Exemplification for Year 3 Expected Standard in Mathematics

Key Performance Indicators for Moderation

The year 3 mathematics moderation document exemplifies key performance indicators of the expected standard in mathematics at year 3. It is not a planning or assessment tool as it does not cover the entire year 3 programme of study.

It should be used to support the moderation of teacher judgements when assessing the extent to which a child has demonstrated the expected standard for year 3 through the application of these indicators in a range of problem solving situations.

Thank you to everyone involved from Nottingham City primary schools in the production of these materials.

Exemplification for Year 3 Expected Standard in Mathematics

Key Performance Indicators for Moderation

Number and Place Value

Counts from 0 in multiples of 4, 8, 50 and 100; finds 10 or 100 more or less than a given number

Write a number that is 100 more than 362

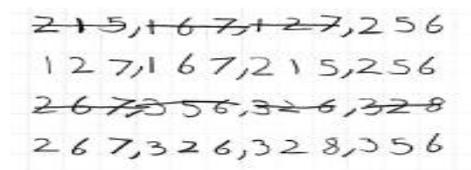**Recognises the place value of each digit in a three-digit number**

For each of these numbers: 428, 205, 130, 25, 7, 909.

Tell me:

How many hundreds? How many tens? How many ones?

$642 = 600 + \Delta + 2$

Compares and orders numbers up to 1000

Sort these numbers into ascending order: 95, 163, 8, 740, 25, 0, 400, 303

Addition and Subtraction

Adds and subtracts numbers mentally, including:

A three-digit number and ones

A three digit number and tens

A three-digit number and hundreds

James has got £2.49. His mum gives him 50p. How much money has he got now?

Tom says 278 take away 60 is 228? Is he correct? How do you know?

Paul says 172 – 15 = 163. Write down an addition calculation that you could do to check this.

What number is 199 more than 428?

Solves problems, including missing numbers, using number facts, and more complex addition and subtraction

```
126 + 154 = 280
  H T U
  1 2 6
+ 1 5 4
  2 8 0  ✓
    1
```

I have 126 red books and and 154 green books. How many books do I have?

A packet of crisps costs 32p. Josh buys two packets.
How much change does he get from £1?

Layla has 45p in her money bank and 28p in her purse. How much more money does she need to buy a comic that costs £1?

3□ + □2 = 85

Multiplication and Division

Recalls and uses multiplication and division facts for the 3, 4 and 8 times tables
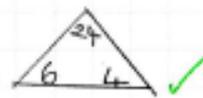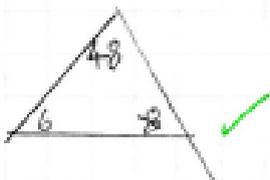
X	8	3	
4	32		16
		15	
6			
9		27	

Circle three numbers that add to make a multiple of 4

11   12   13   14   15   16   17   18   19

Uses known multiplication tables to calculate two-digit numbers times one-digit numbers

```
35 × 3 = 105  ✓

 X  30  5       9 0
 3  90  15      1 5
              1 0 5
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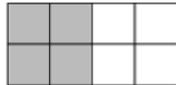
Fractions

Recognises, finds and writes fractions of objects: unit fractions and non-unit fractions with small denominators

1	/	10	o	f	5	0	=	5	✓
1	/	10	0	f	6	0	=	6	✓
1	/	10	0	f	8	0	=	8	✓

2	/	1	0	o	f	5	0	=	10	✓
2	/	1	0	0	f	6	0	=	12	✓
2	/	1	0	0	f	8	0	=	16	✓

What fraction of this shape is shaded? How do you know? Is there another way that you can describe the fraction?

There are 21 apples. I eat 1/3 of the apples. How many apples do I eat?

There are 24 sweets in a box. ¼ of the sweets are red. How many are red?

Would you rather have 1/3 of 30 sweets or 1/5 of 40 sweets? Why?

Adds and subtracts fractions with the same denominator within a whole

5/7 + 1/7 =

I have got ¾ of a cake. I eat ¼ of the cake. How much cake is left?

Ben cuts a pizza into 8 equal pizzas.

Ben eats $\frac{5}{8}$ and Sue eats $\frac{1}{8}$ of the pizza.

What fraction of the pizza is left?

Compares and orders unit fractions

Would you rather have 1/3 of 30 or 1/6 of 30? Why?

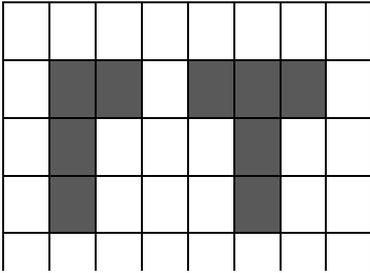$$\frac{1}{3} > \boxed{} > \frac{\overline{1}}{6}$$

Write these numbers in order, starting with the smallest.

$$\frac{5}{7} \qquad \frac{2}{7} \qquad \frac{6}{7} \qquad \frac{3}{7}$$

Measurement

Measures the perimeter of simple 2-D shapes

Which shape has the greatest perimeter?

4cm

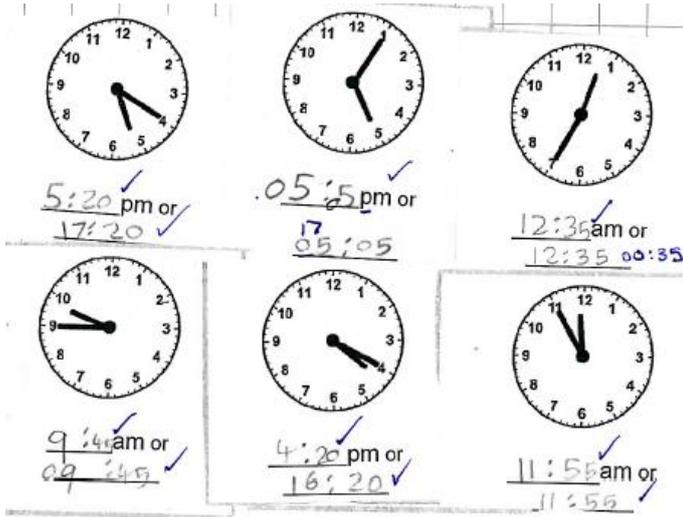A rectangle has a perimeter of 20cm

What is the length of the longest side?

Adds and subtracts amounts of money to give change, using both £ and p in practical contexts

Jake wants to buy a comic that costs £1. He saves 25p one week and 40p the next. How much more money does he need to buy the comic?

Add these prices: £6.73, £9.10 and £7.00 to find the total. Find out how much more it needed to make £25

Tells and writes the time from an analogue clock, and 12-hour and 24-hour clocks

5:20 pm or 17:20

05:05 pm or 17 05:05

12:35am or 12:35 00:35

9:45 am or 09:45

4:20 pm or 16:20

11:55am or 11:55

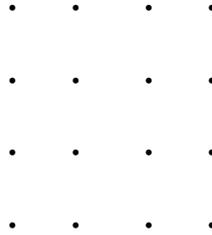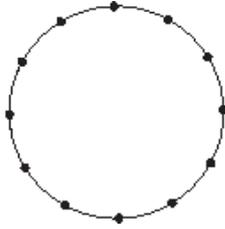Ben's clock says 7:50 when he gets up. Draw the hands on the clock to show this time.

Kelly sets off to school at this time.

It takes her 15 minutes to walk to school.
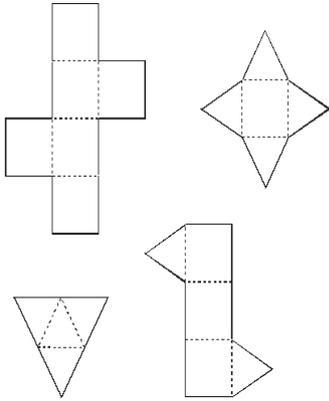
What time does she get to school?

Geometry – properties of shape

Draws 2-D shapes and makes 3-D shapes using modelling materials, recognises 3-D shapes in different orientations and describes them

Join 4 dots to make a square.

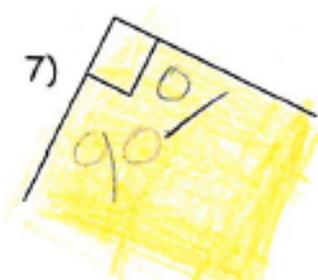Join the dots to make a pentagon with one right angle.

|	Flat faces	Curved faces
Cone		
Cuboid		
Sphere		

Complete the table to show the faces of 3d shapes.

Tick the nets that fold to make a pyramid.

Identifies right angles

7)

Statistics

**Solves one-step and two-step questions (How many more? How many fewer?) using information presented in scaled bar charts and pictograms and tables**

Ray of Sun	7
Flying Annie	9
Red Duke	5
Silver Feather	4
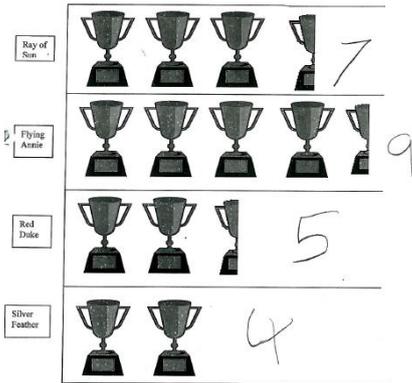
How many more did Flying Annie win than Ray of Sun? 2

How many races did Ray of Sun and Red Duke win altogether? ~~14~~ 12

This pictogram shows the number of ice creams a shop sold in one day.

| | stands for 10 ice creams |

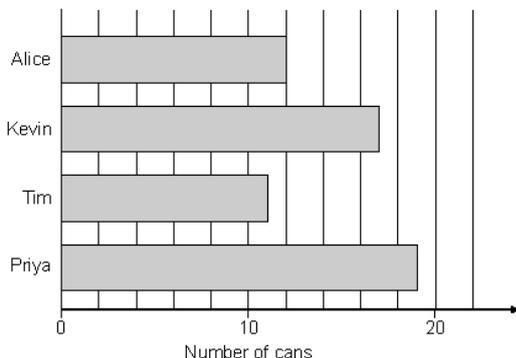| vanilla | |
| strawberry | |
| chocolate | |
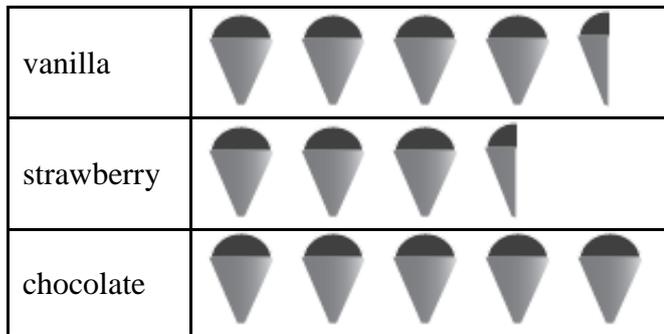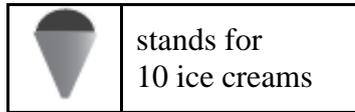
How many **more** chocolate than strawberry ice creams were sold?

How many ice creams were sold in total?

Some children collect cans for recycling
Here is a chart of how many cans they collect in the first week.

How many cans did Kevin collect?

How many more cans did Priya collect than Tim?