

Type 2: Teachers situate mathematics within a contextualised practical problem to engage the students but the motive is explicitly mathematics

Some examples of contextualised tasks are the following:

1. *Mike and his numbers.* Mike from Tasmania, wrote all of the numbers from 1 to one million. In so doing, how many digits did he write altogether?
2. *Soccer goal increase.* It has been proposed that the size of soccer goals be increased on three sides by the diameter of a soccer ball. Investigate what would change, predict the consequent increase in scoring, and possibly simulate the situation in some way to test your prediction.
3. *BP discount.* BP advertises that “5% off BP petrol beats 4 cents off a litre.” When is this true?
4. *Money measurement.* You have won a prize. Your prize can be either: 1 metre of \$2 coins; one square metre of five-cent pieces; one litre of 20-cent pieces; or 1 kg of \$1 coins. Which would you choose?
5. *D-Tape creation.* D-tapes are used in the forestry industry to quickly measure the diameter of trees as the tapes are placed around the trunk. Using a streamer, ruler and calculator, make your own D-tape, so that you could read off the diameter of any tree with a diameter between 40 and 50 cm.
6. *Melbourne White Pages.* Using a copy of the Melbourne White Pages and techniques which you devise, find the ten most common surnames in the White Pages. Carry out the same investigation for your school population and compare the data.