can be filled so the jugs must have a smaller capacity.

Greater Depth

- 7a. B because the container holds 3 full glasses and 1 half full glass. A only holds 2 full glasses and 3 quarter full glasses.
8a. $>$ $<$, $<$ $>$
9a. Grace is incorrect because with the same amount of water, the pond is only three-quarters full but the paddling pool is full so the pond must have a larger capacity than the paddling pool.

Reasoning and Problem Solving Compare Capacity

Developing

- 1b. A because the container holds 9 full glasses. B only holds 6 full glasses.
2b. A is equal to B, A is less than B.
3b. Shelley is correct because it takes 3 buckets more to fill the paddling pool.

Expected

- 4b. B because the container holds 4 full glasses. A only holds 2 full glasses and 1 half full glass.
5b. $>$, $=$
6b. Peter is correct because with the same amount of water, fills more jugs than saucepans can be filled so the saucepan must have a larger capacity.

Greater Depth

- 7b. B because the container holds 2 full glasses and 1 quarter full glass. A only holds 2 full glasses.
8b. $<$ $>$, $=$ $>$
9b. Sajid is correct because with the same amount of water, 5 buckets can be filled but only have of the kitchen sink so the sink must have a larger capacity.