create maths

Working with others : Vedic maths 2

Description

Working in the community sector involves knowing about and understanding a variety of cultures. This topic follows on from **Vedic maths 1** and explores the ancient laws of Vedic mathematics which feature in both Hindu and Islamic contemporary cultures.

Activity 1: More about nines worksheet

Activity 2: Dividing by nine

Activity 3: Vedic multiplication

The patterns of nine that the pupils will have found in Vedic maths 1 continue into the More about nines worksheet. Pupils may like to lightly pencil in the numbers 1-9 round the circles to begin with but should be encouraged to try to hold the numbers mentally as they complete the designs.

Dividing by nine continues the theme but is a more challenging activity. Pupils will be intrigued with the idea that division can be reduced to an addition algorithm. The *sutra* works when the sum of the dividend digits is less than 10 because the additions do not require carrying. A deeper understanding is needed to handle dividends whose digits sum to more than 10 – carrying is required and then the 'remainder' needs decomposing into nines plus the true remainder. A full explanation of why the *sutra* works is particularly demanding – but some insight into the pattern of nines on which it depends is more accessible.

Vedic multiplication introduces another *sutra*. Ask pupils to explore a few examples to convince themselves that it works – and then pose the question: why? Simple algebra is all that is needed and the activity provides a motivation for its use.

The mathematics

This set of activities requires pupils to practice number operations, to search for pattern in number and to work and deepen with their arithmetic understandings. In Vedic multiplication, these understandings are developed into simple algebra.