Home Learning Pack

Year 6

Guidance and Answers

Week 4
11/05/2020

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This week's pack supports the **Week 4 timetable** on Classroom Secrets Kids.

Monday

Maths – Multiply Fractions by Integers (page 2)

Fractions are amounts that are not whole numbers; they are made up of a **numerator** (the top part of a fraction, which shows how many parts of the whole are being considered) and a **denominator** (the bottom part of a fraction, which shows how many equal parts the whole has been split into).

$$\frac{2}{16}$$ ⟵ Numerator
⟵ Denominator

Fraction

An **integer** is a whole number, which is either positive or negative.

A **calculation** is a way to determine an amount. It may involve addition, subtraction, multiplication or division.

Bar models are numbers in the form of bars or boxes, used to solve number problems; children may find using these helpful when comparing fractions. Below are two examples of fractions being represented as **bar models**.

$\frac{2}{4}$ $\frac{1}{2}$

An **improper fraction** is a fraction where the **numerator** is larger than the **denominator**.

These are sometimes known as top heavy fractions.

For example, $\frac{4}{3}$.

A **mixed number** is a whole number and a proper fraction represented together.

For example, $1\frac{1}{3}$.

>, < and **=** are comparison symbols used to represent more than (**>**), less than (**<**) and equal to (**=**).

Question 1 - This question requires children to draw a line from the images of the fractions (represented as **bar models**) to their matching pairs. Children may find it useful to count the number of boxes for each bar model (which represents the **denominator**), and the number of sections that are coloured in each one (which represents the **numerator**). It is important to remember that when multiplying fractions by **integers**, only the **numerator** changes; the **denominator** stays the same.

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Monday

Maths – Multiply Fractions by Integers
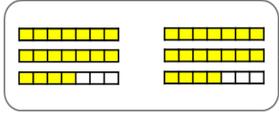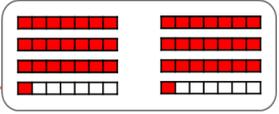
A matches 2. The answer is $\frac{36}{7}$ as an improper fraction, and $5\frac{1}{7}$ as a mixed number.
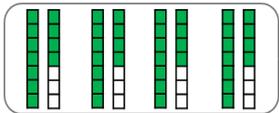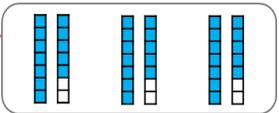
B matches 1. The answer is $\frac{44}{7}$ as an improper fraction, and $6\frac{2}{7}$ as a mixed number.

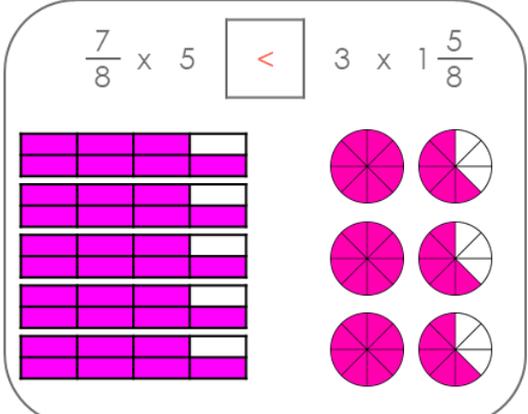Question 2 - This question requires children to use **>**, **<** and **=** (see page 2) to compare the calculations involving fractions. The calculations include both **improper fractions** (see page 2) and **mixed numbers** (see page 2). Images are given in addition to the written calculations to support children in working out their answers.

As with question 1, they may find it useful to count the number of sections for each representation (which represents the **denominator**), and the number of sections that are coloured in each one (which represents the **numerator**). Again, it is important to remember that when multiplying fractions by **integers** (see page 2), only the **numerator** (see page 2) changes; the **denominator** (see page 2) stays the same.

A. $\frac{7}{8}$ x 5 $\boxed{<}$ 3 x $1\frac{5}{8}$

B. $\frac{4}{9}$ x 7 $\boxed{=}$ 2 x $1\frac{5}{9}$
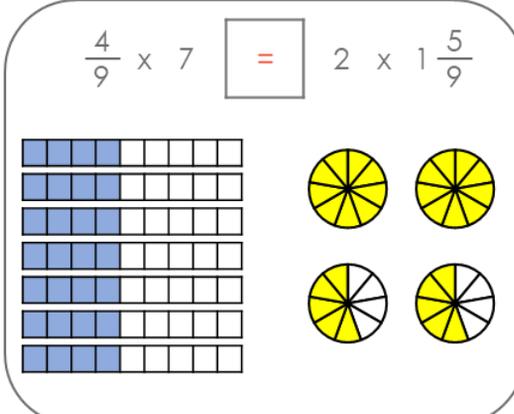
Question 3 - This question requires children to select the correct calculation that produces the greatest amount. As with question 1 and 2, images are provided in addition to the written calculations to support children in working out their answer; the same tips can be also used to solve this question.

A is correct because A = $3\frac{3}{5}$, while B = $3\frac{1}{5}$.

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Monday

English – Non-chronological Report (page 3)

A **non-chronological report** is a text that isn't written in time order. They are often used for **non-fiction** (things that are factual) texts which give information on a particular subject or event (such as a fact-file, biography, etc).

This task asks children to create and write a **non-chronological report** on a single subject of their choosing. Answers will differ due to the open-ended nature of this task, however, children are encouraged to include paragraphs that focus on different aspects of the report. For example, if writing a non-chronological report on polar bears, paragraphs could be sectioned into: habitat, diet, appearance, interesting facts, etc...

Further tips and advice on things to include in a non-chronological report have been provided at the bottom of the sheet.

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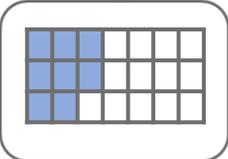## Tuesday

Maths – Multiply Fractions by Fractions (page 4)

Question 1 - This question requires children to circle the correct answer to the given calculation; two options are given as fractions, one is given as a pictorial representation. It is important to remember that when multiplying a fraction by another fraction, both the **numerator** (see page 2) and **denominator** (see page 2) changes; whatever one is multiplied by, the other is multiplied by the same amount.

The correct option to circle is C.

Question 2 - This question requires children to draw a line from the calculations to the correct answers; two answers are given as fractions, one is given as a pictorial representation. As with question 1, when multiplying a fraction by another fraction, both the **numerator** and **denominator** changes.

The correct pairings are shown below.

A. $\dfrac{2}{3} \times \dfrac{7}{8} =$ B. $\dfrac{2}{3} \times \dfrac{4}{7} =$ C. $\dfrac{11}{12} \times \dfrac{7}{9} =$

1. [pictorial grid representation]   2. $\dfrac{77}{108}$ 3. $\dfrac{7}{12}$

Digit cards (or **number cards** if there is more than one digit) refers to a physical resource which can be used to create numbers. The digits 0 to 9 are written on individual cards (or paper) and can be ordered to make different numbers. They are especially useful when investigating the value of digits within a number on a place value chart.

Question 3 - This question requires children to select the correct **number cards** to correctly complete the given calculation. Children should note that both a **numerator** and a **denominator** are given, and use the fact that both need to multiplied by the same amount to work out the correct placement of the missing numbers.

There are two potential answers to this question:

$$\dfrac{2}{3} \times \dfrac{5}{6} = \dfrac{10}{18} \quad \text{or} \quad \dfrac{2}{3} \times \dfrac{5}{8} = \dfrac{10}{24}$$

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Tuesday

English – Environmental Speech (page 5)

This task asks children to research and create a speech on one of the given subjects provided linked to the environment. Answers will differ due to the open-ended nature of this task, however, children are encouraged to include a range of features to make their speech more engaging.

These include (but are not limited to):

- **Rhetorical questions** (questions that do not require an answer.)
- **Emotive language** (language that evokes an emotional response.)
- Facts, quotes and statistics
- Opinions
- **Repetition** (a word or an idea that is repeated to reinforce its importance.)
- **Metaphors** (a figure of speech; comparing something to something else, for example, He has a heart of gold.)
- **Similes** (comparing something using the word 'like' or 'as', for example, It erupted like a volcano)

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Wednesday

Maths – Divide Fractions by Integers 1 (page 6)

Throughout this resource, it is important to remember that when dividing fractions by **integers** (see page 2), only the **numerator** (see page 2) changes; the **denominator** (see page 2) stays the same if the numerator is a **multiple** (appears in the same timetable) of the integer.

Question 1 - This question requires children to use the **>**, **<** and **=** symbols (see page 2) to compare the calculations involving fractions. It is important to note that all of the **numerators** given in these calculations are **multiples** of the **integer**, so only the **numerators** will need to change; the **denominators** will stay the same.

The correct answers are shown below.

A. $\dfrac{16}{25} \div 4$ $\boxed{<}$ $\dfrac{18}{25} \div 2$

B. $\dfrac{21}{32} \div 3$ $\boxed{>}$ $\dfrac{30}{32} \div 10$

Question 2 - This question requires children to select the correct fractions to complete a given calculation. It is important to note that all of the **numerators** given in this question are **multiples** of the **integer**, so only the **numerators** will need to change; the **denominators** will stay the same. Children should also note that they will need to divide whatever numerator they choose by 5, as this is the integer that is given.

The correct, completed calculation is:

$\boxed{\dfrac{25}{33}} \div 5 = \boxed{\dfrac{5}{33}}$

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Wednesday

Maths – Divide Fractions by Integers 1

The **inverse operation** is the operation that undoes what was done by the previous operation. The inverse of addition is subtraction and vice versa. The inverse of multiplication is division and vice versa.

Question 3 - This question requires children to use the facts provided by Daya in order to find her original fraction. Children should note that the answer has been given, along with the **integer** (see page 2) she has multiplied her original fraction by. Knowing this, children should use the **inverse operation** to divide the given fraction by the integer to find the solution to this question. A blank bar model (see page 2) has also been given for children to use if needed.

Again, it is important to note that the **numerator** in Daya's answer is a multiple of the **integer**, so only the **numerator** will need to change; the **denominators** will stay the same.

The fraction Daya thought of was $\frac{4}{15}$.

You need to use the inverse to calculate the answer. $\frac{12}{15} \div 3 = \frac{4}{15}$

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Wednesday

Maths – Divide Fractions by Integers 2 (page 7)

Throughout this resource, it is important to remember that when dividing fractions by **integers** (see page 2), only the **numerator** (see page 2) changes; the **denominator** (see page 2) stays the same if the numerator is a **multiple** (appears in the same timetable) of the integer.

However, if the **numerator** isn't a **multiple** of the **integer**, then the **denominator** is multiplied by the **integer**.

Question 1 - This question requires children to complete two given calculations. Two blank **bar models** (see page 2) have also been provided for children to use if needed. It is important to note that the **numerators** given in these calculations are not **multiples** of the **integer**, so the **denominator** will need to be multiplied.

The correct answers are shown below.

A. $\dfrac{5}{9} \div 2 = \dfrac{5}{18}$

B. $\dfrac{4}{7} \div 3 = \dfrac{4}{21}$

Question 2 - This question requires children to select the correct fractions to complete a given calculation. Again, it is important to note that the **numerators** given in these calculations are not **multiples** of the **integer**, so the **denominator** will need to be multiplied.

Children should note that they will need to multiply the **denominator** they choose by 3, as this is the **integer** that is given.

The correct, completed calculation is:

$$\boxed{\dfrac{5}{8}} \div 3 = \boxed{\dfrac{5}{24}}$$

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Wednesday

Maths – Divide Fractions by Integers 2

Question 3 - This question requires children to find the answer to the given calculation and explain why one of the children is correct. Again, it is important to note that the **numerators** given in the calculations are not **multiples** of the **integer**, so the **denominator** will need to be multiplied.

Children should note that they will need to multiply the **denominator** they choose by 4, as this is the **integer** that is given.

Yumnah is correct because $\frac{5}{7} \div 4 = \frac{5}{28}$.

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Wednesday

English – Writing a Debate (page 8)

A **debate** is a formal discussion that is based on a particular topic.

This task asks children to prepare a debate on the subject of 'home learning'. Children may choose which side of the topic they feel more strongly towards, however, it is important that they have knowledge of both sides of the argument in order to strengthen their overall conclusion at the end of the debate.

Answers will differ due to the open-ended nature of this task, however, it is encouraged that children follow the tips and structure given in the resource, and also to include some of the vocabulary to present their argument in a more formal manner.

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Thursday

Maths – Fractions of an Amount (page 9)

When finding fractions of an **integer** (see page 2), it is important to pay close attention to the total amount being divided, and the integer it is being divided by.

When dividing an integer by a fraction, the **denominator** (see page 2) represents how many 'groups' the **integer** is made out of (and what it will need to be divided by); the **numerator** tells you how many 'parts' of the whole is needed (what the result needs to be multiplied by) to get your final answer.

For example, to find $\frac{2}{9}$ of 108, divide 108 by 9, and then multiply the result by 2; the answer is 24.

Question 1 - This question may need to be solved in several steps; children will first need to calculate how many marbles each child has won from the total of 63 marbles using the fractions that they give (**bar models** have also been provided for children to use if needed). Children can choose to work out whichever child they want first, however, it is important for them to keep track of how many marbles need deducting from the total of 63 as they progress through the question. For example, if Child A gets 25 marbles, the total left to be shared is 38, not 63.

The number of marbles each child has won (along with a completed bar model for each child) are as follows:

Sasha has won 18 marbles.

63 marbles						
9	9	9	9	9	9	9

Oskar has won 14 marbles.

63 marbles								
7	7	7	7	7	7	7	7	7

Martha has won 21 marbles.

63 marbles		
21	21	21

After working out the number of marbles each child has won, children will then need to explain whether the statement Sasha gives is correct. Explanations may vary, however, the important fact here is that children are trying to find $\frac{3}{21}$ of the original amount of 63. An acceptable answer and explanation has been provided below:

Sasha is incorrect. Sasha, Oskar and Martha have won a total of 53 marbles which means that there will be 10 marbles left in the bag, but $\frac{3}{21}$ of 63 is 9.

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Thursday

English – Writing a Recount (page 10)

A **recount** is a retelling/recounting of an event, experience or story. Although recounts are often personal and told in the **first person** (from one's own point of view), they can also be factual or imaginative (such as from a character's point of view in a story).

This task asks children to write a diary entry based on a personal experience. Answers will differ due to the open-ended nature of this task, however, it is encouraged that children include sentences detailing their thoughts and feelings, and write in an **informal style** (as if they were writing to a friend).

Further tips and advice on things to include in a diary entry have been provided at the bottom of the sheet.

These include (but are not limited to):

- First person
- **Chronological order** (in time order).
- Similes and metaphors (see page 6).
- Past tense
- Detailed descriptions
- Self-reflection
- **Time adverbials** (words that that describes when, for how long, or how often something occurred, for example, everyday).
- Opinions and facts
- Informal language

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Friday

Maths – Practical Fractions

Click on the link to watch the practical maths activity on fractions. As the video progresses, Aaron will provide you with some practical ways to work out fractions using things you have around the home.
https://www.youtube.com/watch?v=Yto1OQKhB7g&list=PLrrPYDDGPV7e9hjL8l1Fm0CK5B0MCN-O3&index=16&t=0s

English – Revision

Click on the link to play an interactive game and answer the questions about the grammar you have learned so far in Year 6.
https://kids.classroomsecrets.co.uk/resource/year-6-spring-revision-set-03/

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Additional Resources

English – Reading – A Week in Chloe's Shoes (pages 11 to 15)

Children should read the extract and answer the questions giving as much detail as they can. Any unfamiliar vocabulary should be highlighted and children should be encouraged to discuss its meaning or check using a dictionary.

The answers to the questions are as follows:

1. Why does the author use italics in the first diary entry? They emphasise his emotions at that point, and show that he is finding the challenge very difficult.

2. What does the writer mean by the phrase 'soundless life'? It is a phrase used to describe the times when the writer has the earplugs in.

3. 'Keenan, Millie and Baz were merrily chatting about who-knows-what all the way back from school'. Explain the phrase 'who-knows-what'. 'Who-knows-what' is a phrase used when somebody does not know something. The writer does not know what his friends spoke about on the way home because he could not hear.

4. Why does Chloe have to lip read? She is deaf.

5. Which phrase shows you Sunni is not a very active student? '... leaning over to look at Sunni's book to see if he'd got any more information written down (which of course, he hadn't).'

6. Which lesson did the writer get to use the earplugs in? Science

7. What does the phrase 'same old, same old' mean? It means that whatever is being referred to is predictable, repetitive and the same as it has always been.

8. On what date can the writer collect the money? Friday 19th May 2017

9. What relation is Chloe to the writer? Explain how you know. Sister. The sentences which show this are: "Chloe was able to lip read when she was just a little nipper!" Dad said today at tea. "And her big, clever brother can barely make sense of a few words even after a week!"

10. Sum up the diary by writing one sentence for each entry. Answers must relate to either key events from each entry, or the writer's emotions/reactions to/feelings about what has gone on that day.

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