



Maths - Planning and Ideas Week Commencing: 1st June 2020

Year Groups: 5

Starter Times Table Rockstars Link - <https://trockstars.com/>

White Rose Maths Link <https://whiterosemaths.com/homelearning/year-5/> All of the videos are included in **Summer Term Week 5 wcl8th May**

This week's planning will be recapping previous learning from earlier this year. The idea behind this is to consolidate children's understanding of key concepts in order to help prepare them for next year. We are aware that some children may already have a sound understanding of some of these areas of learning, while others will still need to practise them. I have tried to include examples of Fluency and Reasoning and Problem Solving activities similar to what we complete in class. For any children who are very confident in working through the worksheets, I have added some Dive Deeper activities in the blue boxes for each day to deepen children's understanding.

	Monday	Tuesday	Wednesday	Thursday	Friday
Area of Learning	Can you add and subtract fractions with the same denominator?	Can you add fractions with different denominators?	Can you add mixed number fractions?	Can you subtract mixed number fractions?	Arithmetic Test
Activity	<p>Starter: Times Table Rockstars Main Teaching: Watch the video (Lesson 1 – Add and Subtract Fractions). Today, we are looking at fractions which have the same denominators. Activity: Fluency – Add and subtract the fractions. On the first example, shade the pictures to go along with the questions. On the second example, try without. Reasoning – How many different possibilities of missing numerators (top numbers) can you find? Remember – when you mark these you may have different answers to the ones on the sheet Dive Deeper – Complete the difficult problem.</p>	<p>Starter: Times Table Rockstars Main Teaching: Watch the video (Lesson 2 – Add Fractions). This is a similar lesson to yesterday, but the denominators are different – remember you can only add or subtract a fraction if the denominators are the same. Activity: Fluency – Complete the calculations. In each, the larger denominator is a multiple of the smaller one so you will only have to convert one. The first answer box is for your answer as an improper fraction (top heavy) and the second is for a mixed number fraction (whole number and fraction) Reasoning – Write different possibilities of what the numerator could be. TIP – convert them all to the same denominator first. Problem Solving – Complete the fraction pyramid. Remember – the total of the box above is the sum of the two below.</p>	<p>Starter: Times Table Rockstars Main Teaching: Watch the video (Lesson 3 –Add Mixed Numbers). Today, we are looking at mixed number fractions (fractions which are made up of whole numbers and fractions) Activity: Fluency – complete the mixed number additions. You may need to work them out on a scrap piece of paper first. Problem Solving – calculate the perimeter of the triangle. Remember, to work out the perimeter you have to add the sides. Dive Deeper – Complete the puzzles with the number cards.</p>	<p>Starter: Times Table Rockstars Main Teaching: Watch the video (Lesson 4 –Subtract Mixed Numbers). This is a similar lesson to yesterday but this time you are subtracting the mixed numbers. I think this is quite a difficult lesson so just try your best and do what you can. Activity: Fluency – Complete the subtraction calculations. You may need to work them out on a scrap piece of paper first. Problem Solving – fill in the table to show the athletic scores. Use the clues at the bottom to help. Work through it in a methodical way as this is quite difficult. Dive Deeper – How many different ways can you complete the calculations? Convert the denominators to the same before trying this.</p>	<p>Starter: Times Table Rockstars</p> <p>Again, something a bit different this week. Answer the arithmetic style questions. Write your answers on a scrap piece of paper. There are a range of topics here, not necessary things that we have done this week. However, you should find the fractions questions easy compared to the difficult work you have done this week! Good luck.</p>

Monday



$$\frac{4}{5} + \frac{3}{5} = \boxed{} = \boxed{}$$



$$\frac{6}{5} + \frac{3}{5} = \boxed{} = \boxed{}$$



$$\frac{8}{5} - \frac{6}{5} = \boxed{}$$



$$\frac{9}{5} - \frac{3}{5} = \boxed{} = \boxed{}$$

a) $\frac{4}{7} + \frac{2}{7} = \boxed{}$

f) $\frac{17}{9} - \frac{8}{9} = \boxed{} = \boxed{}$

b) $\frac{4}{7} + \frac{3}{7} = \boxed{} = \boxed{}$

g) $\frac{16}{9} - \frac{8}{9} = \boxed{}$

c) $\frac{4}{7} + \frac{4}{7} = \boxed{} = \boxed{}$

h) $\frac{7}{9} + \frac{2}{9} + \frac{8}{9} = \boxed{} = \boxed{}$

d) $\frac{8}{7} - \frac{3}{7} = \boxed{}$

i) $\frac{7}{15} + \frac{2}{15} + \frac{8}{15} = \boxed{} = \boxed{}$

e) $\frac{7}{9} + \frac{8}{9} = \boxed{} = \boxed{}$

j) $\frac{7}{15} - \frac{2}{15} + \frac{8}{15} = \boxed{}$

$$\frac{\boxed{}}{8} + \frac{\boxed{}}{8} = \frac{13}{8}$$

What could the missing numerators be?

Give six different possibilities.

$$\frac{\boxed{}}{8} + \frac{\boxed{}}{8} = \frac{13}{8}$$

$$\frac{\boxed{}}{8} + \frac{\boxed{}}{8} = \frac{13}{8}$$

$$\frac{\boxed{}}{8} + \frac{\boxed{}}{8} = \frac{13}{8}$$

$$\frac{\boxed{}}{8} + \frac{\boxed{}}{8} = \frac{13}{8}$$

$$\frac{\boxed{}}{8} + \frac{\boxed{}}{8} = \frac{13}{8}$$

$$\frac{\boxed{}}{8} + \frac{\boxed{}}{8} = \frac{13}{8}$$

Annie and Dexter both have a skipping rope.

Annie's rope is $\frac{3}{4}$ m shorter than Dexter's rope.

The ropes are $\frac{13}{4}$ m altogether.

How long is each skipping rope?

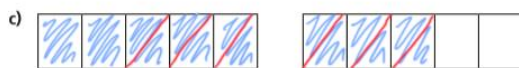
Monday Answers



$$\frac{4}{5} + \frac{3}{5} = \frac{7}{5} = 1\frac{2}{5}$$



$$\frac{6}{5} + \frac{3}{5} = \frac{9}{5} = 1\frac{4}{5}$$



$$\frac{8}{5} - \frac{6}{5} = \frac{2}{5}$$



$$\frac{9}{5} - \frac{3}{5} = \frac{6}{5} = 1\frac{1}{5}$$

a) $\frac{4}{7} + \frac{2}{7} = \frac{6}{7}$

f) $\frac{17}{9} - \frac{8}{9} = \frac{9}{9} = 1$

b) $\frac{4}{7} + \frac{3}{7} = \frac{7}{7} = 1$

g) $\frac{16}{9} - \frac{8}{9} = \frac{8}{9}$

c) $\frac{4}{7} + \frac{4}{7} = \frac{8}{7} = 1\frac{1}{7}$

h) $\frac{7}{9} + \frac{2}{9} + \frac{8}{9} = \frac{17}{9} = 1\frac{8}{9}$

d) $\frac{8}{7} - \frac{3}{7} = \frac{5}{7}$

i) $\frac{7}{15} + \frac{2}{15} + \frac{8}{15} = \frac{17}{15} = 1\frac{2}{15}$

e) $\frac{7}{9} + \frac{8}{9} = \frac{15}{9} = 1\frac{2}{3}$

j) $\frac{7}{15} - \frac{2}{15} + \frac{8}{15} = \frac{13}{15}$

What could the missing numerators be?

Give six different possibilities.

e.g.

$$\frac{1}{8} + \frac{12}{8} = \frac{13}{8}$$

$$\frac{4}{8} + \frac{9}{8} = \frac{13}{8}$$

$$\frac{2}{8} + \frac{11}{8} = \frac{13}{8}$$

$$\frac{5}{8} + \frac{8}{8} = \frac{13}{8}$$

$$\frac{3}{8} + \frac{10}{8} = \frac{13}{8}$$

$$\frac{7}{8} + \frac{6}{8} = \frac{13}{8}$$

Annie's rope is $1\frac{1}{4}$ m long.

Dexter's rope is 2 m long.

Tuesday

a) $\frac{4}{5} + \frac{7}{20} = \square = \square$

d) $\frac{4}{3} + \frac{5}{12} = \square = \square$

b) $\frac{5}{4} + \frac{7}{20} = \square = \square$

e) $\frac{3}{5} + \frac{11}{15} = \square = \square$

c) $\frac{3}{4} + \frac{5}{12} = \square = \square$

f) $\frac{5}{3} + \frac{11}{15} = \square = \square$

What could the three missing numerators be?

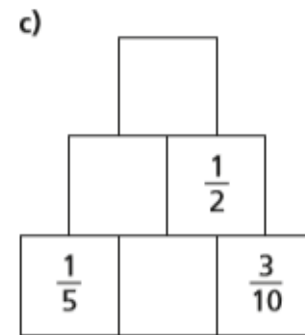
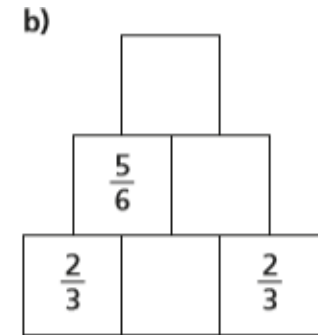
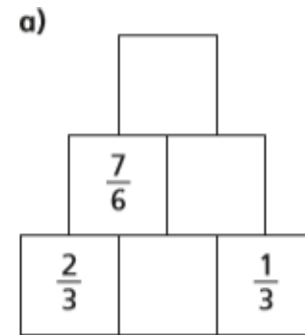
$$\frac{\square}{4} + \frac{\square}{12} + \frac{\square}{3} = \frac{13}{12}$$

Give three different possibilities.

$$\frac{\square}{4} + \frac{\square}{12} + \frac{\square}{3} = \frac{13}{12}$$

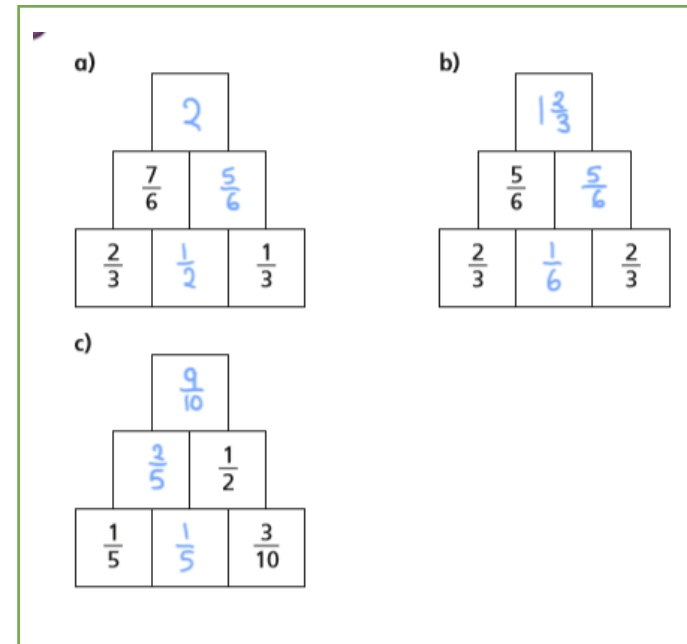
$$\frac{\square}{4} + \frac{\square}{12} + \frac{\square}{3} = \frac{13}{12}$$

$$\frac{\square}{4} + \frac{\square}{12} + \frac{\square}{3} = \frac{13}{12}$$



Tuesday Answers

a) $\frac{4}{5} + \frac{7}{20} = \frac{23}{20} = 1\frac{3}{20}$	d) $\frac{4}{3} + \frac{5}{12} = \frac{21}{12} = 1\frac{3}{4}$
b) $\frac{5}{4} + \frac{7}{20} = \frac{32}{20} = 1\frac{3}{5}$	e) $\frac{3}{5} + \frac{11}{15} = \frac{20}{15} = 1\frac{1}{3}$
c) $\frac{3}{4} + \frac{5}{12} = \frac{14}{12} = 1\frac{1}{6}$	f) $\frac{5}{3} + \frac{11}{15} = \frac{36}{15} = 2\frac{2}{5}$



Give three different possibilities.

$$\frac{1}{4} + \frac{6}{12} + \frac{1}{3} = \frac{13}{12}$$

$$\frac{2}{4} + \frac{3}{12} + \frac{1}{3} = \frac{13}{12}$$

$$\frac{1}{4} + \frac{2}{12} + \frac{2}{3} = \frac{13}{12}$$

Wednesday

a) $1\frac{2}{5} + 2\frac{3}{10} =$

b) $2\frac{2}{5} + 2\frac{3}{10} =$

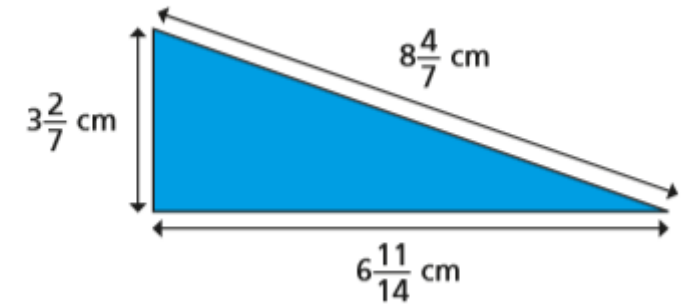
c) $1\frac{3}{4} + 3\frac{3}{20} =$

e) $4\frac{1}{4} + 2\frac{11}{16} =$

d) $1\frac{3}{16} + 4\frac{3}{4} =$

f) $1\frac{4}{15} + 3\frac{2}{3} =$

Calculate the perimeter of the triangle.



Here are some number cards.



a) What is the greatest total you can make with two cards?

b) What is the smallest total you can make with two cards?

Wednesday Answers

$$\text{a) } 1\frac{2}{5} + 2\frac{3}{10} = \boxed{3\frac{7}{10}}$$

$$\text{b) } 2\frac{2}{5} + 2\frac{3}{10} = \boxed{4\frac{7}{10}}$$

$$\text{c) } 1\frac{3}{4} + 3\frac{3}{20} = \boxed{4\frac{9}{10}}$$

$$\text{e) } 4\frac{1}{4} + 2\frac{11}{16} = \boxed{6\frac{15}{16}}$$

$$\text{d) } 1\frac{3}{16} + 4\frac{3}{4} = \boxed{5\frac{15}{16}}$$

$$\text{f) } 1\frac{4}{15} + 3\frac{2}{3} = \boxed{4\frac{14}{15}}$$

$$\boxed{18\frac{9}{14} \text{ cm}}$$

a) What is the greatest total you can make with two cards?

$$\boxed{8\frac{15}{12}}$$

b) What is the smallest total you can make with two cards?

$$\boxed{5\frac{3}{4}}$$

Thursday

Complete the subtractions.

a) $3\frac{1}{4} - \frac{5}{24} =$

d) $7\frac{5}{6} - \frac{13}{24} =$

b) $3\frac{3}{16} - \frac{1}{8} =$

e) $4\frac{4}{9} - \frac{4}{27} =$

c) $2\frac{5}{6} - \frac{2}{3} =$

f) $6\frac{11}{12} - \frac{3}{4} =$

Three children take part in throwing competitions.

Here is the table of results.

	Javelin	Shot Put	Discus
Dexter	$15\frac{1}{4}$ m	$7\frac{5}{12}$ m	
Amir	$13\frac{3}{8}$ m		$12\frac{7}{8}$ m
Annie		9 m	$11\frac{5}{12}$ m

Use the clues to complete the table.

- Annie's javelin throw is $\frac{11}{12}$ m less than Dexter's.
- Amir's shot put throw is $\frac{3}{4}$ m less than Annie's.
- Dexter's discus throw is $\frac{1}{2}$ m less than Amir's

Find three different ways to complete the calculation.

$$3\frac{\boxed{}}{5} - \frac{\boxed{}}{20} = 3\frac{1}{20}$$

$$3\frac{\boxed{}}{5} - \frac{\boxed{}}{20} = 3\frac{1}{20}$$

$$3\frac{\boxed{}}{5} - \frac{\boxed{}}{20} = 3\frac{1}{20}$$

Are there any other ways to complete this calculation?

Thursday Answers

Complete the subtractions.

a) $3\frac{1}{4} - \frac{5}{24} = 3\frac{1}{24}$

d) $7\frac{5}{6} - \frac{13}{24} = 7\frac{7}{24}$

b) $3\frac{3}{16} - \frac{1}{8} = 3\frac{1}{16}$

e) $4\frac{4}{9} - \frac{4}{27} = 4\frac{8}{27}$

c) $2\frac{5}{6} - \frac{2}{3} = 2\frac{1}{6}$

f) $6\frac{11}{12} - \frac{3}{4} = 6\frac{1}{6}$

	Javelin	Shot Put	Discus
Dexter	$15\frac{1}{4}$ m	$7\frac{5}{12}$ m	$12\frac{3}{8}$ m
Amir	$13\frac{3}{8}$ m	$8\frac{1}{4}$ m	$12\frac{7}{8}$ m
Annie	$14\frac{1}{3}$ m	9 m	$11\frac{5}{12}$ m

Find three different ways to complete the calculation.

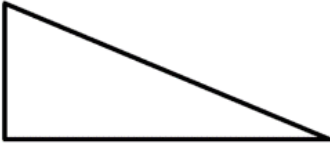
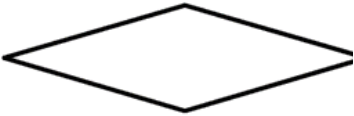
e.g.

$3\frac{1}{5} - \frac{3}{20} = 3\frac{1}{20}$

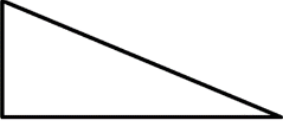
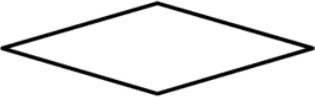
$3\frac{3}{5} - \frac{11}{20} = 3\frac{1}{20}$

$3\frac{2}{5} - \frac{7}{20} = 3\frac{1}{20}$

Friday

1)	0.6×4	
2)	Which two of the numbers below are prime? 17 14 15 18 19 10	
3)	How many acute angles? 	
4)	What is the perimeter of a square with sides 50cm?	
5)	Which of these numbers are divisible by 5? 32 51 45 20 18	
6)	Add together $\frac{2}{10}$, $\frac{3}{10}$ and $\frac{4}{10}$	
7)	$9278 = 9008 + \underline{\hspace{2cm}}$	
8)	What is the name of this shape?  trapezium rectangle rhombus square	
9)	Round 3.48 to the nearest whole number.	
10)	A 2kg chicken takes 15 minutes plus 25 minutes per 500g to cook. How long do I need to cook it for? ___ h ___ min	
11)	I buy 10 raffle tickets at £1.60 per ticket. How much money have I spent?	
12)	$\frac{1}{4}$ of 32 subtract $\frac{1}{3}$ of 18	
13)	What is the value of the expression $2x + 1$ if $x = 6$?	
14)	Sally spends £4.30 on a sandwich and £2.50 on a drink. How much change from £10?	
15)	In a class, $\frac{2}{5}$ of the children are boys. What fraction are girls?	
16)	I set off at 7:40am. My journey takes 45 min. When do I arrive?	

Friday Answers

1)	0.6 x 4	2.4
2)	Which two of the numbers below are prime? 17 14 15 18 19 10	17 and 19
3)	How many acute angles? 	2
4)	What is the perimeter of a square with sides 50cm?	200 cm
5)	Which of these numbers are divisible by 5? 32 51 45 20 18	45 and 20
6)	Add together $\frac{2}{10}$, $\frac{3}{10}$ and $\frac{4}{10}$	$\frac{9}{10}$
7)	9278 = 9008 + ____	270
8)	What is the name of this shape?  trapezium rectangle rhombus square	rhombus

e nearest whole number.	3
10) A 2kg chicken takes 15 minutes plus 25 minutes per 500g to cook. How long do I need to cook it for? ___ h ___ min	1 h 55 min
11) I buy 10 raffle tickets at £1.60 per ticket. How much money have I spent?	£16
12) $\frac{1}{4}$ of 32 subtract $\frac{1}{3}$ of 18	8-6=2
13) What is the value of the expression $2x + 1$ if $x = 6$?	13
14) Sally spends £4.30 on a sandwich and £2.50 on a drink. How much change from £10?	£3.20
15) In a class, $\frac{2}{5}$ of the children are boys. What fraction are girls?	$\frac{3}{5}$
16) I set off at 7:40am. My journey takes 45 min. When do I arrive?	8:25am