Teacher Notes

Instructions for Students

What is 'I'm a Scientist'?

You can read this to your students to brief them about the event. It may help to have the website (<u>www.imascientist.org.au</u>) up on a projector or interactive whiteboard whilst you describe the event.

I'm a Scientist, Get me out of Here! is an online event where you get to meet and interact with real scientists. It's in the form of an Australian Idol-meets-Masterchef-style competition between the scientists. You submit questions which the scientists will try to answer by the next day. These stay on the site so you can read the questions other students have already asked, and the scientists' answers. You can have live online MSN-style chats with scientists where you get to ask the scientists questions and learn more about them.

You get to vote for the scientist that you think should win a prize of \$1,000 to promote their work. A student from each zone will win a gift voucher prize for asking the best questions and engaging with the scientists.

Each of you will get an Access Code card which you'll use to register on the site. You'll be asked to choose a username and password. Use a username that does not identify you by name or age. Write them on the Access Code card and don't lose it. You'll need it to log onto the site. You'll also be asked for an email address and your school's name. Giving your email address will mean you'll be kept up to date with answers to your questions and evictions of scientists.

Once you're on the site you'll be able to do the following:

Fill in Your Profile – You can answer questions on your favourite and least favourite things about science. (*You may cover this as a class in Lesson 1: You're the Judges!*)

Meet the Scientists – There are five scientists competing for your votes. They have each posted a profile and answered some set questions. (*You will hopefully cover this in more detail in Lesson 2: Meet the Scientists.*)



ASK - You have the chance to ask the scientists whatever question you like. They'll try to answer by the next day and you'll get an email to let you know it has been answered. Questions and answers remain on the site so have a look around and see what others have asked before you pose your own question. (Lesson 2: Meet the Scientists will help prepare.)



CHAT - Live chats are your chance to ask questions and let scientists know your opinions. (Lesson 3: Live Chat has more details on this.)



VOTE - You vote for the scientist you think should win a prize of \$1,000 to promote their work. You can vote at any time and your final vote in each of the four rounds is the one that counts. In the second week the scientists are evicted day by day until the winner is announced on the Friday.

Feedback – This event is relevant to the curriculum topic of Science as Human Endeavour. It is important to reflect on your learning, and the organisers will also appreciate any feedback you can give them, at www.imascientist.org.au/feedback

How long will it take/How much time should you spend on it?

Awesome: 12 hours

Including interacting with scientists on the website, all lesson plans and information sheets there is enough material for about 12 hours of lessons.

Average: 3-5 hours

Most teachers will do at least Lessons 1-3. Many will have more than one live chat.

Minimum: 2 hours

This will usually be 1 introductory lesson, 1 homework of reading more about the scientists and submitting questions and 1 lesson of live chat with scientists.

Be warned:

Most teachers, when asked what they would do differently next time said, 'spend more time on I'm a Scientist'.

Eviction update:

In the second week of the event, evictions take place daily from Tuesday. During this week, even in lessons not on I'm a Scientist, take five minutes at the start or end of the lesson to check the website (www.imascientist.org.au) to see who has been evicted.

Teacher tips – learn from other people's experiences

In every event we ask teachers in the feedback survey what they would do differently if they ran the event again. Here are the most common answers, in order of popularity:-

1. Spend more time on the event

2. Involve more students

3. More preparation time – especially before live chats

"Prepare the class more, carry out the discussions first. Get them thinking about what scientists do, and the decisions they have to make."

"I'd spend more time working with the group looking at the sort of questions they might like to ask. I did some of this but a number of students persisted in asking 'trivial pursuit' type science questions"

There are better ways to use the event than to have scientists as Googlers. If students get stuck, encourage them to ask questions that follow-up the information provided in the scientists' profiles, questions that relate to their own interests, questions that explore what they've been studying in more detail or questions that explore their curiosity using 'why' and 'how'?

4. Use smaller groups or pair up students in live chats

"I would book more chunks of online chat but split the group so there were fewer students on at a time to give more chance of dialogue."

"I would pair up weaker members of the group during live chat so they could work as a team to read/assimilate information/type responses."

5. Use the provided resources more

And remember if you have questions, the Staffroom (<u>www.imascientist.org.au/staffroom</u>) is open every day from 9am – 5:30pm AEST during the event and we can also answer questions through Twitter @IASAus or email at admin@imascientist.org.au.

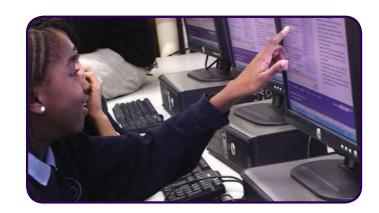
Live chats

"We are live chatting with scientists right now! The girls are excited and this is total engagement, thanks so much."

Tracey Warzecha, Riverside Girls High School, New South Wales

Before live chat lesson

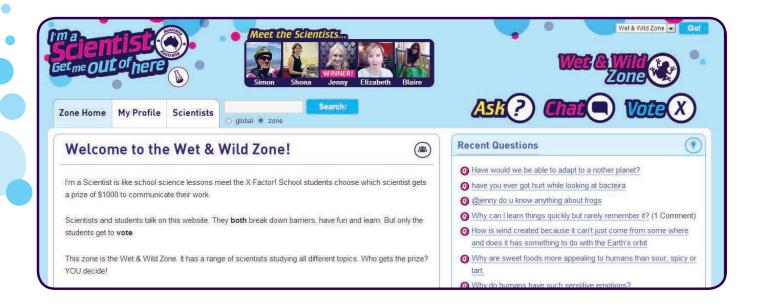
- Book IT suite/provide internet access for students
- Book live chat Log in and choose your desired start and finish time, date, zone, school and class at <u>www.imascientist.org.au/live-chat</u>.
- Do some preparation with your class (we suggest Lesson 1: You're the Judges! and Lesson 2: Meet the Scientists).



During lesson

- Explain to your students that they are going to have an MSN-style chat with some real scientists. Please encourage them to interact with the scientists, and not just amongst themselves. Encourage students to express their opinions on the work that the scientists do. Tell them there will be a moderator in the chatroom who will help keep the conversation on track and will block disruptive pupils.
- Live chats are consistently the most popular part of the event for students, for scientists, and even for teachers!
- They are fun and give immediate contact between scientists and students. Students realise scientists are 'real people' and feel connected to them.
- Many teachers tell us that quieter students are more active in live chats than face to face and it can be an interesting change to class dynamics.
- Don't be embarrassed if your class is boisterous or mess about. The moderators will deal with this.

Please prepare your students before the live chat. Prepared students get the most educational benefit out of the live chats. Lesson 1: You're the Judges! and Lesson 2: Meet the Scientists are ideal preparation.



How do the lesson plans and the activities work together?

- 1. "You're the Judges!" Coming to it cold, students may just vote for the scientist with the nicest photo, or the best joke. This lesson plan gets students thinking about some of the deeper issues, while still giving them ownership of the criteria they come up with (rather than telling them what to consider). There's no right or wrong answer, but all students should have thought about how we judge scientists a little by taking part.
- **2. Interaction with scientists and voting** gives students practice at using these skills and giving them a real say about something gives them a reason to engage.
- **3.** "Media views of nanotechnology" assists with the analysis and synthesis of public information related to sciences and builds discussion skills.
- **4. Other accompanying resources** extend this further, raise different Science as a Human Endeavour issues, and give more opportunities for practice.

"It seems to me this is a really good match with the Science as a Human Endeavour aspect of the new curriculum in science"

Helen Marussinszky, Mitcham Girls High School, South Australia

Lesson Plans

There are many ways to use the I'm a Scientist event. We've put together six lesson plans and we recommend that you use at least Lessons 1, 2 and 3. These lesson plans were developed in consultation with teachers and have been extensively tested. Most have found them extremely helpful.

Format: Starter/activity/plenary

Suggested adaptations: For lower and higher ability groups

Timings: Designed for 50 mins

Purpose: Develop Science as a Human Endeavour

skills and deepen learning (see back page for more details)

Further resources:

Online at <u>www.imascientist.org.au/teachers</u>

There is a summary of all six lessons plans on the back page.







	Lesson	Learning Outcomes
1	You're the Judges! Introduce I'm a Scientist then choose and rank criteria by which to judge the scientists.	 Introduction of science as human endeavour. Develop critical thinking skills. Consider ethical, social and practical aspects of science.
2	Meet the Scientists Get to know the scientists in your zone through scientific speed-dating, or an alternative version of Lesson 2 that doesn't involve student movement around the classroom.	 Realise that scientists are 'real people' they can relate to. Find out about up-to-date science.
3	Live chat 'Chat' to real scientists online in real time.	 Feel a personal connection to scientists. Have fun! Sustain and develop their enjoyment of, and interest in, science.
4	Science In The Media Case Study: Nanotechnology (A) Consider how members of the public receive scientific information from the media.	 Science as Human Endeavour Developing an argument. Societal aspects of scientific evidence. Using data to draw conclusions. Develop debate and discussion skills.
5	Science In The Media Case Study: Nanotechnology (B) Review Lesson 4 and consider further examples of how nanotechnology is presented to the public.	Substantive To evaluate the benefits of, and the problems that may arise from, the use of nanotechnology.
6	Project analysis Look back on the project and analyse their learning in a structured way.	 Society and individuals make decisions on issues relating to science and technology. Different issues need to be weighed up and this can be difficult.

After the event - prizes and certificates

- Please do fill in the teacher survey at www.imascientist.org.au/feedback. You are the expert on what happened in your classroom. Your feedback will help us to continuously improve the event.
- Please also encourage your students to fill in the student survey too, at www.imascientist.org.au/feedback.
- In each zone the scientists pick a student winner (who they think has asked good questions and really engaged with the event). The moderators also pick a winning student, selected at random from the completed student surveys. Winning students get a certificate and a \$50 iTunes voucher. We'll let you know if this is one of your students.
- To thank the students for their important contribution, we have created student participation certificates. Individual ones can be downloaded from the students' profile pages.

Contact

If you need any help please email <u>admin@imascientist.org.au</u> or call 0410 442 629.

For further information please visit: www.imascientist.org.au/teachers

