HOT IDEAS

WRITING in MATHS

Following is a collection of ideas for incorporating writing in mathematics teaching.

Make a dictionary

Students write definitions or explanations of mathematical words or symbols in their own words. These can be collated and added to as the year progresses to form a class dictionary that all students can access as required, or students could create their own personal dictionaries.

Now I get it!

Have pages available for students to use whenever appropriate; e.g., when they have an "aha!" moment , they could record it under the heading, "Now I Get It!".

From: McIntosh, M. E. (1991). No time for writing in your class? *Mathematics Teacher*, September, 423–433.)

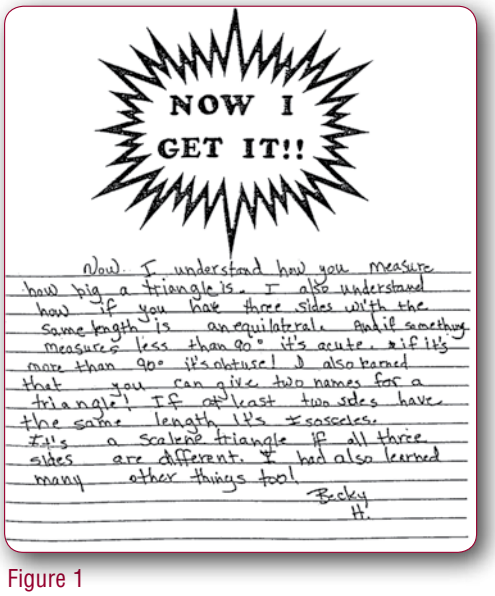

Figure 1

Sentence starters for journal writing

One thing I learned in maths today was…
I was pleased that I…
I found out that… means…
I think that I'm getting better at…
I'm still confused about…

A reflection sheet can provide a format for a range of writing prompts (adapted from Wardrop, H. (1993). Mathematics language problems. *The Australian Mathematics Teacher*, 49(1), 10–13.):

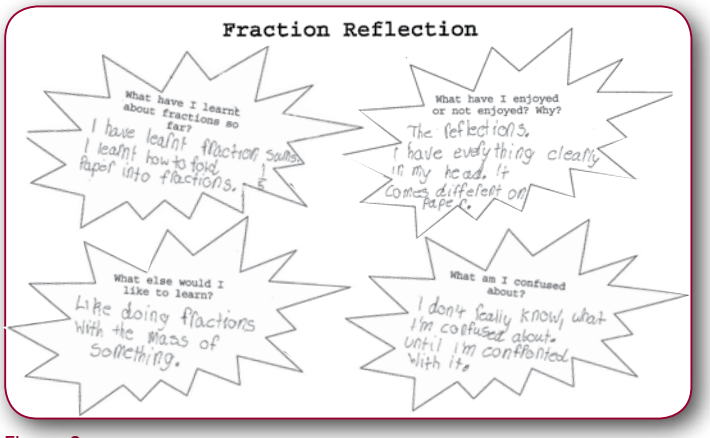

Figure 2

Link sheets

A link sheet is a communication aid for clarifying and developing mathematical ideas and processes. It consists of a sheet divided into four quadrants with different labels; e.g., Maths Example, Everyday Example, Diagram/ Picture or graph. Figure 3 shows a link sheet with the labels Where I see it, Pictures, Story problem and Signs and Symbols.

(From Shield, M. & Swinson, K. (1996). The link sheet: A communication aid for clarifying and developing mathematical ideas and processes. In P. C. Elliott & M. J. Kenney (Eds.), *Communication in mathematics*, K–12 and beyond (pp. 35–39). Reston, VA.: NCTM).

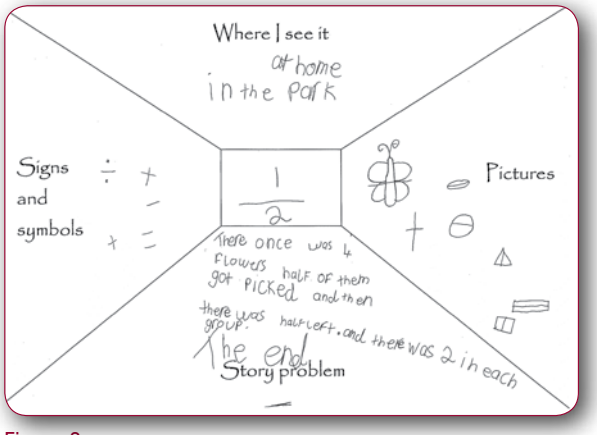

Figure 3

Mobiles

Hang mathematical facts or insights from wire coat hangers (see Figure 4). Provide students with a range of materials to create mobiles, such as string, streamers, cardboard and pipe cleaners. Students can make number mobiles showing at least seven things they know about a selected number. Variations could include taking digital photographs of where their number occurs in the school or playground, magazine cut outs, or replacing the number with a shape or mathematical term.

(Adapted from Hillbrick, A. (2004). *Maths essentials.* Carlton, Vic: Curriculum Corporation.)

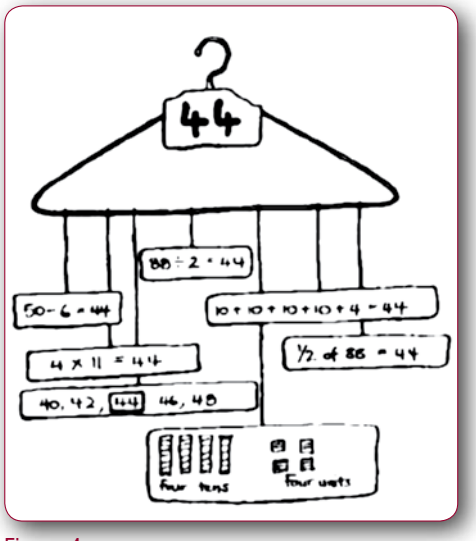

Figure 4

Behind the door

Fold an A4 piece of paper in half and cut three slits in the top half to make four "doors" that, when lifted, reveal answers underneath (see Figure 5). Behind the door activities assist teachers to present criteria, questions or problems for students to solve and students can also create their own behind the door activities for their peers to solve. For example, each student draws and labels a shape on each of their four doors; another student then has the task of finding the shape in the classroom and recording its location under the flap.

(For more suggestions see Hillbrick, A. (2004). *Maths essentials.* Carlton, Vic: Curriculum Corporation.)

Behind the Door

My favourite topic in mathematics. Why?	My greatest challenge in mathematics. Why?	One area I can improve in my mathematics.	One way I can support my peers in mathematics.

Figure 5