

Posters & Scientific Wall charts – Junior and Intermediate

Section Coordinator: Diana Veremciukas, Cheltenham Secondary College

A successful setting-up afternoon on Friday the 7th of August and judging day on the 8th of August once again was only possible due to the tremendous assistance received from Methodist Ladies' College staff and students. Also, thanks to the forty-five volunteer teacher and student-teacher judges.

I had some concerns with entries this year: some secondary students submitted posters which included Primary topics and thus eliminated themselves from receiving bursaries. The STS handbook clearly identifies Junior as year 7 and 8, and Intermediate as year 9 and 10. Fortunately, most teachers directed students to the correct poster topics. Also, some student names and poster topics were not entered on the STAV database by school coordinators by the due date.

One hundred and eighteen Junior entries were received. Nine won major bursaries, 24 won minor bursaries and 48 were awarded merit certificates. Twenty-six Intermediate entries were received which was double last year's entries. Three won major bursaries, 7 won minor bursaries and two were awarded merit certificates.

Favourite topics for entrants were:

'Pluto – planet or not?' – 50%. Posters included data on criteria for a planet classification, criteria for a dwarf planet classification, the Kuiper Belt, Trans-Neptunian object, types of orbital paths, Pluto's tilt, mass, volume and gravity, Solar System, Pluto's structure, moons and its discovery.

'Space junk' – 28%. Posters included data on Gravitation attraction, Geosynchronous orbit, Elimination using a laser broom or beam and aerogel, protective shields, meteors and craters, where it falls, meteoroids and asteroids, types of Space junk, orbital debris, its speed and risks, countries responsible, the Kessler Syndrome, tracking using radar and optical detectors.

'Problems with the space shuttle' – 12%. Posters included data on cost, disasters-Challenger and Columbia, design difficulties, O rings, liquid hydrogen tanks, escape systems, aerodynamic forces, flight risk management, adverse weather, space debris, shuttle structure, launch, re-entry and landing.

'Space transmissions' – 10%. Posters included data on the Hubble telescope, optical telescopes, radio waves, microwaves, optical fibres, satellites-weather, mobile phone, radar and TV, space probes, Mars Rover, search for extraterrestrial intelligence, binary code, radio telescopes and satellite dishes.

A reminder to all students – if you access the web for your poster research, you must include the sites used and the date(s) when accessed in your bibliography.

Congratulations to all who participated in or helped students with the Science Talent Search poster section this year. I look forward to seeing what students produce in 2010.