



BIKES AND CERTAINTY

Key ideas: Knowledge, Certainty, Proof

Resources

- ✓ A4 white board or similar surface to draw on

Starter

- ✓ On a white board draw and upside down 'V' (hidden from the children's eyes to add suspense) then reveal it. See Fig 1

Questions

- ✓ What is it?
- ✓ Why is it [a mountain]?
- ✓ Who thinks it is something else?
- ✓ Ask children for a number of ideas and write them down or keep them in your head.

Main activity

- ✓ Pick up the white board and (hiding it from their prying eyes) add a couple of lines to the picture. See fig 2.

Questions

- ✓ What is it?
- ✓ Is it a (insert one of their ideas from the previous picture like 'mountain')?
- ✓ Are you sure?
- ✓ 'Show me if it's definitely a mountain – thumbs up.
- ✓ Definitely not a mountain – thumbs down. Or,
- ✓ Might be a mountain – half-way, uncertain thumb.'
- ✓ Children often say that it is a mountain because "it's got a pointy bit"
- ✓ Make sure you follow up with, questions like 'So is it definitely a mountain?'

Continue to add bits to the picture (see pics attached) and reveal to the class, asking the questions above.

- ✓ Can it be a bike if it doesn't have wheels?
- ✓ If it looks like a bike does that mean it is?
- ✓ Can it be 2 different things?

EXTENSION ACTIVITY/GAME:

Teacher or children to draw a simple line or shape on the whiteboard. Then ask who can make it into something by adding a line or continuing the drawing in some way e.g. I draw a line on the board and ask 'who can finish the picture?' A child comes up at draws another line across it 'It's the letter 't'!" For example