Monday 20th April (scroll to Tuesday/Wednesday/Thursday/Friday lessons and answers)

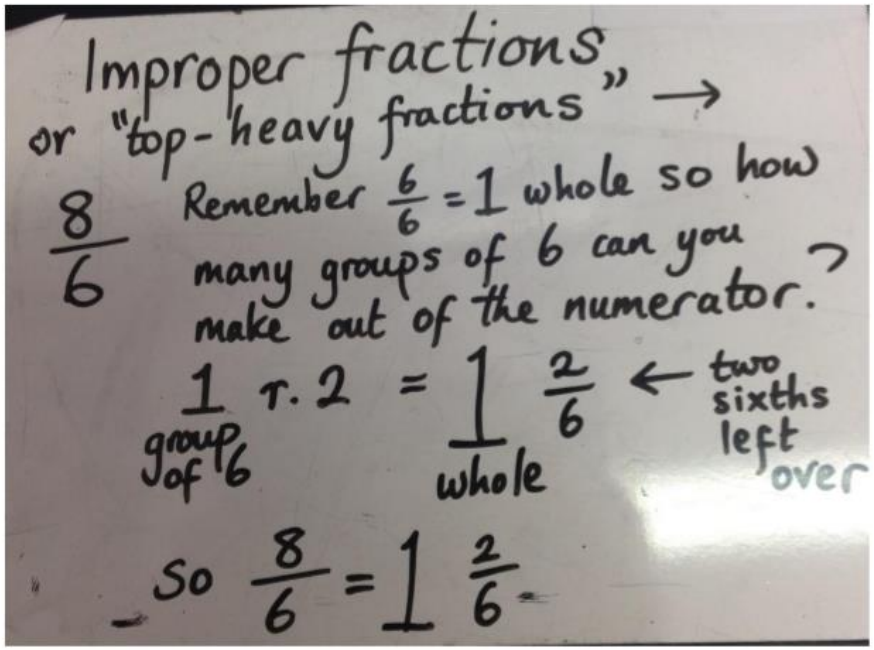
Welcome back to home learning y5!

Your Maths objective is : to

Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements.

First of all think about improper fractions (or top-heavy fractions = numerator is a bigger number than denominator) and how you can convert them into mixed numbers also known as mixed fractions

Think about improper fractions today:



Now search for mixed fractions maths is fun maths resources

And look carefully at the visual explanations.

Copy out any key information as a colourful mini- poster to help you remember and understand.

Now do the pre-assessment:

Spring 2: Week 3: Pre-Learning Task

The pre-learning task below could be used to assess pupils' starting points within this objective. It needs to be completed by all/ or some of the pupils in advance of the main teaching.

Name	Spring 2: Week 3
Objective: Fractions	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements.

Write $\frac{9}{4}$ as a mixed number.			How many ¼ are there in 3¾?		
Write $\frac{12}{5}$ as a mixed number.			How many ⅛ are there in 3⅜?		

Monday's pre-assessment continued:

Write $\frac{17}{6}$ as a mixed number. Write $\frac{19}{5}$ as a mixed number.	How many tenths in three wholes and three tenths? How many thirds in three wholes and two thirds?

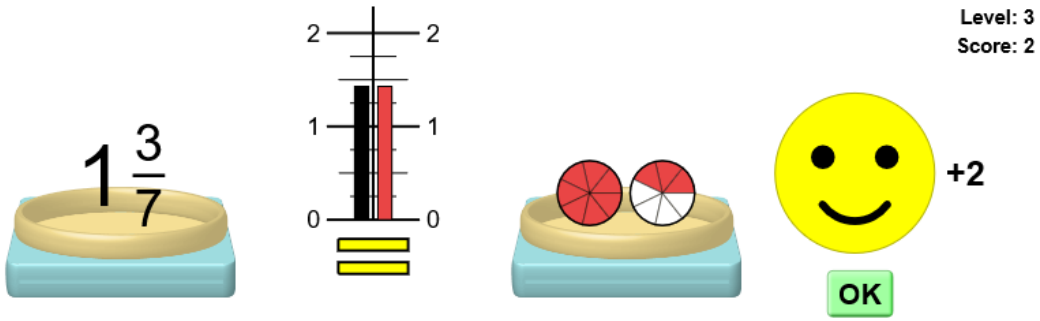
Tuesday 21st April

First of all search www.topmarks fraction matcher and select mixed numbers section

If you feel unsure about mixed numbers start at level 2, if you are quite confident start at level 3.

Firstly, just use the interactive tool.

Secondly start to write out the improper fraction equivalents e.g:



Mixed number = $\frac{10}{7}$

(above)

Now complete Tuesday's practice and consolidation (skills) worksheet:

k 3: Practice and Consolidation

ise mixed numbers and improper fractions and convert from one form to the athematical statements.

Oral and Mental Activities Examples:	Pencil and Paper Activities Examples:
• Begin by using a metre stick which can be divided into equal parts. Start with four parts. Emphasise that 4 parts of 4 is one whole and can be expressed as 4/4. Similarly 6 parts of 6 is 6/6, etc. • Establish understanding of the numerator and denominator. The denominator is the parts it has been divided into and the numerator is the number of those parts you have. In this way pupils should see that 6 parts of 4 is one and 2 fourths or one and a half.	Write these as mixed numbers: $\frac{9}{4}$ $\frac{12}{5}$ $\frac{5}{3}$ $\frac{8}{7}$ $\frac{7}{6}$ $\frac{11}{4}$ $\frac{13}{5}$ $\frac{20}{7}$ Write these as improper fractions: $2\frac{1}{2}$ $4\frac{5}{6}$ $6\frac{2}{5}$ $8\frac{1}{4}$ $10\frac{3}{4}$ $7\frac{3}{8}$ $9\frac{2}{5}$ How many ½ in 5½? How many ¼ in 6¾? How many 1/3 in 7 2/3? How many ⅛ in 3⅞? How many ¼ in 5½? How many ⅛ in 3⅜? How many ¼ in 4¾? How many 1/6 in 8 5/6? Write as mixed numbers: Nine fifths. Twenty thirds Ten quarters Twelve tenths Sixteen fifths Eleven halves

Wednesday 22nd April

Good morning!

Today search fraction games maths games.org and scroll down to the fraction lesson

Look at What is a fraction? as general revision then Fraction practice

(although this seems simple it's a good reminder that 3 out of 4 means the same as $\frac{3}{4}$)

And finally scroll to the improper/mixed fraction section.

Have you digested all that information?

Now complete mastery:

If pupils have mastered this objective they will be able to complete these activities independently:

Convert the following sets of improper fractions to mixed fractions and then order them putting the highest value first:

$\frac{12}{5}$ $\frac{7}{2}$ $\frac{8}{3}$ $\frac{19}{5}$ $\frac{22}{3}$ $\frac{17}{8}$ $\frac{21}{4}$ $\frac{30}{7}$

$\frac{15}{4}$ $\frac{19}{2}$ $\frac{33}{7}$ $\frac{14}{9}$ $\frac{7}{2}$ $\frac{9}{5}$ $\frac{17}{7}$ $\frac{23}{7}$

Complete the following table:

Mixed	Improper
$3\frac{7}{8}$	
	$\frac{134}{7}$
$7\frac{3}{4}$	
	$\frac{152}{9}$

Use one of the following signs to complete these sentences (<; >; =)

$3\frac{1}{8}$ ☐ $\frac{17}{8}$

$6\frac{3}{4}$ ☐ $\frac{29}{4}$

$8\frac{3}{8}$ ☐ 75

Now create 2 of your own for your friends to solve.

Turn 33/5 into an improper fraction and then find half of 33/5.

Turn 33/7 into an improper fraction and then find half of 33/7.

Turn 93/9 into an improper fraction and then find half of 93/9.

Turn 166/7 into an improper fraction and then find half of 166/7.

*This section clarified below

Focus Mastery:
To recognise and convert mixed numbers/improper fractions
(Wednesday)

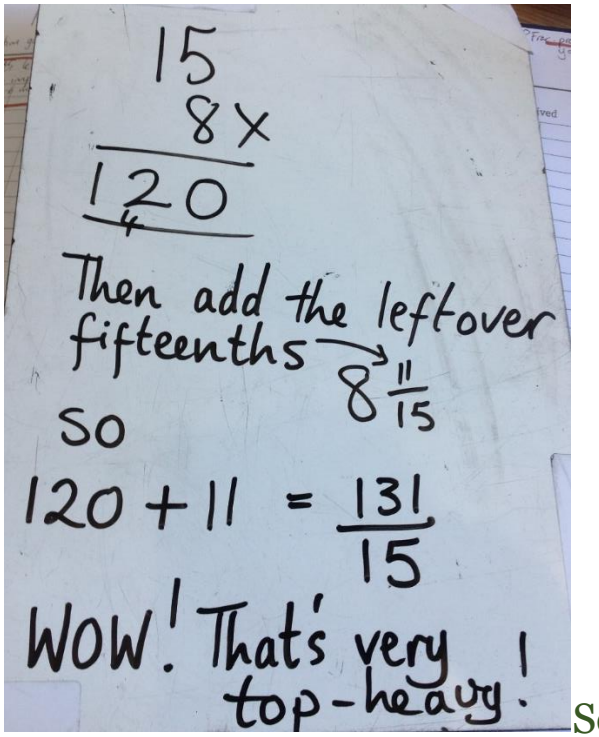
Final section bottom right is unclear so check:
Firstly fraction is three and three fifths
Then 3 and three sevenths
Then 9 and three ninths
Then 16 and six sevenths

Thursday 23rd April

Firstly search transum improper fractions and go to level 2 use calculations where necessary to convert mixed numbers to improper fractions e.g

You could have a tricky conversions such as $8\frac{11}{15}$ to convert to fifteenths

Remember if you had pizzas delivered to a party and all the slices were fifteenths, every 15 slices could be put back together to create one whole pizza as $\frac{15}{15} = 1$ whole so if you have 8 wholes in this instance you begin by multiplying 15 by 8. This is a short multiplication remember:



See if you can win the trophy on transom!

Now begin / complete part one of greater depth:

Spring 2: Week 3: Working at greater depth

Fractions: Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements.

Teaching Sequence	Activities for pupils working at greater depth:	
➢ Know that a whole number can be written as a fraction, e.g. 2/2 etc. ➢ Know that 1½ can be written as 3/2 etc. ➢ Convert any improper fraction to a mixed fraction	**Taxi Journey** A taxi driver charges 10p for every ¼Km he takes his passenger. How much will a journey of 3¾ cost? What about a journey of 4½Km? What about a journey of 6¼Km? Make up some other journeys for your friends to solve.	**Wedding Ribbon** A dressmaker wants to buy special ribbon for a wedding dress. For every ⅛ of a metre the ribbon costs £2.50. The dressmaker wants 4⅜ metres. How much will the ribbon cost? What if she wanted to buy 6½metres?

Friday 24th April

Firstly , complete greater depth:

Pizza Delivery	Moving Sand
10 children share some pizzas. They each get ⅜ of one pizza and there were 2 pieces left over. How many pizzas did they have delivered? On another day 11 children shared some pizzas. Each child got 5/6 of a whole pizza and there was 1 piece left over. How many pizzas were delivered this time?	Ahmet is given the task of moving sand from one place to another. His bucket holds 6/7Kg. He has to move 10 2/7Kg in total. How many journeys will Ahmet have to make to move all the sand? What if his bucket held 1 1/7Kg?

To clarify Moving Sand fractions:

Bucket holds $\frac{6}{7}$kg

Has to move 10 and $\frac{2}{7}$ kg in total What if his bucket held 1 and $\frac{1}{7}$ kg?

If you have completed focus greater depth you can revise equivalent fractions

Firstly go to fraction monkeys on maths games.org to revise expressing fractions on a number line and remembering some simple equivalents

Then search creature capture fractions on topmarks

First of all hover over the grass blocks/water blocks/ fire blocks to find out how you can trump your partner (or the computer) by dragging certain fractions to the blocks. Every so often there will be a water battle etc..and great visuals to show you exactly why the winner is for example (the largest number or fraction….or the nearest to half..) This is a fun way to compare fractions and revise equivalents!

Scroll down for focus maths answers for the whole week:

Focus Maths Answers Year 5

Spring Term 2 Week 3

Page 128 Pre-Learning Task

Write $\frac{9}{4}$ as a mixed number.	**$2\frac{1}{4}$**	How many ¼ are there in 3¾?	**15**
Write $\frac{12}{5}$ as a mixed number.	**$2\frac{2}{5}$**	How many ⅛ are there in 3⅜?	**27**
Write $\frac{17}{6}$ as a mixed number.	**$2\frac{5}{6}$**	How many 1/10 are there in $3\frac{3}{10}$?	**33**
Write $\frac{19}{5}$ as a mixed number.	**$3\frac{4}{5}$**	How many 1/3 are there in $3\frac{2}{3}$?	**11**

Page 129 Practice and Consolidation

Write these as mixed numbers:

$\frac{9}{4} = \mathbf{2\frac{1}{4}}$ $\frac{12}{5} = \mathbf{2\frac{2}{5}}$ $\frac{5}{3} = \mathbf{1\frac{2}{3}}$ $\frac{8}{7} = \mathbf{1\frac{1}{7}}$

$\frac{7}{6} = \mathbf{1\frac{1}{6}}$ $\frac{11}{4} = \mathbf{2\frac{3}{4}}$ $\frac{13}{5} = \mathbf{2\frac{3}{5}}$ $\frac{20}{7} = \mathbf{2\frac{6}{7}}$

Write these as improper fractions:

$2\frac{1}{2} = \mathbf{\frac{5}{2}}$ $4\frac{5}{6} = \mathbf{\frac{29}{6}}$ $6\frac{2}{5} = \mathbf{\frac{32}{5}}$ $8\frac{1}{4} = \mathbf{\frac{33}{4}}$ $10\frac{3}{4} = \mathbf{\frac{43}{4}}$ $7\frac{3}{8} = \mathbf{\frac{59}{8}}$

$9\frac{2}{5} = \mathbf{\frac{47}{5}}$

How many ½ in 5½? **11**
How many ¼ in 6¾? **27**
How many 1/3 in 7 2/3? **23**
How many ⅛ in 3⅞? **31**
How many ¼ in 5½? **22**
How many ⅛ in 3⅜? **27**
How many ¼ in 4¾? **19**
How many 1/6 in 8 5/6? **53**

Write as mixed numbers:

Nine fifths = **1 4/5**
Twenty thirds = **6 2/3**
Ten quarters = **2 ½**
Twelve tenths = **1 1/5**
Sixteen fifths = **3 1/5**
Eleven halves = **5 ½**
Nineteen thirds = **6 1/3**
Twenty-two eighths = **2 ¾**
Seven thirds = **2 1/3**

Page 130 Mastering this Objective

Convert the following sets of improper fractions to mixed fractions and then order them putting the highest value first:

12/5 = **2 2/5** 7/2 = **3 ½** 8/3 = **2 2/3** 19/5 = **3 4/5** 22/3 = **7 1/3**
17/8 = **2 1/8** 21/4 = **5 ¼** 30/7 = **4 2/7**

Ordered: **17/8; 12/5; 8/3; 7/2; 19/5; 30/7; 21/4; 22/3**

15/4 = **3 ¾** 19/2 = **9 ½** 33/7 = **4 5/7** 14/9 = **1 5/9** 7/2 = **3 ½**
9/5 = **1 4/5** 17/7 = **2 3/7** 23/7 = **3 2/7**

Ordered: **14/9; 9/5; 17/7; 23/7; 7/2; 15/4; 33/7; 19/2**

Use one of the following signs to complete these sentences (<; >; =)

3⅛ **>** 17/8

6¾ **<** 29/4

8⅜ **<** 75/8

Complete the following table:

Mixed	Improper
3⅞	**31/8**
19 1/7	134/7

$7\frac{3}{4}$	**$\frac{31}{4}$**
$16\ \frac{8}{9}$	$\frac{152}{9}$

Turn $3_{3/5}$ into an improper fraction and then find half of it. **18/5** **$1_{4/5}$**
Turn $3_{3/7}$ into an improper fraction and then find half of it. **24/7** **$1_{5/7}$**
Turn $9_{3/9}$ into an improper fraction and then find half of it. **84/9** **$4_{1/3}$**
Turn $16_{6/7}$ into an improper fraction and then find half of it. **118/7** **$8_{3/7}$**

Page 131 Working at greater depth

Taxi Journey
A taxi driver charges 10p for every ¼Km he takes his passenger. How much will a journey of 3¾ cost? **£1.30**
What about a journey of 4½Km? **£1.80**
What about a journey of 6¼Km? **£2.50**

Pizza Delivery
10 children share some pizzas. They each get ⅜ of one pizza and there were 2 pieces left over. How many pizzas did they have delivered? **4**
On another day 11 children shared some pizzas. Each child got 5/6 of a whole pizza and there were 5 pieces left over. How many pizzas were delivered this time? **10**

Wedding Ribbon
A dressmaker wants to buy special ribbon for a wedding dress. For every ⅛ of a metre the ribbon costs £2.50. The dressmaker wants 4⅜ metres. How much will the ribbon cost? **£87.50**
What if she wanted to buy 6½ metres? **£130**

Moving Sand
Ahmet is given the task of moving sand from one place to another. His bucket holds 6/7Kg. He has to move 102/7Kg in total. How many journeys will Ahmet have to make to move all the sand? **17**
What if his bucket held 11/7Kg? **10**