

Reasoning and Problem Solving

Step 2: Make Equal Groups

National Curriculum Objectives:

Mathematics Year 2: (2C8) [Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts](#)

Differentiation:

Questions 1, 4 and 7 (Reasoning)

Developing Explain if a statement is correct using knowledge of making equal groups. Up to 5 images per group, where each image represents 1.

Expected Explain if a statement is correct using knowledge of making equal groups. Up to 10 images per group, where each image represents 1.

Greater Depth Explain if a statement is correct using knowledge of making equal groups, where each image can represent more than 1. Includes some numbers represented as words.

Questions 2, 5 and 8 (Reasoning)

Developing Identify the odd one out. Up to 5 images per group, where each image represents 1.

Expected Identify the odd one out. Up to 10 images per group, where each image represents 1. Includes some numbers represented as words.

Greater Depth Identify the odd one out, where each image can represent more than 1. Includes some numbers represented as words.

Questions 3, 6 and 9 (Problem Solving)

Developing Group objects to solve a word problem. Up to 5 images per group, where each image represents 1.

Expected Group objects in two different ways to solve a word problem. Up to 10 images per group, where each image represents 1. Includes some numbers represented as words.

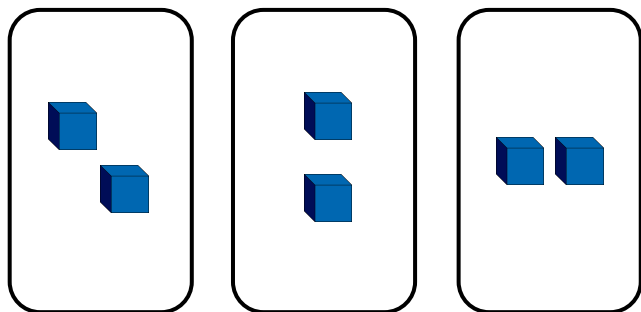
Greater Depth Group objects in different ways to solve a word problem. Each image can represent more than 1. Includes some numbers represented as words.

More [Year 2 Multiplication and Division](#) resources.

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

Make Equal Groups

1a. Jack thinks that this shows 2 equal groups of 3.



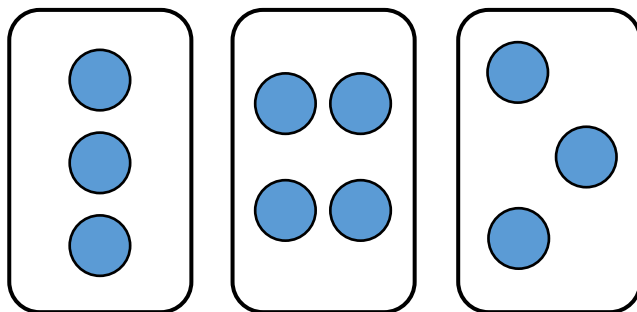
Is he correct? Explain your answer.



R

Make Equal Groups

1b. Katie thinks that this shows 3 equal groups of 3.

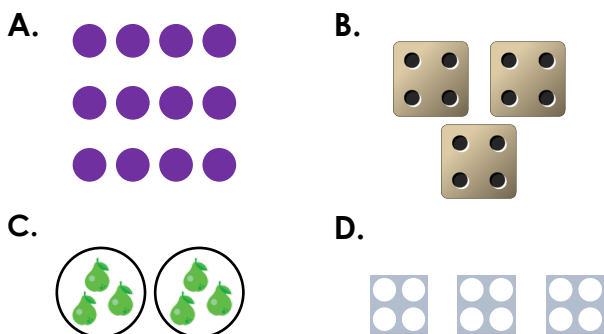


Is she correct? Explain your answer.



R

2a. Which example does not show 3 groups of 4?

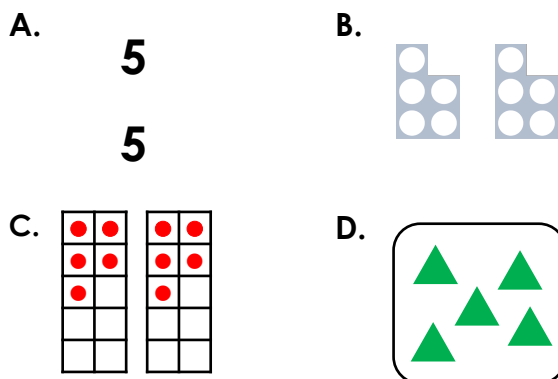


Explain how you know.



R

2b. Which example does not show 2 groups of 5?



Explain how you know.



R

3a. Ben has some sweets. He wants to share them between 2 children.



How many will each child get?



PS

3b. Yusef has some marbles. He wants to share them between his 2 friends.



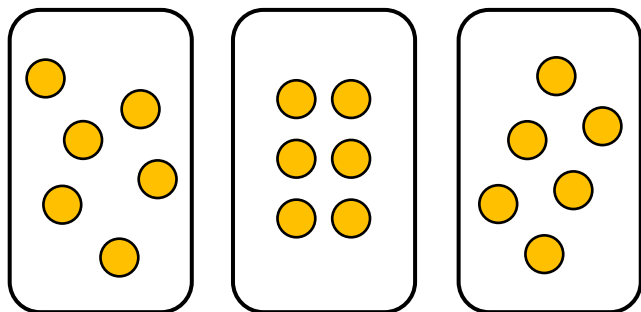
How many will each friend get?



PS

Make Equal Groups

4a. Sam thinks that this shows 6 equal groups of 3.



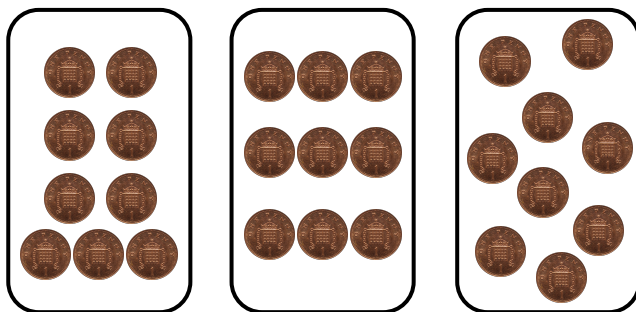
Is he correct? Explain your answer.



R

Make Equal Groups

4b. Rachel thinks that this shows 3 equal groups of 9.



Is she correct? Explain your answer.

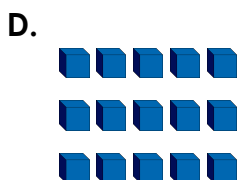
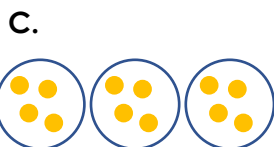


R

5a. Which example does not show 3 groups of 5?



B. five
five
five



Explain how you know.

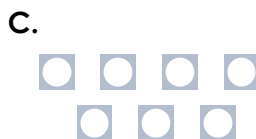


R

5b. Which example does not show 7 groups of 1?



B. seven



Explain how you know.



R

6a. Mrs. Lomas has some gold stars. She wants to share them equally between four children.



How many will each child get?

If Mrs Lomas shares them equally between two children, how many stars will each child get?



PS

6b. Mr. Jones has some pencils. He wants to share them between two children.



How many will each child get?

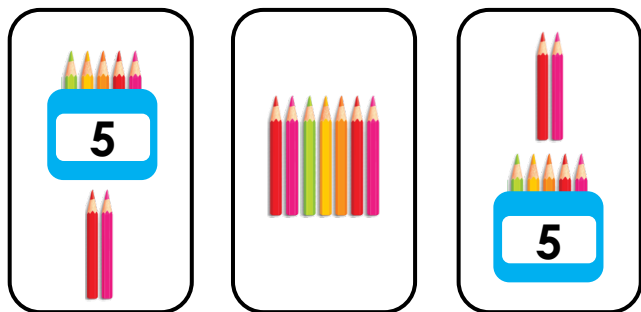
If Mr Jones shares them between four children, how many pencils will each child get?



PS

Make Equal Groups

7a. Ava thinks that this shows three equal groups of seven.



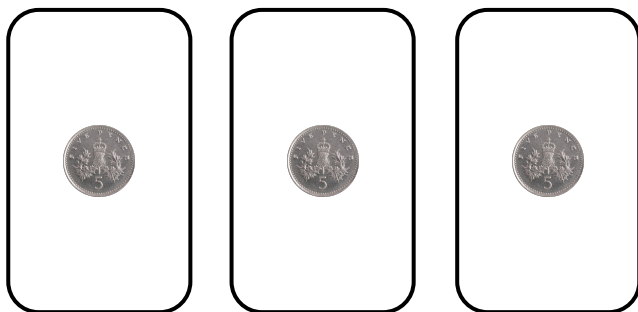
Is she correct? Explain your answer.



R

Make Equal Groups

7b. Lucas thinks that this shows five equal groups of three.

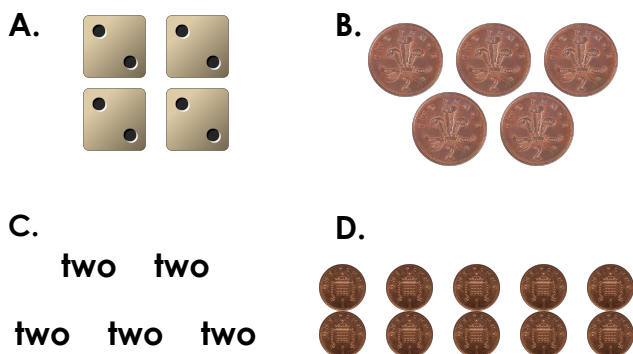


Is he correct? Explain your answer.



R

8a. Which example does not show 5 groups of 2?

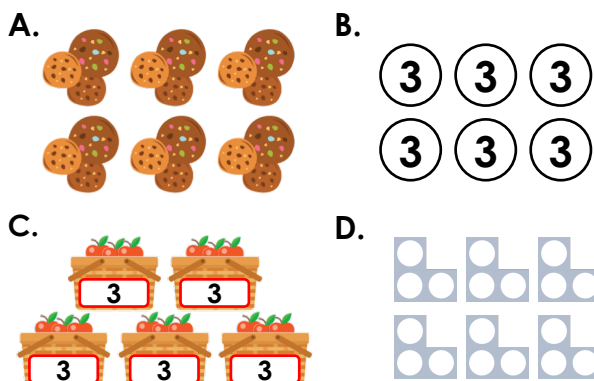


Explain how you know.



R

8b. Which example does not show 6 groups of 3?



Explain how you know.



R

9a. Annie has eighteen books. She wants to organise them into three piles.



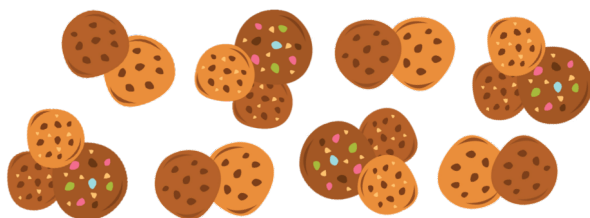
How many will be in each pile?

How many other ways could Annie organise her books into equal groups?



PS

9b. Mike has twenty biscuits. He wants to share them between four plates.



How many will be on each plate?

How many other ways could Mike share his biscuits into equal groups?



PS

Reasoning and Problem Solving Make Equal Groups

Developing

- 1a. Jack is incorrect because there are 3 equal groups of 2.
- 2a. C because it shows 2 groups of 3.
- 3a. Each child will get 3 sweets.

Expected

- 4a. Sam is incorrect because there are 3 equal groups of 6.
- 5a. C because it shows 3 groups of 4.
- 6a. When shared equally between four children, each child will get three stars. When shared equally between two children, each child will get six stars.

Greater Depth

- 7a. Ava is correct because there are 3 groups with 7 pencils in each group.
- 8a. A because it shows 4 groups of 2.
- 9a. When organised into three piles, there will be six books in each pile. Various answers of other equal groups, for example: two equal groups of nine.

Reasoning and Problem Solving Make Equal Groups

Developing

- 1b. Katie is incorrect because there are 2 equal groups of 3 and 1 group of 4.
- 2b. D because it shows 1 group of 5.
- 3b. Each friend will get 4 marbles.

Expected

- 4b. Rachel is correct because there are 3 groups with 9p in each group.
- 5b. B because it shows 1 group of 7.
- 6b. When shared equally between two children, each child will get 8 pencils. When shared equally between four children, each child will get 4 pencils.

Greater Depth

- 7b. Lucas is incorrect because there are 3 equal groups of 5.
- 8b. C because it shows 5 groups of 3.
- 9b. When shared between four plates, each plate will have five biscuits. Various answers of other equal groups, for example: ten equal groups of two.