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|  | **Concrete** | **Pictorial** | **Abstract** |
| EYFS | | | |
| To solve problems including halves | Halves of fruit or drinks and other common items |  |  |
| Key Stage 1  Half and share images E.g. put half of the purple spikes on the Gruffalo | | | |
| To find of a shape | Telling Time -  Find half using cubes or everyday items |  |  |
| To find of a number | Find half using cubes or counters | Find half using cubes or counters  Find half of variety shapes in different ways | of 8 = 4  = 5 |
| To find of a shape  To find of a shape | Find quarter using cubes or everyday items and show in different ways | Find quarter using pictures and show in different ways |  |
| To find of a number  To find of a number | Find quarter using cubes or everyday items and show in different ways | Find quarter using pictures and show in different ways | of 8 = 2  = 3 |
| To find of a shape | Find third using cubes or everyday items and show in different ways | Find third using pictures and show in different ways | Find quarter using abstract form    Find third using abstract form |
| To find of a number | Find third using cubes and show in different ways | Find third using pictures and show in different ways | of 9 = 3  = 5 |
| **Key Stage 2** | | | |
| Recognise, find, and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators | What fraction are apples? Pears? Limes? | What fraction are square? Circles? |  |
| Find unitary fractions of shapes | Find unitary fractions using cubes or everyday items and show in different ways | Find unitary fractions using pictures and show in different ways |  |
| Find unitary fractions of numbers | Find unitary fractions using cubes | Find unitary fractions using pictures | of 25  of 18 |
| Find Non-unitary fractions of shapes | Use part whole models to record what you see | Use part whole models to record what you see |  |
| Find Non-unitary fractions of numbers | Link the array to a part whole model used folded paper or practical resources | of 15  Link the array to a part whole model  5  5  5 | of 15  of 25 |
| Find increasingly difficult non unitary fractions | Find 3/7 OF 42 and 5/6 of 42  Comapre fraction of same number | Find 2/7 of 28 and 5/7 of 63  Compare fractions using same denominator | Compare fractions |
| Recognise mixed numbers and improper fractions |  |  | = 4 |
| Use common factors to simplify fractions |  |  | Find largest common factor of 6 and simplify to |
| Compare and Order fractions | | | |
| Compare and order unit fractions |  |  | Compare and  1  0 |
| Compare and order fractions of the same denominator | Compare and | Compare and | 1  0 |
|  |  | Show both fractions ( and ) on the number line |  |
| Compare and order fractions of the same denominator | Compare and | Compare and | 2  1  0 |
| Compare and order fractions of the whose denominators are all multiples of the same number |  |  | 1  0 |
| Compare and order fractions including fractions > 1 |  | Compare and | Compare and  2  0  1 |
| Equivalent Fractions | | | |
| Recognise the equivalence of and |  |  | and |
| Recognise and show, using diagrams, families of common equivalent fractions with small denominators |  |  |  |
|  | Family of and | Find a fraction of a shape and cut into equal groups in different ways | Use double number line |
| Recognise and show, using diagrams, families of common equivalent fractions |  | Family of and  Family of and | Use multiplication table |
| Identify name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths | =  = | = = | Write fractions that are equivalent to |
| Calculation  Addition and Subtraction of fractions | | | |
| Add and subtract fractions with the same denominator within one whole |  | + = | + =  + + = |
| Add and subtract fractions with the same denominator |  | .36+  ? | + = 1  1 = 1 |
| Add and subtract fractions with denominators that are multiples of the same number | +      Split into thirds Split into ninths      1/3 is the same as 3/9 (remove the cubes)  1/3 = 3/9    Put on 4/9  Add them | + | + = |
| Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions | 2/3 + 1/4  Split into thirds    Split into quarters    Put on 2/3 and remove  2/3 = 8/12  Put on ¼ and remove  ¼= 3/12  Finally add them    Answer= 11/12 |  | +  + = |
| Calculation  Multiplication and division | | | |
| Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams | x 5 | x 5 | x 5  + + + + =  = 1 |
| Multiply pairs of proper fractions, writing the answer its simplest form |  | × = | × = |
| Divide proper fractions by whole numbers | ÷ 2      ÷ 3 | ÷ 2    ÷ 3 | ÷ 2 ÷ × =  ÷ 3 ÷ × = |