

## Types of Questions

### Recalling facts

- What is 3 add 7?
- How many millimetres are there in a metre?
- Is 31 a prime number?
- What formula is used to calculate the volume of a cylinder?
- What is Pythagoras' Theorem?

### Applying facts

- Tell me two numbers that have a difference of 12.
- What are the factors of 42?
- What is the area of a circle with radius 3 cm?
- If \$250 is deposited in a bank account paying 5% interest per year, how much compound interest will be earned over 5 years?

### Hypothesising or predicting

- Predict the number of marbles in this jar.
- If the survey was repeated on Friday, how likely is it that the resulting graph would be the same?
- Predict how many rectangles will be in the next diagram... and the next.
- Predict how many presents, in total, would have been received over the Twelve Days of Christmas.

### Designing and comparing procedures

- How might we count a pile of sticks?
- How could you subtract 37 from 82?
- How could we test a number to see if it is divisible by 6?
- How could you find the 20th triangular number?
- If a farmer has an L-shaped, one-hectare paddock, how could you determine the length of fencing required to enclose it?

### Interpreting results

- What does that tell us about numbers ending in 5 or 0?
- What can we deduce about the most common shoe size from this graph?
- What can we say about the sum of the angles in a triangle?
- Which shape has the best surface area to volume ratio for losing heat rapidly?

## **Applying reasoning and processes**

- The seven coins in my purse total 80c. What could they be?
- In how many different ways can five children sit in the rear bus seat?
- Why is the sum of two odd numbers always even?
- A train passes a station platform in 36 seconds, and a man standing on the platform in 20 seconds. If the speed of the train is 54 km/hr, what is the length of the platform?