

Number Wb 9.11.20

Comparing groups

Each day begin with some counting forward and back to 20

Monday

Day 1

Learning focus

Comparing groups

Before you teach II

- Can children accurately count up to 5 objects?
- Do children understand *how many* in terms of numbers to 5?
- Do children understand that 5 is more than 4, 4 is more than 2, for example?

Starter

Comparing quantities of non-identical objects

Who has more?

Let's look.

PREREQUISITE CHECK

PREREQUISITE CHECK Using the language *more* to compare two groups of identical objects.

WAYS OF WORKING Whole class

IN FOCUS This **Prerequisite check** practises the skill of comparing two groups of identical objects. Children can compare by looking, or can use cubes to represent the strawberries.

ASK

- How many strawberries does Ash have?
- How many strawberries does Flo have?
- Do you remember what 'more' means?
- Can you tell me who has more?

STIMULUS

STIMULUS Photograph prompting a guided activity

WAYS OF WORKING Small groups

Using the photograph of a child helping to set the table as a stimulus for discussion, guide children towards a comparison of non-identical objects using the **Get Active** activity below.

IN FOCUS The focus of the **Stimulus** photograph and activity is to prompt understanding that one-to-one correspondence does not only apply to objects that are the same.

GET ACTIVE In small groups, ask children to seat 4 teddy bears at a table. Encourage children to set the table for snack time. Provide a pile of 5 plates and 3 cups for children to give out (you could expand the activity with forks, spoons, toy fruit). Each teddy needs a plate.

ASK

- Does every teddy have a plate?
- Are there more plates or more teddies?
- Each teddy also needs a cup. What's wrong? [Children should notice that one teddy doesn't have a cup.]
- Are there fewer teddies or fewer cups?
- Are there more plates or more cups?

Comparing quantities of non-identical objects

Who has more ?



Let's look.



PREREQUISITE CHECK



STIMULUS

Tuesday

WAYS OF WORKING Whole class or small groups
Ensure cubes are available for children to use to represent objects for comparison.

IN FOCUS The focus of the **Discover** is to start to compare two groups of objects where the items are not identical, but are the same size, and to begin to line up objects in two parallel lines in order to accurately match and then compare them. Children should be encouraged to match groups of objects as a strategy for comparison, and can practise representing objects with cubes, a core skill introduced in Week 5.

ASK

- How many oranges are there? How many apples are there?
- Can you say what 'more' means?
- How could you work out which fruit there are more of?

STRENGTHEN Children need lots of experiences where they can compare collections and begin to talk about which group has more items. Initially, the groups should be very obviously different, with one group having many more things than the other group. Include collections with items



that are different but similar in size (such as apples and oranges) to help develop the skill of visual comparison. The more difficult skill of comparing objects of different sizes will be introduced in a later unit.

DEEPEN Point out other groups of non-identical objects for comparison in the **Discover** picture, such as the plates and cups. Encourage children to compare these groups using similar questions to those in **Ask**.

Share

WAYS OF WORKING Whole class
Provide cubes and/or toy fruit to recreate the focus items from the **Discover** picture.

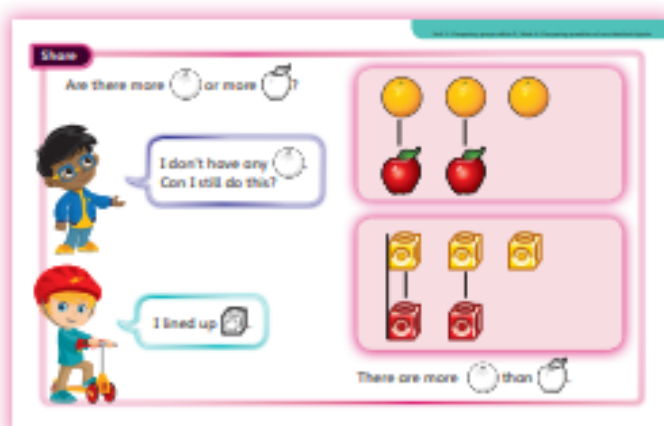
IN FOCUS The focus of **Share** is for children to begin matching in order to compare two groups of non-identical objects. Children need to have an understanding of the meaning of the word *matching* and how this can help to compare two groups of objects, identifying when there are more, fewer or the same.

ASK

- Refer children to what Ash is saying. *What can you use to represent the oranges and apples?*
- *How can you line them up or match them up to help you compare?*
- *Can you see which fruit there are more of? How do you know?*

STRENGTHEN Use the real fruits or a five frame and cubes to represent the fruits in the picture.

DEEPEN To extend thinking, use the classroom environment to sort and match non-identical objects such as pencils and felt-tip pens. Prompt children to line up and match their



groups. Ask: *Which group has more? Which group has fewer? How can you check?*

GET ACTIVE Give children collections of cubes in two colours for them to put into parallel lines to compare. Ask: *Are there more red or more yellow cubes?*

Discover




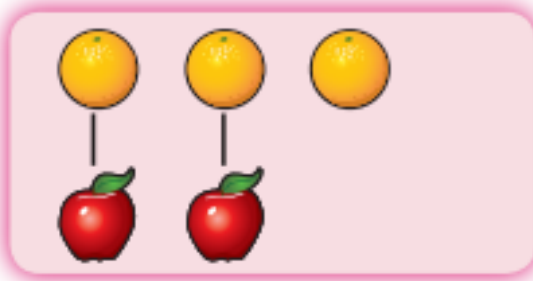
Are there more  or more .

Share

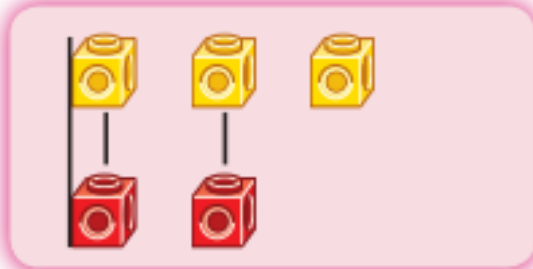
Are there more  or more .



I don't have any .
Can I still do this?



I lined up .



There are more  than .

Wednesday

Think together

WAYS OF WORKING Whole class

IN FOCUS The focus of the **Think together** is to practise the skill of comparing non-identical objects by matching them in lines, as modelled in **Share**. The small step of progression between Question 1 and Question 2 is the comparison of *fewer* rather than *more*, and that the objects in Question 2 are not aligned. Check that children understand the word *fewer* before attempting Question 2.

ASK

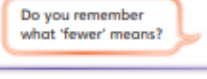
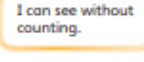

- Question 1: How can you compare the purple plates and the green plates? Which group has more? How can you check?
- Question 2: What does 'fewer' mean? Can you see which group has fewer, without counting? How can you check?

STRENGTHEN Encourage children to develop efficient comparing strategies by prompting them to decide what to do first. Ideally they should sort objects for comparison into two groups and then match them together, leading to a discussion about which has *more*, *fewer* or *an equal* amount.

Think together

1 Are there more or more ?

2 Are there fewer or fewer ?

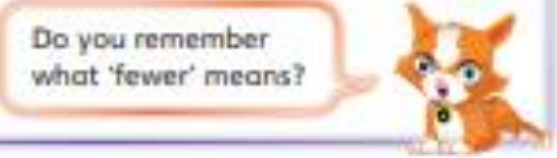
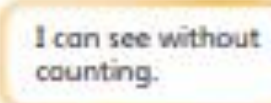





DEEPEN Challenge children to compare two non-identical groups without matching, but rather by seeing (subitising). Set up two groups of similarly sized non-identical objects (such as fruit, toy vehicles or animals) in familiar patterns (dice formations). Ask children to say which group has *more*, *fewer* or the *same* by looking, not counting or matching.

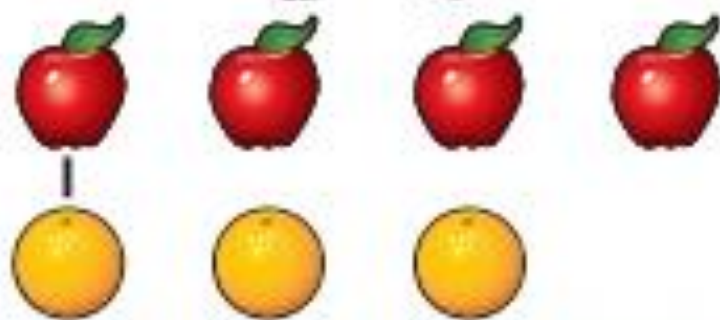
Think together

1 Are there more or more ?

2 Are there fewer or fewer ?



Are there more  or ?



Are there fewer  or fewer ?



ELD 11: Mathematics: Numbers count reliably with numbers from 1 to 5, say which number is one more or one less than a given number.



Strengthen: Can you use cubes to help you? Where could you put the cubes? (One cube on each picture.) How can you move the cubes to help you? Can you match them up?
Deepen: Make an obvious mistake by matching two objects to one. Ask children to explain where you have gone wrong.

Thursday

WAYS OF WORKING Whole class or in pairs

Provide cubes for children to use to represent the objects.

IN FOCUS The focus of this **Challenge** is to apply the skill of matching to a new type of question. Children first need to work out that this is a comparison question, and then choose a strategy to help them make the comparison. The strawberries are in an irregular arrangement, so it is more difficult to see which group has more. Children apply the methods of representing objects with cubes and then matching them, as prompted by Astrid.

ASK

- *What do you need to do to answer this question?*
[Make a comparison.]
- *How could you work this out?*
- Refer to what Astrid is saying: *Can you use cubes to help you? How?*
- *What should you do first? What should you do next?*
- *How can you check your answer?*

STRENGTHEN For children who have not yet achieved mastery, use real skewers and strawberries in the same quantities as the **Challenge**. Guide children to unpick the question by asking them to first line up the skewers and then line up the strawberries underneath. Ask: *Is this still a comparison question? How do you know? Show me how you can compare the skewers and the strawberries.*

DEEPEN Deepen understanding by taking opportunities to ask children to compare groups in everyday situations. For example, ask: *Are there more children in the reading corner or at the sand tray? Can every bowl have a spoon? Does every bike have a parking space?*

CHALLENGE

Can every skewer have a strawberry?

I will use cubes to help me.

GET ACTIVE Provide wooden skewers and a selection of fruit (larger fruits can be cut up into pieces). Make fruit skewers with children, leaving some pieces of fruit spare. Compare some of the skewers, ask: *Which one has more fruit pieces on it? Which one has fewer fruit pieces on it? Are there enough strawberries left over for each skewer to have another strawberry?*

Friday

Reflect: Journal 2

WAYS OF WORKING Independent thinking

IN FOCUS Children decide how many more apples than oranges they will draw in their journals. To successfully complete this activity, children will need to be comfortable with their understanding of *more*, and then be able to transfer that understanding accurately onto the page.



MASTERY CHECKPOINT **Children who have mastered this concept** can compare two groups of non-identical objects and match them in order to find out which has more, fewer or the same.


Children who have not yet mastered this concept need support when comparing two groups of non-identical objects, rely on teacher support and matching to compare and are not confident using the terms *more*, *fewer* and *the same*.


Children who have mastered this concept with greater depth can compare two groups of non-identical objects using various strategies, including matching, representing and subitising. They are confident with the comparison language of *more*, *fewer* and *the same* and can apply this in various contexts.

Unit 3: Comparing groups within 5, Week 6: Comparing quantities of non-identical objects

Reflect

Draw more  than .



First I will count the .


Strengthen: How many oranges are there? Can you use yellow cubes to represent them? What does 'more' mean? Let's get some red cubes – can you lay out more red cubes than yellow cubes? How many red cubes do you have? Can you show that number of apples?

Deepen: Make an obvious mistake by using 2 cubes to represent the apples (fewer, not more) or 4 cubes to represent the oranges. Ask children to explain where you have gone wrong.

13

Draw more  than .



First I will count the .



Strengthen: How many oranges are there? Can you use yellow cubes to represent them? What does 'more' mean? Let's get some red cubes - can you lay out more red cubes than yellow cubes? How many red cubes do you have? Can you draw that number of apples?
Deepen: Make an obvious mistake by using 3 cubes to represent the apples (three, not three) or 4 cubes to represent the oranges. Ask children to explain where you have gone wrong.

