5 Suggested further reading

A way of thinking about what it means to function mathematically rather than to use mathematics functionally.

Cain, D. (2007) 'Functioning Mathematically: 1' *Mathematics Teaching,* 203, pp8-10 <u>http://www.atm.org.uk/mt/archive/mt203files/ATM-MT203-08-10.pdf</u>

Are all investigations about spotting patterns or are we missing rich sources of mathematical thinking?

Hewitt, D (1992) 'Train spotters paradise', *Mathematics Teaching*, 140, pp 6-8 <u>http://www.atm.org.uk/mt/archive/mt193files/ATM-MT140-p6-8-mo.pdf</u>

The seminal text for asking pupils to think mathematically Mason, J., Burton, L. and Stacey, K. (1982) *Thinking Mathematically,* London: Addison-Wesley

The book that inspired so much of the research into problem solving heuristics (or what to do when you are 'stuck')

Polya, G. (1957) *How to Solve It: A New Aspect of Mathematical Method*, (2nd Ed) Penguin Science.

Looking at "World Class Tests" and what they show about pupils' strategies when they are stuck.

Pool, P. (2003) 'What do you do when you don't know what to do?' *Mathematics Teaching*, 182, pp 42-44

http://www.atm.org.uk/mt/archive/mt182files/ATM-MT182-42-44-mo.pdf

Can lower attainers exhibit higher-order thinking? Yes, *if we ask them to!* Watson A. (2001) 'Low attainers exhibiting higher-order mathematical thinking' *Support for Learning* 16(4) Nov pp.179-183

http://www.education.ox.ac.uk/uploaded/annewatson/watsonsocjustlowattainers.pdf