

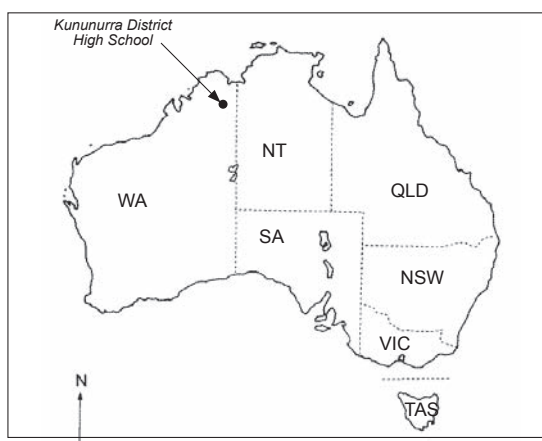
# SPECTRA

**SPECTRA is a national program organised by the Australian Science Teachers Association. It is a series of science activities that may include practical and observational activities, visits, research and experimental work. SPECTRA aims to stimulate and maintain interest in science.**

**There are two levels, Junior SPECTRA for students in Year 1-4 and SPECTRA for Years 4-9. Students complete activities related to their chosen topic. Students work to complete enough activities to be awarded an attractively designed and nationally recognised badge and certificate.**

**Each issue of *Teaching Science* will feature a 'snapshot' of a different school participating in the SPECTRA Awards system. If you would like to know more about SPECTRA please contact Sue Plaistowe, the SPECTRA Coordinator on 02 6282 9377 or alternatively at [asta@asta.edu.au](mailto:asta@asta.edu.au)**

## Kununurra District High School, WA



*Year 7 Science Club students with teacher Steve Bedford (in background).*

### 1. Name and role in the school.

Steve Bedford, Level 3 Science Teacher, Science Coordinator  
Frank Nicol, Science Teacher

### 2. Brief description of your school.

Largest district high in the state (K-12, with inclusive education)

### 3. What sort of area is the school in—urban/rural/isolated?

Isolated

### 4. Which cards do you use?—Junior Spectra /Spectra Cards

Spectra cards

### 5. Which topics do you/your students particularly enjoy using?

Botany, Home Chemistry, Engineering, Entomology, Chemical Processes and Zoology.

### 6. Who uses the cards?—a class, a club, a group of special students, individuals?

Year 7s science club (12 year olds). Advertised to all year 7s, first 20 who pay up each term.

### 7. When are they used?—in class, during lunchtime, at home?

After school for an hour a week.

### 8. When did you start using Spectra Cards?

2004

### 9. Have you had any particular success with the cards?

Yes, has really raised the profile of science in the school. It also allows the secondary teachers to start teaching lab skills to willing students and allows us to build up rapport with kids a year before we teach them. It is great to see kids engaged in various topics of science and choosing to work independently as they go about it.

### 10. Have you got any hints for teachers who are thinking about starting to use the cards?

Yes, go for it! It encourages kids ownership of their choices and allows for independent, self-paced learning skills. This serves a great purpose for students in this school who aren't great at sport but like to extend themselves academically and intellectually. Make sure that students have had the opportunity to read all tasks on a card before choosing that card.

### 11. SPECTRA stands for Science Program Exciting Children Through Research Activities. How has SPECTRA done this for your children/school?

By engaging year 7 students before they come up to actually study science in year 8, it gives our students a headstart in science!

# Science Program Exciting Children Through Research Activities

## Our Lady of Mercy College, VIC

**1. Name and role in the school.**

Dianne Collis, Science Teacher

**2. Brief description of your school.**

Catholic Secondary Girls School

**3. What sort of area is the school in –urban/rural/isolated?**

Urban

**4. Which cards do you use? –Junior Spectra /Spectra Cards?**

SPECTRA cards

**5. Which topics do you/your students particularly enjoy using?**

Students choose which topic they will do. Most popular are zoology, botany, astronomy, entomology and chemistry.

**6. Who uses the cards? –a class, a club, a group of special students, individuals?**

Year 7 students complete one card as part of course.

**7. When are they used? –in class, during lunchtime, at home?**

Cards are introduced in class. Some class time is given to students and it is then completed at home.

**8. When did you start using Spectra Cards?**

Our school has been using SPECTRA cards for 3 years.

**9. Have you had any particular successes with the cards?**

Many students begin with a negative view of research and learning. When they are guided to tackle the activities on the cards they realise that they are capable of carrying out their own research—and doing it well!



**10. Have you got any hints for teachers who are thinking about starting to use the cards?**

We use the cards as a research project (as part of our curriculum). All students are required to carry out activities of their own choice to achieve 15 to 20 stars. This work is assessed as any normal assignment.

Students who achieve 20 or more stars at an appropriate level have their cards submitted.

**11. SPECTRA stands for Science Program Exciting Children Through Research Activities. How has SPECTRA done this for your children/school?**

It has shown the students that they are capable of carrying out their own independent investigations and they produce some great work—they do become excited about their work and often involve the family as well!!



Examples of year 7 SPECTRA students' work.