

Year 3 Maths No Problem lesson plans Chapter 10 mind workouts and Review 10.
Revision 3, pages 85 - 90. Chapter 11, Lesson 1-4, Pages 91 - 94, week beginning 11/05/20

Please complete the mind workouts in the workbook (page 81) and textbook (page 113 – 114).

Please complete Review 10, pages 82 – 84.

Please complete Revision 3, pages 85 – 90.

These all need to be completed independently.

Chapter 11

Lesson 1: Counting in Tenths

Textbook pages: 116 – 119

Lesson Objective

To be able to count in tenths.

Lesson Approach

To begin this lesson, display the In Focus task and ask pupils to look at the complete bar of chocolate. How many small pieces can the chocolate bar be cut into? Then ask them how many pieces each child gets.

Show them that if the chocolate bar is cut into 10 pieces, each piece is 1 out of 10 pieces. How do we write 1 out 10? If pupils do not recall fractions previously learnt, write the fractional notation $\frac{1}{10}$ as you read 1 out of 10. Then tell pupils it is read as 1 tenth. Draw a number line from 0 to 1 and ask pupils where to place $\frac{1}{10}$. Give them time to discuss this, then ask them if they know how many tenths there are in 1 whole. Count together with them using the number line. Ask them what 2 pieces of chocolate is – $\frac{2}{10}$ and then indicate this on the number line. Work through Let's Learn until you reach 1 whole. Then count the tenths backwards. Count forwards and backwards a few times, starting from different tenths.

During Guided Practice, pupils are exploring different visuals of tenths: in a bar and on a number line. What are the similarities between them? Are there differences?

Lesson 2: Making Number Pairs

Textbook pages: 120 – 121

Lesson Objective

To be able to add fractions with the same denominator within 1 whole.

Lesson Approach

To begin this lesson, show pupils the In Focus task and discuss the number of parts the square has been divided into. How many pieces are blue? How many pieces are purple? Therefore, we can see that 4 pieces of blue and 5 pieces of purple make a total of 9 pieces. Ask pupils how we write 4 out of 9 pieces. Tell them we read $\frac{4}{9}$ as 4 ninths. What about 5 out of 9 pieces? How do we read $\frac{5}{9}$? Point out that $\frac{4}{9}$ and $\frac{5}{9}$ will make $\frac{9}{9}$.

Ask pupils what they notice about the denominators and numerators. Guide them to see that the denominator tells us the total number of equal parts a whole has been divided into, that is why it remains the same whether we count the blue or purple parts. The numerator tells us the number of equal parts we are counting, that is why it is 4 when we count the blue parts and 5 when we count the purple parts.

Provide pupils with small paper squares in two different colours and ask them to combine them to make 9 pieces. For each pattern, ask them to write the two fractions that will make $\frac{9}{9}$. Show them we can also use number bonds to present the pairs of fractions.

During Guided Practice, pupils are finding number pairs to make a fraction.

Lesson 3: Adding Fractions

Textbook pages: 122 – 123

Lesson Objective

To be able to add fractions with the same denominator within 1 whole.

Lesson Approach

To begin this lesson, provide pupils with a piece of paper that has been divided into fifths. Tell them to pretend that this is a chocolate bar (or anything else they like!). Show them the In Focus task and ask them to share the chocolate bar in the same way. Ask them how they will do this; allow them to shade the parts, cut them out, etc. Then ask them to display what they have done and show you how much of the chocolate bar has been eaten by each child.

Ask them to write the fraction for the amount of chocolate each child has eaten. Guide them to see that as the chocolate bar has been divided into 5 parts, each part should be written as $\frac{1}{5}$ and read as 1 fifth. Then ask them to find how much chocolate both of them have eaten altogether. Show them we can add the two fractions, $\frac{1}{5}$ and $\frac{2}{5}$ to find the total amount of chocolate eaten, which is $\frac{3}{5}$.

Guide pupils to conclude that adding fractions with the same denominator is the same as adding whole numbers. We do not add the denominator because it only tells us how many

equal parts a whole has been divided into. We add the numerators because they tell us the number of equal parts we are counting.

During Guided Practice, pupils are adding together fractions with the same denominator using pictures and fractional notations.

Lesson 4: Adding Fractions

Textbook pages: 124 – 125

Lesson Objective

To be able to add fractions with the same denominator within 1 whole.

Lesson Approach

To begin this lesson, provide pupils with a piece of paper and ask them to fold it into 4 equal pieces. Also provide them with two different coloured pencils. Tell them that the paper is 1 whole pizza that has been cut into 4 equal pieces.

Now show pupils the In Focus task and ask them if they are able to solve the problem using their 'pizzas'. Allow them some time to work out the solution. When they begin to say they ate the whole pizza, tell them that is impossible because they were only eating a fraction of it! Tell them they'll need to prove it to you. Ask them if they are able to draw it for you, as in Let's Learn 1. Can they show you using a bar? Finally, agree that the whole pizza is gone.

Ask pupils if this is true for all fractions – when the numerator equals the denominator, do you have 1 whole? Ask them to try this out with a number of fractions to check that it is always correct. Provide the class with further examples of addition as shown in the Let's Learn tasks.

During Guided Practice, pupils are adding fractions with the same denominator.