a) Circle the factors of 24 .
$\begin{array}{lllllllllll}1 & 2 & 3 & 4 & 5 & 6 & 8 & 10 & 12 & 16 & 24\end{array}$
b) Write 4 factors of 100 .
c) Circle the numbers that are multiples of 9 .

$$
\begin{array}{lllll}
24 & 27 & 32 & 36 & 72
\end{array}
$$

d) Jay wrote a pattern of numbers that are divisible by BOTH 3 and 4 .
i) What's the first number in the pattern?
ii) What's the fourth number in the pattern?
multiplying large numbers by one and two-digit numbers
a) $28 \times 6=$ $\qquad$ c) $45 \times 38=$ $\qquad$
b) $375 \times 8=$ $\qquad$ d) $364 \times 49=$ $\qquad$

## problem solving

a) Each box contains 48 cans of beans. How many cans in 8 boxes?
b) Buses can carry 76 adult passengers. What's the maximum number of adult passengers allowed on 38 buses?
c) There are 6 boxes each weighing 85 kg AND 34 boxes each weighing 27 kg on a crate. Which shows the total weight of all the boxes?
$\bigcirc 85+6 \times 27$$(6 \times 85)+(34 \times 27)$
$\bigcirc(27+85)+(34+6)$
$\bigcirc(27 \times 85)+(34 \times 6)$
problem solving
a) Julie wants to share 273 tokens equally among 7 people. How many tokens will each person get?
b) Sammy has 224 tennis balls to pack in containers of 6 each. How many containers will Sammy need and how many balls will be left over?

## identifying fractions



The box has white and black balls as shown.
a) What fraction of balls are white? $\qquad$
b) Three black balls are removed from the box. What fraction of balls are white?

## fractions on a number line

Five fractions are placed on the number line.


Circle the fraction that's in the INCORRECT spot.

## problem solving involving fractions

a) Andrea ate $1 / 4$ of a pizza. Henry ate half.

What fraction of the pizza is left?
b) Three children shared a bag of 100 sweets until non were left.

The first child took one fifth. The second child one half.
How many sweets did the third child take?
comparing decimals
Circle the largest decimal. Underline the smallest.
0.79
0.18
$0.8 \quad 0.09$
0.68
0.45

Write a decimal number that lies between the two numbers shown.
a) 0.46
0.6
b)
0.17
0.26

## balancing equations

Balance each equation.
a) $6+7=22$ - $\qquad$ d) $54 \div 9=$
b) $\quad$ _ $\quad 20=10 \times 10$
e) $12 \times 12=6 x$ $\qquad$
c) $22 \times 4=100$ - $\qquad$ f) $9 x+=324 \div 4$
simple financial plans
Alexia earns $£ 100$ per week. She spends some of the money on activities. The rest she saves.

| Activity | cost $£$ |
| :--- | :---: |
| gym fee | 14 |
| piano lessons | 30 |
| swimming | 12.50 |
| karate | 16 |
| savings |  |

a) How much does Alexia save each week?
b) At least how many weeks will it take Alexia to save $£ 200$ ? $\qquad$
c) Alexia's friend David spends the same amount of money on swimming and karate. If he spends $£ 8$ on karate, how much does he pay for swimming?
area and perimeter
Shown are the dimensions for a small yard.

| 7 m | a) Calculate the area and perimeter <br> of the yard. <br> area: |
| :--- | :--- |
| 5 m | Perimeter: <br> b) How much will it cost to <br> completely fence the yard if fencing <br> costs $£ 20$ per metre? |

converting between $\mathbf{1 2}$ - and 24 -hour time
The table shows the arrival times for five flights.

| Flight | Arrival Time |
| :--- | :---: |
| QF 224 | $6: 22$ |
| BA 677 | $11: 45$ |
| EM 904 | $16: 36$ |
| SA 811 | $20: 18$ |
| JP 463 | $23: 58$ |

a) Which flight arrives between 4pm and 5pm?
b) How many flights arrive before midday? $\qquad$
c) Flight SA 811 left its destination at 13:26. What time is this in 12-hour time?
d) The first flight on the following day arrives 1 hour and 12 minutes after flight JP 463. In 24-hour time, what's its arrival time
choosing the appropriate units of measurement
Circle the most appropriate unit for measuring:
The width of a classroom: mm cm m km
The capacity of a bucket: mL L
The mass of an average sized adult: g kg t
a) Which 3D object will this net make?
hexagonal pyramid
hexagonal prism
octagonal prism
pentagonal pyramid

b) Cathy made a 3D object using two identical five sided shapes and five identical rectangles.
Which object did she make? $\qquad$
c) Paul started drawing a 3D object. Which 3D object is he drawing?
$\bigcirc$ hexagonal prism
( rectangular prism
octagonal prism
○ square pyramid


## Use grid reference

Jen is drawing a cube on grid paper.
Which point on the grid will become part of the cube?
A B CDEFGHIJK


○ $F 2$E 3F 5E 5
transformation - enlargement
Draw an enlarged rectangle by doubling its dimensions.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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transformation - reflection
Draw this shape's reflection.

grid reference to describe locations

|  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | A |  |  |  |  |  |  |
|  |  |  |  | B |  |  |  |  |
|  |  |  |  |  |  |  | C |  |
|  |  |  |  |  |  |  |  |  |

The letter ' A ' is at $(3,2)$ The Letter ' B ' is at $(5,3)$

What's the grid reference for the letter ' C '?
estimating angles using degrees
Which is the best estimate for each angle marked ' A '?

measuring angles using a protractor


What's the size of angle 'A'?
represent probabilities using fractions
These numbers are placed in a bag. Without looking Tony chooses a number.
(3)
©
©
(4)
(8)
(3) (9) (4) (7)
a) What is the most-likely number that Tony chooses?
b) What's the chance of choosing either a 3 or 6 ?
○ $1 / 4$
$1 / 5$
1/3

1/2
interpret simple maps
A map of the island of Boha is shown.

$\begin{array}{lllllllllllllllll}\text { A } & \text { B } & \text { C } & D & E & F & G & H & I & J & K & L & M & N & O & P & Q\end{array}$

$\square=5 \mathrm{~km}$
yacht
a) A town is being built north-west of 'Russellville. What is its most-likely grid reference?
G,5
H,2
M,7
N,3
O

b) About how far is Blackrock from Russellville?


37 km
52 km
70 km

c) If the yacht sails 25 km north, what would its grid reference be? $\qquad$
d) What direction is The Greens from Redtree?
north-east south-west

south-east

north-west


These cards are flipped over then rearranged.

8


1

71
a) From a range from 0 to 1 , what's the chance of choosing the number 3?
0.1
0.3
0.5
0.8
O
O
$\bigcirc$
b) Which number has a 0.3 chance of being chosen?

data
The table shows the average monthly temperature for Dublin $\left({ }^{\circ} \mathrm{C}\right)$

| J | F | M | A | M | J | J | A | S | O | N | D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 5 | 7 | 8 | 11 | 14 | 16 | 16 | 14 | 11 | 8 | 7 |

Present the information on the line graph.


This pie graph shows the daily sales for the number of pies sold. If 1000 pies were sold in the week:

a) How many pies were sold on Monday?
100

150
250
400

b) About how many pies were sold on Friday?

| 20 | 100 | 200 | 250 |
| :---: | :---: | :---: | :---: |
| 0 | $\bigcirc$ | 0 | 0 |

c) Which statement is true?The most number of pies were sold on Monday.More pies were sold on Tuesday than Thursday.More than half the week's pies were sold on Thursday and Friday.A quarter of the week's pies were sold on Monday.

## reading tables

The table shows ice cream sales for this week by the time of day.

| DAY | morning | afternoon | evening |
| :---: | :---: | :---: | :---: |
| Monday | 20 | 33 | 45 |
| Tuesday | 15 | 45 | 56 |
| Wednesday | 41 | 43 | 56 |
| Thursday | 19 | 50 | 70 |
| Friday | 48 | 52 | 84 |

a) At which time of the day are sales at their highest?
b) On which day were the most ice creams sold? $\qquad$
c) This week's Thursday evening sales are DOUBLE last weeks. How many ice creams were sold last week on Thursday evening?

