This week's pack supports the <u>Week 8 timetable</u> on Classroom Secrets Kids.

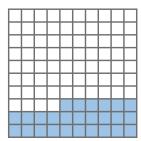
Monday

Maths - Understand Percentages (page 2)

Percentage means parts for each hundred. You write percentages using the % symbol. So 26% means 26 parts out of 100.

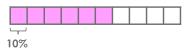
Bar models show how numbers can be split into different parts, by splitting them into bars or boxes. Bar models can be used to solve a wide variety of calculations, showing the relationship between the whole model and the parts.

Question 1 – This question asks your child to match the grids to the correct **percentages**. A **100 square** is a 10 x 10 grid (100 squares) that can be used to help with representing **percentages**:



In this instance, each square represents 1% so your child can count the individual squares to work out the **percentage** that is represented. To be even more efficient, your child could count the rows of tens then the extra ones.

Percentages can also be represented on a **bar model** (see definition above) with ten sections:



In this instance, 1 square = 10% because 100 divided between the 10 squares = 10%. So your child can count in tens to work out the **percentage** that is represented.

Match the grids to the correct **percentages** thinking about what **percentage** each square represents. Then count the total shaded squares. The correct answers are:

$$A = 60\%$$
, $B = 63\%$, $C = 70\%$

Question 2 – This question asks your child to write the **percentage** represented by the grids.

Your child needs to work out what **percentage** each square represents and then count the total shaded squares.

Write the **percentage** represented by the grids by counting in tens or tens and ones. The correct answers are:

$$A = 50\%$$
, $B = 47\%$



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Monday

Maths – Understand Percentages – continued (page 2)

Question 3 – This question asks your child to colour 80% of each grid. To do this, your child needs to work out what **percentage** each square represents. Then count up carefully to colour 80%.

Colour 80% of each grid by counting in tens or tens and ones.

The correct answers are: A= , B=

Question 4 – This question asks your child to find the odd one out. To do this, your child needs to work out what **percentage** is represented by each grid. They will need to know what each individual square represents then count the total number of shaded squares.

Find the odd one out. One grid will represent a different **percentage** than all the rest. The correct answer is: B is the odd one out because it represents 61%. A, C and D all represent 60%.

Question 5 – This question asks your child to order the values from largest to smallest. To do this, your child could draw and colour in 100 squares or **bar models** to help them see the different values. Your child could also use multiplication to help them so '7 parts out of ten' must be multiplied by 10 to make it '70 parts out of 100' or 70%.

Order the values from largest to smallest by drawing and colouring grids, visualising grids or using multiplication to help you.

The correct answer is: F (91%), D (90%), C (70%), A (64%), E (50%), B (38%)

Question 6 – This question asks your child to work out whose statement is correct and to explain their choice. To do this, your child can work out what each square of the bar model represents. They can use multiplication to help them so '3 parts out of ten' must be multiplied by 10 to make it '30 parts out of 100' or 30%.

Work out who is correct and explain why by multiplying so the number represented in the **bar model** is out of 100 instead of 10.

The correct answer is: Jake is correct because the bar model is split into 10 parts. Percentages are the number of parts out of 100 so 3 needs to be multiplied by 10 to find the percentage.



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Tuesday

Maths - Percentages as Fractions and Decimals (page 4)

Question 1 – This question asks your child to match the fractions to the **equivalent** (have the same value) decimal and **percentage**. Please refer to page 2 for a definition of this term. To answer this, they need to look if the **denominator** (bottom part of the fraction) of the fraction is out of 100. if it is, then it converts directly to a percentage. For example, $\frac{45}{100}$ = 45%. If the **denominator** is larger then it must be converted to 100. See the example below.

$$\frac{\div 2}{200} = 24\%$$

Next, your child should convert this to a decimal. For example, $\frac{24}{100}$ = 0.24 because this represents 24 parts out of 100 or 24 hundredths.

Match the fractions to the equivalent decimal and **percentage** by converting them all to hundredths. The correct answers are:

$$A = \frac{36}{300} = 0.12 = 12\%$$
, $B = \frac{65}{100} = 0.65 = 65\%$, $C = \frac{84}{200} = 0.42 = 42\%$

Question 2 – This question asks your child to circle the odd one out. To do this your child should write the value of each image. They will need to look carefully and understand what each image is representing. Converting all the given images into hundredths will make them easier to compare.

Circle the odd one out. The correct answer is : $\frac{63}{300}$ as when converted into hundredths this equals $\frac{21}{100}$ or 21% or 0.21. The other images all show 63%.

Question 3 – This question asks your child to say whether a statement is true or false. To do this they will need to convert the percentage to a decimal.

Say whether the statement is true or false by converting the percentage into hundredths. The correct answer is: The statement is false because 75% = 0.75.

Question 4 – This question asks your child to complete the boxes with the missing equivalent decimal or **percentage**. To do this they will need to ensure the fractions have 100 as the **denominator** then convert the fractions to **percentages** or decimals using their knowledge from previous questions.

Complete the boxes with the missing **equivalent** decimal or **percentage** using their knowledge about hundredths. The correct answers are: A. 0.32; B. 24%; C. 36%



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Tuesday

Maths – Percentages as Fractions and Decimals – continued (page 4)

Question 5 – This question asks your child to answer questions about 100 pencils in a box. To answer the questions, your child needs to convert the four tenths into hundredths. See the image below. This will tell your child how many pencils class 5 have.



Class 4 take 25% of the pencils. Your child needs to remember that **percentages** are out of 100. So they take 25 out of 100 pencils. This will tell your child how many pencils class 4 have.

They then must subtract both the amounts of pencils from 100 to find out how many pencils are left in the box.

The remaining number of pencils left must then be converted to a **percentage** (out of 100) to answer the final question.

Answer the questions about the pencils in the box. The correct answers are: Class 5 have 40 pencils. Class 4 have 25 pencils. There are 35 pencils left which is 35%.

Question 6 – This question asks your child to convert the fractions and decimals into percentages. To do this your child should ensure all the fractions have 100 as their **denominator**. Also, they must ensure they read the decimals as hundredths instead of tenths, for example, 0.5 = 5 tenths = 50 hundredths. Next, your child must order their **percentages** in **descending** (counting down) order.

Convert the fractions and decimals into **percentages** by converting them all into hundredths if necessary to convert them easily to **percentages**. Then write them from largest to smallest. The correct answers are: 75%, 74%, 72%, 70%, 25%

Question 7 – This question asks your child to explain whose statement is correct. To do this, your child should convert all the fractions, decimals or **percentages** into hundredths to check the statements. Also, ensure all fraction **denominators** are 100.

Explain whose statement is correct by comparing using hundredths. The correct answer is:

Hannah is correct, 0.5 = 50%. Sean is incorrect, $\frac{50}{200} = \frac{25}{100}$ which is equivalent to 0.25 or 25%.

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Wednesday

Maths - Adding - Same Decimal Places (page 6)

A **decimal place** is the number of digits after the decimal point. For example 2.34 has 2 digits after the decimal point, so there are 2 decimal places.

Question 1 – This question asks your child to complete the addition calculations using the digits on the digit cards. To find the answer they need to complete the addition calculations, remembering to show and use any **exchanging** (also known as 'carrying'). Cross off the digit cards as they are used. If your child puts a number in one of the boxes which is not on a digit card, then they must recalculate.

Complete the calculations using the digits on the digit cards, remembering to show any **exchanges**. The correct answer is: A. 6.78; B. 8.91

Question 2 – This question asks your child to use the numbers to complete the number sentences. Your child could write out the addition taking each given number in turn. So they could start with:

Then they can complete the addition and cross off the two numbers that complete the addition. Then they can use the next given number (3.81) and repeat the above steps.

Use the numbers to complete the number sentences. Take each number in turn and complete the addition calculations. The correct answers are:

$$3.76 + 6.01 = 9.77$$
; $5.96 + 3.81 = 9.77$; $6.08 + 3.69 = 9.77$

Question 3 – This question asks which gems the knight will be able to take with him if he can carry 8.89kg. Firstly, your child needs to find the total weight of his sword, shield and armour. They could write out a formal addition calculation (see image above).

Then they can add onto this the weights of various combinations of gems. The total must not go over 8.89kg. However, your child may try some combinations that, when totalled, do go over 8.89kg. This is fine but your child should realise to reject this combination as it goes over the total weight allowed.

Find which gems the knight can take with him but make sure the total weight does not go over 8.89kg. The correct answers are: Sir Kevin is already carrying 7.82kg of weight. He can take the green gem (0.58kg) and the red gem (0.49kg) because 7.82kg + 0.58kg + 0.49kg = 8.89kg.

This week's pack supports the <u>Week 8 timetable</u> on Classroom Secrets Kids.

Thursday

Maths - Adding Different Decimal Places (page 8)

A **decimal place** is the number of digits after the decimal point. For example 2.34 has 2 digits after the decimal point, so there are 2 decimal places.

Question 1 – This question asks your child to match the representation to the correct calculation. The representations (A, B and C) are the answers to the given calculations. Your child can set out the addition calculations in a formal column addition to help. It might look like the following example:

+ 2 . 5 7

+ 2 . 5 3

Your child can fill this gap with a 0 if it helps them.

Match the representation to the correct calculation. Work out the answers to the addition calculations first (setting each one out correctly). Then match each answer to a representation (A, B or C). The correct answers are:

1.32 + 2.57 = B; 1.034 + 2.53 = A; 1.45 + 1.016 = C

Question 2 – This question asks your child to place an 'X' in the boxes to show whether the statements are true or false. Your child needs to solve each addition then check to see if their answer matches the answer on the sheet. If the answers match then the statement is true. If the answers are different then the statement is false.

Show whether the statements are true or false, remembering to stack up the decimal places when you write out and solve each addition calculation. The correct answers are: A is true; B is false, the answer is 2.47; C is false, the answer is 5.402.

Question 3 – This question asks your child who is correct and to explain their answer. To do this, they will need to complete the given addition calculation, writing it out correctly with the decimal points lined up. Then check the children's answers on the sheet to decide who gave the correct answer. Your child needs to look carefully at which child got the answer wrong and identify the mistake they made.

Who is correct and explain your answer. The correct answer is: Sean is correct. Steph has added the 3 in the thousandths column instead of the tenths column.



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