Age 11+ Level ★
Worksheet 2

1. Down and Along

The letters J, M and C represent three different non-zero digits.

What are the values of J, M and C?

$$\begin{array}{r} J\ J \\ M\ M \\ +\ C\ C \\ \hline J\ M\ C \end{array}$$

2. 354972

What is the remainder when 354972 is divided by 7?

3. Subtracting to 2008

In this subtraction, P, Q, R and S are digits. What is the value of P + Q + R + S?

$$\begin{array}{r} 8\ Q\ 0\ S \\ -\ P\ 0\ R\ 2 \\ \hline 2\ 0\ 0\ 8 \end{array}$$

4. Split Clock face

Use 2 straight lines to split the clock face into 3 parts, so that the sums of the numbers in each of the parts are equal.

5. 50, 50, 50 and 50

Aroon says his age is 50 years, 50 months, 50 weeks and 50 days. What age will he be on his next birthday?

6. Missing Digits

In this calculation, K, L, M, N and P each denote a single digit.

Find K, L, M, N and P.

$$\begin{array}{r} K\ L\ M\ N\ P\ 4 \\ \times\ \qquad\qquad\quad 4 \\ \hline 4\ K\ L\ M\ N\ P \end{array}$$

These problems are adapted from UKMT (ukmt.org.uk) and WMC (competition.ac) problems.