Lesson Plans: Numeracy

Numeracy Trail

Arrange a local walk. Let the children note all the examples of numeracy on the route. e.g. vehicle registrations, route numbers on direction signs, numbers on doors, lamp columns and fire hydrant plates, numbers on advertisements, opening and closing times of shops, post box collection times, admission times of local events and admission prices etc.
Consider allowing the children to take photographs or video footage. Create a numeracy "WALKABOUT" display.

Number

- Produce graphs of favourite/least favourite footwear.

- Conduct traffic surveys: compare results from different times of day and different sites.

- In a row of numbered houses, can they work out door numbers where there is only a house name?

- Make odd and even numbered sets from cut out footwear pictures in magazines.

- Calculate how much their journey to school would cost using different means of transport.

Shapes and Patterns

• How many different shapes and patterns can the children identify on their route to school? Look at roof tiles, chimney pots, paving, zig-zag markings, bricks, railings, road-signs and markings etc. Which are symmetrical? Which tessellate?

• Draw a pattern they have seen on the route to school. Get a partner to repeat it, or draw half the pattern, can their partner complete it?

• Create concertina folded patterns - a line of little people holding hands is useful to emphasise the importance of young children holding hands when out and about. Try a repeating shoe, boot or foot shape.

Can they make a repeating pattern of colours or fastenings on the footwear?

Measurement

Ask the children to estimate the length of their own journey to school using the most appropriate unit of measurement e.g. strides, metres or minutes. Compare longest with shortest journeys.

Older pupils can carry out speed and distance experiments - estimating, recording and calculating. (This is a good opportunity to discuss the effects of different weather conditions on stopping distances.) A car travelling at 30mph (51kph) would need 75 feet (23 metres) to stop, in ideal road and weather conditions. In the playground, ask each child to stand where they think 23 metres is from a given line.

Whose guess is closest? Most will underestimate. The lesson is - "wait until traffic has passed before crossing."