Name: Date:

Classifications – Activity 1: KS1 sorting

Classification means sorting things into groups. You can sort animals into groups, but also things like shapes and numbers! Have a go at sorting these and check your answers afterwards. Ask a grown up to help you.

Evens and odds

Even numbers can be split into two equal halves. Odd numbers can't be split equally. Can you sort these numbers into 'even' and 'odd'?

1   2   3   4   5   6   7   8   9   10

Even	Odd

Multiples of 2, 3 and 5

Do you know the times tables for 2, 3 and 5? Which times tables are these numbers in? Can you sort them?

4,   6,   8,   9,   14,   15,   21,   22,   25
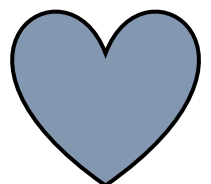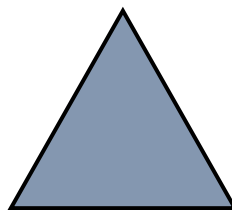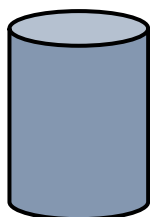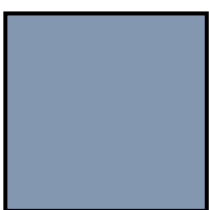
2 times table	3 times table	5 times table

Can any of the numbers be sorted into two of the groups? Which ones?

_____

2D and 3D shapes

2D shapes are flat. 3D shapes are not. Tick the shapes that are 3D shapes.

☐   ☐   ☐   ☐   ☐

Name: Date:

Classifications – Activity 1: Lower KS2 sorting

Classification means sorting things into groups. You can sort animals into groups, but also things like shapes and numbers. Have a go at sorting these and check your answers afterwards. Ask a grown up to help you.

Multiples of 6, 7 and 9

Which times tables are these numbers in? Can you sort them?

12, 21, 24, 27, 35, 36, 49, 54, 63

6 times table	7 times table	9 times table

Can any of the numbers be sorted into two of the groups? Which ones?

_____

Equivalent fractions and decimals

Fractions, decimals and percentages can be used to show an amount of a whole. Sometimes a fraction can represent the same amount as a decimal. Which decimals are these fractions equal to?
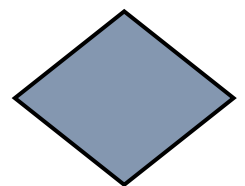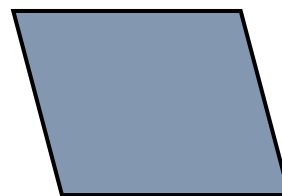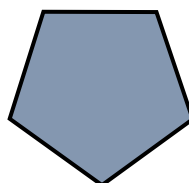
$$\frac{1}{2} \quad \frac{5}{10} \quad \frac{1}{4} \quad \frac{2}{4} \quad \frac{3}{6} \quad \frac{25}{100} \quad \frac{10}{20} \quad \frac{8}{16} \quad \frac{50}{100}$$

0.5	0.25

Quadrilateral shapes

Quadrilaterals are four sided shapes. Tick the shapes that are quadrilaterals.

☐   ☐   ☐   ☐   ☐
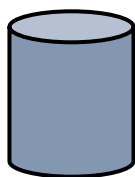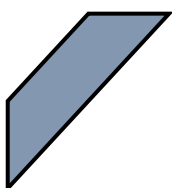
Name: Date:

Classifications – Activity 1: Upper KS2 sorting

Classification means sorting things into groups. You can sort animals into groups, but also things like shapes and numbers. Have a go at sorting these and check your answers afterwards.

Rounding to the nearest 100

Numbers can be rounded down or up. Which way would you round these?

836,   471,   122,   98,   303,   264,   49,   1030,   255

Rounds down to the nearest 100	Rounds up to the nearest 100

Which of the numbers would round *up* to the nearest *10*? How do you know?

_____

Factors and Multiples

'Factors' are numbers that can be multiplied to make a given answer. 'Multiples' are the numbers in a times table. Below are the factors and multiples of 24. Can you classify them into whether they are factors or multiples?

2   48   4   6   12   72   3   96   8

Factors	Multiples

Equivalent fractions, decimals and percentages

Fractions, decimals and percentages can be used to show an amount of a whole. Sometimes a fraction or percentage can represent the same amount as a decimal. Which decimals are these fractions and percentages equal to?

25% $\dfrac{1}{2}$ $\dfrac{9}{12}$ 50% $\dfrac{14}{28}$ $\dfrac{6}{24}$ $\dfrac{21}{28}$ 75% $\dfrac{1}{4}$ $\dfrac{3}{4}$ $\dfrac{8}{32}$ $\dfrac{50}{100}$

Equal to 0.5	Equal to 0.25	Equal to 0.75

Classifications – Activity 1: sorting answers

KS1 answers:

Evens and odds:

Evens: 2, 4, 6, 8, 10   *Odds:* 1, 3, 5, 7, 9

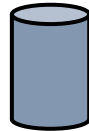Multiples of 2, 3 and 5

2 times table: 4, 6, 8, 14, 22
3 times table: 6, 9, 15, 21
5 times table: 15, 25
Can be sorted into two groups: 6 and 15, 6 is in the 2 and 3 times tables, 15 is in the 3 and 5 times tables

2D and 3D shapes:

The 3D shapes are the cylinder and the cuboid

Lower KS2 answers:

Multiples of 6, 7 and 9:

6 times table: 12, 24, 36, 54
7 times table: 21, 35, 49, 63
9 times table: 27, 36, 54, 63
Can be sorted into two groups: 36, 54 and 63, 36 is in the 6 and 9 times tables, 54 is in the 6 and 9 times tables and 63 is in the 7 and 9 times tables

Equivalent fractions and decimals

Equal to 0.5: 1/2, 5/10, 2/4, 3/6, 10/20, 50/100
Equal to 0.25: 1/4, 25/100, 8/16

Quadrilateral shapes:

The quadrilateral shapes are the trapezium and the parallelogram
and the rhombus

Upper KS2 answers:

Rounding to the nearest 100

Rounds down to the nearest 100: 836, 122, 303, 49, 1030
Rounds up to the nearest 100: 471, 98, 264, 255
Rounds up to the nearest 10: 836, 98, 49, 255

How do you know? The last digit (the units or 'ones' digit) is 5 or greater than 5. This means the number rounds up to the nearest 10.

Factors and Multiples

Factors of 24: 2, 4, 6, 12, 3, 8   (2x12=24, 4x6=24, 3x8=24)
Multiples of 24: 48, 72, 96   (24x2=48, 24x3=72, 24x4=96)

Equivalent fractions, decimals and percentages

Equal to 0.5: 1/2, 50%, 14/28, 50/100
Equal to 0.25: 25%, 6/24, 1/4, 8/32
Equal to 0.75: 9/12, 21/28, 75%, 3/4

Classifications - Notes for parents and guardians

This activity has been designed to support learning about classification. Classification means sorting things into groups and the first video lesson looks at classification as a concept and one way that we classify animals.

This maths activity asks children to sort according to various maths learning objectives. These should have been covered in school, but we have attempted to explain the concepts in each question. Please find the appropriate work sheet for your child's key stage. The answers are at the end of the document.

You can encourage your children to sort objects in your home. Some suggestions include:

- Sort into 'living', 'was alive' and 'never lived'. For an extension, think about objects made from plastic. If this was made from fossil fuels, then should they be classified as 'was alive'?
- Sort objects by shape
- Sort by genre – sort films or books by their genre. Which genre do the children like the most? Why?

This will support learning about classification, as it encourages children to look for key markers and identifiers that help them to tell one type or group from another.