TEACHER PREPARATION prior to the first mentor visit:

Before the day… organise your classroom so that the children can sit in five or six clusters, each cluster will have a few groups of children. Circle formations work best. Designate a seat for the mentor.

Students will have their books with them, in which they have recorded their five questions within their areas of interest relating to the class theme. There is no need for them to have written the answers to the following questions but they must have discussed these aspects in their groups before the mentor visit.

What are you most interested in investigating from your ideas?

What do you already know about the problem?

How are you planning to conduct the experiment?

Which variable is likely to be measured?

Which are being controlled (kept the same)?

Select one or two good spokespeople to take the role of "discussion starter" in the group as the mentors are not teachers and may not have been in a classroom for years. Meet with these students to show them the format of the meeting (see next page).

All students should have name tags clearly visible. Make sure there are name tags for the mentors as well.

It must be emphasised that students should show good listening and speaking skills. They should use eye contact and speak clearly and loudly enough for their whole cluster to hear. The whole cluster is to be involved in all discussions, and listen to each others experiments.

Use the mini-lab for one cluster and the wet area for another to spread them out (it still gets hard to hear.)

Teacher should have a camera (for annual report etc) for a photo of each cluster.

On the day

If necessary, excuse yourself from assembly to get kids unpacked, ready and settled well before 9.30am.

Please send a couple of students to greet the mentors (with a smile) at the office at 9.25am.

Display the next page on your smartboard.

When mentors arrive… be confident, welcoming and happy to see them! They are volunteering their time out of hectic schedules to be with us and help our budding scientists in our classrooms. They will possibly be feeling a little nervous themselves. **Collect their Prohibited Declaration forms** (I emailed this request) or give them a new form to fill in. **Ask Uni Students to "sign on" sheet (I emailed you). Give them a stick on name tag and direct them to a cluster of children.**

Help the mentors and students break the ice and get to know each other, and help discussion. Get involved with the clusters (so you can continue the 'discursive practices of science' discussion with the kids over the next fortnight).

Keep an eye on the time and help monitor each cluster to guide them to get through all groups.

Thank them and mention your appreciation of their time and assistance … and looking forward to their next visit!

Designed and created by Bonita Mendis, MyScience school coordinator, Epping West PS, March 2012

TEACHER GUIDE about mentor and student activities during the first mentor visit:

9.30-9.45am

Students will welcome & introduce themselves to their mentor.

Mentors have a chance to respond to their group and give some insight to how they are / were involved in science beyond high school, what fascinated them to choose further study / to work in the field. Following this information, students may have questions to ask their Mentor.

9.45am-10.30am 15 minutes for each of 3 groups within a cluster

Students and mentors will have time to discuss their ideas. Each cluster will listen to each of their group's ideas and assist each other with the guidance of the mentor.

Before today, the groups will have selected 4 or 5 questions in one particular areas of the energy theme that they are curious about. Mentors will guide the groups to select one question which will be both interesting and practical and can be done at school.

What are you most interested in investigating from your ideas?

What do you already know about the problem?

How are you planning to conduct the experiment?

Which variables are being measured?

Which are being controlled (kept the same)?

Mentors may add ideas to improve the children's ideas, including

how to improve / conduct the experiment

ideas of repetition and replication

what predictions can be made

how observations and results will be taken, recorded and analysed.

The whole cluster needs to listen to each group and get involved in the discussion. This is MOST important as it is where the students, mentors and we teachers are participating in a 'community of science practice'. When the mentors are absent it is intended that the student and teachers continue with this type of discussion – known as the 'discursive practices of science'.

If there is time "left over" the students can start to write up their selected question and hypothesis (prediction), equipment and method.

10.30am Students thank mentors and … till next meeting, XXXX at 9.30am.