

Homework

Friday 26th April 2024

Please complete the following:

English	<p>Reading Read at home on at least three separate occasions and record in your reading diary. These must be handed in daily to be signed.</p> <p>Spellings Practise your spellings. These will be uploaded on Spelling shed too. You will have a test on Friday.</p>
Mathematics	<p>MAIN HOMEWORK:</p> <p>1) Fractions, decimals and percentages worksheets</p> <p>And</p> <p>2) Number and Place Value worksheets.</p>
Other	<p>Read over any previous past papers you have been given over the last few months and revise anything you have struggled with. Look up any key concepts that you are not confident with on the following websites.</p> <p><u>Revision Websites:</u> https://www.bbc.co.uk/bitesize/subjects/zv48q6f/year/zncsscw https://trockstars.com/ https://myminimaths.co.uk/year-6-mini-maths/ https://mathsframe.co.uk/</p> <p>Year 3/4&5/6 word lists</p> <p>Don't forget to keep reviewing the word lists and practise the words you are unfamiliar with. As well as being useful to include in your writing, these words may pop up in the SATs test...</p>

If you need any further guidance on how to complete the tasks, please ask! Don't leave it until Wednesday!

Remember, have a go and try your best!

Fractions, Decimals & Percentages

1. **Simplify** these fractions as much as possible.

a. $\frac{24}{40}$

 1

b. $\frac{18}{63}$

 1

2. a. Find an **equivalent fraction** to $\frac{1}{3}$, where the denominator is 21.

 1

b. Find an **equivalent fraction** to $\frac{3}{7}$, where the denominator is 21.

 1

c. What is $\frac{1}{3} + \frac{3}{7}$?

 1

3. a. What is the **value** of the digit '4' in the number 0.45?

.....

 1

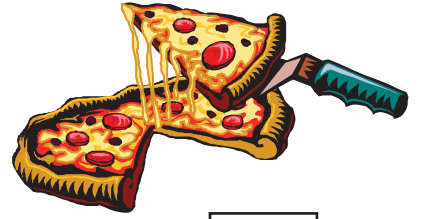
b. Multiply 0.45 by 1000.

.....

 1

Fractions, Decimals & Percentages

4. Michiko has $\frac{3}{4}$ of a pizza. She shares it equally between four people.
What fraction of a whole pizza will each person get?



1

5. What is $\frac{4}{5} \times \frac{3}{8}$? Give your answer as a fraction in its **simplest form**.

1

6. A box of 100 teaspoons weighs 1854 g.
a. How much does 1 teaspoon weigh?

..... g

1

- b. **Round** the weight of 1 teaspoon to the nearest gram.

..... g

1

7. Put the fractions $\frac{5}{4}$, $\frac{9}{10}$ and $\frac{4}{5}$ in order from **smallest to largest**.

smallest \longrightarrow largest

1

Fractions, Decimals & Percentages

8. **Convert** the fraction $\frac{5}{8}$ to a decimal. Show your working.

..... (1)

9. If you have twelve pieces of ribbon that are each 0.43 m long, how many metres of ribbon do you have in total?

..... m (1)

10. Pete buys six bananas. He pays £1.62. How much did each banana cost, in pounds?
Use a **written division method** to find the answer.

£ (1)

11. Which number below would round to 6.2 when rounding to **one decimal place**?

6.254

6.149

6.245

6.304

6.274

..... (1)

Fractions, Decimals & Percentages

12. What is $1\frac{2}{5} - \frac{9}{10}$? Give your answer as a fraction in its **simplest form**.

—	2
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13. Box A contains 200 marbles. $\frac{3}{5}$ of the marbles are green.

Box B contains 300 marbles. 50% of the marbles are green.

Which box contains **more green marbles**? Show your working.

Box 2

14. Adam has $1\frac{3}{4}$ pints of milk. Jade has $1\frac{3}{8}$ pints of milk.

How many pints of milk do they have in total between them? Give your answer as an **improper fraction**.

— pints	3
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23
Total

Fractions, Decimals & Percentages

Answers

1. Simplify these fractions as much as possible.

a. $\frac{24}{40}$

Highest common factor = 8

$$24 \div 8 = 3$$

$$40 \div 8 = 5$$

$$\frac{3}{5}$$

1

b. $\frac{18}{63}$

Highest common factor = 9

$$18 \div 9 = 2$$

$$63 \div 9 = 7$$

$$\frac{2}{7}$$

1

2. a. Find an **equivalent fraction** to $\frac{1}{3}$, where the denominator is 21.

$$\frac{1}{3} \xrightarrow{\times 7} \frac{7}{21}$$

$$\frac{7}{21}$$

1

b. Find an **equivalent fraction** to $\frac{3}{7}$, where the denominator is 21.

$$\frac{3}{7} \xrightarrow{\times 3} \frac{9}{21}$$

$$\frac{9}{21}$$

1

c. What is $\frac{1}{3} + \frac{3}{7}$?

$$\frac{7}{21} + \frac{9}{21} = \frac{7+9}{21} = \frac{16}{21}$$

$$\frac{16}{21}$$

1

3. a. What is the **value** of the digit '4' in the number 0.45?

4 tenths / 0.4

1

b. Multiply 0.45 by 1000.

450

1

Fractions, Decimals & Percentages

Answers

4. Michiko has $\frac{3}{4}$ of a pizza. She shares it equally between four people.

What fraction of a whole pizza will each person get?

$$\frac{3}{4} \div 4 = \frac{3}{4 \times 4} = \frac{3}{16}$$



$$\frac{3}{16} \quad (1)$$

5. What is $\frac{4}{5} \times \frac{3}{8}$? Give your answer as a fraction in its **simplest form**.

$$\frac{4}{5} \times \frac{3}{8} = \frac{4 \times 3}{5 \times 8} = \frac{12}{40} \xrightarrow{\div 4} \frac{3}{10}$$

$$\frac{3}{10} \quad (1)$$

6. A box of 100 teaspoons weighs 1854 g.

a. How much does 1 teaspoon weigh?

$$\dots\dots\dots 18.54 \dots\dots\dots \text{g} \quad (1)$$

b. **Round** the weight of 1 teaspoon to the nearest gram.

$$\dots\dots\dots 19 \dots\dots\dots \text{g} \quad (1)$$

7. Put the fractions $\frac{5}{4}$, $\frac{9}{10}$ and $\frac{4}{5}$ in order from **smallest to largest**.

20 is a common multiple of 4, 10 and 5.

$$\frac{5}{4} \xrightarrow{\times 5} \frac{25}{20} \quad \frac{4}{5} \xrightarrow{\times 4} \frac{16}{20}$$

$$\frac{9}{10} \xrightarrow{\times 2} \frac{18}{20}$$

$$\frac{4}{5} \xrightarrow{\times 4} \frac{16}{20}$$

$$\frac{4}{5}$$

$$\frac{9}{10}$$

$$\frac{5}{4}$$

smallest \longrightarrow largest

(1)

Fractions, Decimals & Percentages

Answers

8. **Convert** the fraction $\frac{5}{8}$ to a decimal. Show your working.

E.g. work out $5000 \div 8$ first:

$$\begin{array}{r} 625 \\ 8 \overline{)5000} \end{array}$$

$$625 \div 1000 = 0.625$$

Allow any sensible method of working this out.

0.625

1

9. If you have twelve pieces of ribbon that are each 0.43 m long, how many metres of ribbon do you have in total?

E.g.

$$\begin{array}{r} 43 \\ \times 12 \\ \hline 86 \\ 430 \\ \hline 516 \\ 1 \end{array}$$

43 is 100 times bigger than 0.43, so:
 $516 \div 100 = 5.16$.

Allow any sensible method of working this out.

5.16

m

1

10. Pete buys six bananas. He pays £1.62. How much did each banana cost, in pounds? Use a **written division method** to find the answer.

E.g.

$$\begin{array}{r} 27 \\ 6 \overline{)162} \end{array}$$

Allow any sensible written division method.

162 is 100 times bigger than 1.62, so:
 $27 \div 100 = 0.27$.

£ 0.27

1

11. Which number below would round to 6.2 when rounding to **one decimal place**?

6.254

6.149

6.245

6.304

6.274

6.245

1

Fractions, Decimals & Percentages

Answers

12. What is $1\frac{2}{5} - \frac{9}{10}$? Give your answer as a fraction in its **simplest form**.

$$1\frac{2}{5} = \frac{(1 \times 5) + 2}{5} = \frac{7}{5}$$

$$\frac{7}{5} \xrightarrow{\times 2} \frac{14}{10}$$

$$\frac{14}{10} - \frac{9}{10} = \frac{14 - 9}{10} = \frac{5}{10}$$

$$\frac{5}{10} \xrightarrow{\div 5} \frac{1}{2}$$

Award 1 mark for doing the subtraction and 1 mark for simplifying the fraction.

$$\boxed{\frac{1}{2}} \quad (2)$$

13. Box A contains 200 marbles. $\frac{3}{5}$ of the marbles are green.

Box B contains 300 marbles. 50% of the marbles are green.
Which box contains **more green marbles**? Show your working.

$$\text{E.g. } \frac{3}{5} \times 200 = \frac{3 \times 200}{5} = \frac{600}{5} = 120$$

$$50\% = \frac{1}{2} \quad \frac{1}{2} \text{ of } 300 \text{ is } 150.$$

Award 1 mark each for finding how many green marbles are in Box A and Box B.

Box **B** (2)

14. Adam has $1\frac{3}{4}$ pints of milk. Jade has $1\frac{3}{8}$ pints of milk.

How many pints of milk do they have in total between them? Give your answer as an **improper fraction**.

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

$$1\frac{3}{8} = \frac{(1 \times 8) + 3}{8} = \frac{11}{8}$$

$$\frac{7}{4} \xrightarrow{\times 2} \frac{14}{8}$$

$$\frac{14}{8} + \frac{11}{8} = \frac{14 + 11}{8} = \frac{25}{8}$$

$$\boxed{\frac{25}{8} \text{ pints}} \quad (3)$$

Award 1 mark for converting the mixed numbers to improper fractions, 1 mark for putting them over a common denominator, and 1 mark for the addition.

(23)
Total

Number and Place Value

1. Jack **partitioned** a big number like this:

$$10\ 000\ 000 + 2\ 000\ 000 + 500\ 000 + 30\ 000 + 9\ 000 + 600 + 50 + 4$$

What was the big number that Jack partitioned?

.....

1

2. A school has 1454 pupils. How many pupils does it have rounded to the **nearest 10**?

..... pupils

1

3. Put the numbers below in order, going from **smallest to biggest**.

1 250 325

Smallest

2 250 105

.....

2 250 150

.....

1 520 000

Biggest

2

4. The temperature in Lima is $18\text{ }^{\circ}\text{C}$. The temperature in Toronto is $-13\text{ }^{\circ}\text{C}$.
What is the **difference** between these two temperatures?

..... $^{\circ}\text{C}$

1

Number and Place Value

5. What is 623 451 rounded to the **nearest 1000**?

..... (1)

6. Look at this number: 8 257 361

a. What is the **value** of the digit '5' in this number?

..... (1)

b. Write **< or >** in the box below to make the number sentence correct.

8 257 361 8 257 631

(1)

7. Four people have the following amounts of money in their bank accounts:

Carol: £1345

Karthik: £1495

Lola: £1516

Alex: £1387

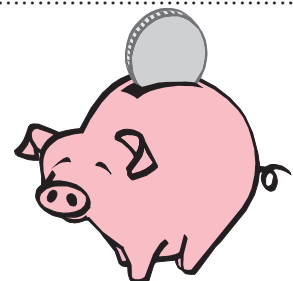
a. Who has £2000, rounded to the **nearest £1000**?

..... (1)

b. Who has £1400, rounded to the **nearest £100**?

..... (1)

8. Alice has -£56 in her bank account. She pays in £110.
How much money does Alice have in her account now?



£

(1)

(11)

Total

Number and Place Value

Answers

1. Jack **partitioned** a big number like this:

$$10\ 000\ 000 + 2\ 000\ 000 + 500\ 000 + 30\ 000 + 9000 + 600 + 50 + 4$$

What was the big number that Jack partitioned?

..... 12 539 654

1

2. A school has 1454 pupils. How many pupils does it have rounded to the **nearest 10**?

..... 1450

pupils

1

3. Put the numbers below in order, going from **smallest to biggest**.

1 250 325	Smallest 1 250 325
2 250 105	 1 520 000
2 250 150	 2 250 105
1 520 000	Biggest 2 250 150

2

Award 2 marks for all correct, otherwise award 1 mark for at least 1 correct.

4. The temperature in Lima is 18°C . The temperature in Toronto is -13°C .
What is the **difference** between these two temperatures?

E.g. there are 13 places between -13 and 0 .

There are 18 places between 0 and 18 .

$$13 + 18 = 31$$

..... 31 $^{\circ}\text{C}$

1

Number and Place Value

Answers

5. What is 623 451 rounded to the **nearest 1000**?

623 000

1

6. Look at this number: 8 257 361

a. What is the **value** of the digit '5' in this number?

50 000

1

b. Write **< or >** in the box below to make the number sentence correct.

8 257 361

<

8 257 631

1

7. Four people have the following amounts of money in their bank accounts:

Carol: £1345

Karthik: £1495

Lola: £1516

Alex: £1387

a. Who has £2000, rounded to the **nearest £1000**?

Rounded to the nearest 1000:

C = £1000, K = £1000,

L = £2000, A = £1000,

Lola

1

b. Who has £1400, rounded to the **nearest £100**?

Rounded to the nearest 100:

C = £1300, K = £1500,

L = £1500, A = £1400,

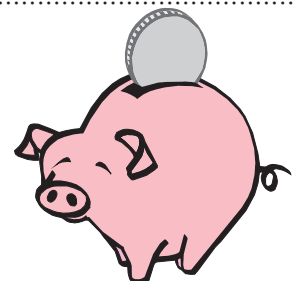
Alex

1

8. Alice has -£56 in her bank account. She pays in £110.
How much money does Alice have in her account now?

E.g. it is £56 from -£56 to £0.

That leaves £110 - £56 = £54



£ 54

1

11

Total