Parody of Assessment Task (for use with any Science Topic) TOPIC GIVEN BY SCIENCE TEACHER: HOW DOES A CAR WORK?

Instructions – do NOT just focus on fundamental knowledge of science to give answer (even if you cover many essential concepts and calculations in science and maths, such as describing combustion, algorithms for gear ratios, etc) – an excellent working knowledge of your subject content is considered only 'lower-order' thinking and will only get you a C grade. Instead, research and create a real-world experience using the tiered criteria (that seem based in the lower- and higher-order thinking levels of 'Bloom's Taxonomy') reflected in the Education Department's 'criteria' and 'standards'. Note: Adults have a lot of real-world experience, but students should do this on their own. Exams alone are not adequate. If you finish early, perhaps write an essay on what widens the gap between the haves and have-nots in maths & science subjects.

Remembering

I remembered that when I sit in my husband's car I must not spill my lunch box on the new leather seats.

Understanding

- 1. I *understand* to sit in the driver's seat
- 2. I *understand* to use key to start the ignition

Applying

COMMENT FROM OUTSIDE: This open-ended task – great exemplar. This student met all the critical-thinking descriptors of the criteria 'Standards'.. The evaluation of errors and innovative presentations with Excel spreadsheet & colour table of nail polishes were good. 'A' grade use of technology. I like the way she investigated a new life-related experience – so different from those boring exam papers that just recall exactly how things work, and repetitively calculate the same old problems, precisely, like typical old textbooks (from the 1970s), year after year. This student justified her actions and explored scenarios. The essay writing (communication criteria) deserves an A that will balance her letter grades in other criteria. By the way, I'm surprised that this student has so much world-experience but I guess that would come with being married and having a licence. Just make sure she can answer questions about what she wrote and has signed a sheet that said she got no help from home. She is on the way to an O.P.1 for Uni.

What I did	What I observed
I applied foot to accelerator	Car moved
I applied foot too hard	Car slammed into garage door

Analysing

- 1. I analysed that I went too fast and misjudged the width of the garage door
- 2. I analysed that this made me scrape the car door
- 3. I analysed that this was a bad thing and my husband would not be happy

<u>Evaluating – discuss errors, use criteria and technology (essential to get an A)</u>

I evaluated how a car worked. I was very successful in scraping the car door and I evaluated the damage and I also evaluated if I could use nail polish to hide the scrape by trying different colours. *Criteria* for my evaluation of error: severity of damage was in indirect proportion to ability to match nail polish colour to car colour (see Excel spreadsheet, graphics presentation, CAD-CAM model and colour table).

<u>Creating - critical thinking, what ifs, justification, posing new scenarios</u>

What if... my car was not in service today – this situation would not have been *created*. I *created* my own misfortune but I also *created* a solution for the outcomes. What if... it was worse. I would *create* an excuse for the insurance company, thus proving that the most resourceful people will win in the new-age educated world. (P.S. written by a female parent of high school child fed up with the watering down 'of school science.)