Teacher Notes

Introduce your students to I'm a Scientist

You can read this to your students to brief them about the event. If possible, it may help to have the website (imascientist.or.ke) available for the students to see whilst you describe the event.

I'm a Scientist, Get me out of Here! is an online event here you get to meet and interact with real scientists. It's in the form of a competition between the scientists. You submit questions which the scientists will try to answer by the next day. You can read the questions other students have already asked, and the scientists' answers. We will book a chatroom for 30 minutes where you can ask scientists questions and learn more about them.

You can vote for the scientist that you think should win a prize of 50,000 KSh to spend communicating science to schools. A student from our zone will win a 3,000 KSh prize voucher for asking the best questions and engaging with the scientists.

Each of you will get a card with a username and password which can be used to log in to the site. You will be able to change your nickname but you will need the details printed on the card each time you log in to the site.

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

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 Activity 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. *(Activity 2: Meet the Scientists will help prepare.)*

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

VOTE - You get to vote for the scientist that you think should win a prize of 50,000 KSh to spend communicating science to schools. 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.

How much time should you spend on it?

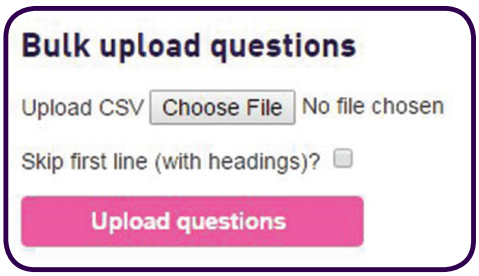
Minimum: 2 hours
This will usually be one introductory session of reading about the scientists and submitting questions, and one session doing a live chat with the scientists.

Be warned:
After taking part in other events, when asked what they would do differently, most teachers 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 (*imascientist.or.ke*) to see who has been evicted.

Questions

Students can ask questions to the scientists by logging in to the site and clicking the ASK icon. Alternatively, if you are unable to provide your students with individual internet access, you can collect their questions and send them from one computer. Here’s how...



1. Create an Excel spreadsheet with Usernames (as found on their log in cards) in column A, and Questions in column B. Enter your students’ usernames into the spreadsheet, together with their questions.

If you have not given each student their own account, you can just type the students’ names into the Username column and the question will be credited to that name. (This will also happen if the username is entered incorrectly.)

2. Use “Save As”, and save the spreadsheet as a CSV (comma-delimited) file.

3. Log in to the site at imascientist.or.ke, using your teacher account. You’ll be taken to your profile page.

4. Scroll down to “Bulk upload questions”. Click “Choose File”, and select your CSV file. Check the box which says “Skip first line (with headings)?”, and click “Upload questions”.

A message will be displayed showing how many questions were uploaded. The questions will go into the queue to be approved by the moderators.

Votes

How evictions work
From Tuesday of the second week, one scientist will be evicted every day until the winner is announced on the final Friday. The evicted scientist will be announced in a news post on the website at 5:00 PM.

Day	M	T	W	T	F	M	T	W	T	F
Voting Round	1						2	3	4	5

Students get one vote in each round, with each round ending at 5 pm with the eviction of a scientist.
The winner will be announced on the final Friday.

How to vote
Students can vote individually by logging in to the site, and clicking on the VOTE icon.

Alternatively, ask students to vote by a show of hands. Count up the votes cast for each scientist and email admin@imascientist.or.ke, by 4:45 PM on the day of the eviction, with the numbers.

Activites

There are many ways to use the I'm a Scientist event. We've put together three activites. These were developed in consultation with teachers and have been extensively tested. Most have found them extremely helpful.

Further resources: Online at *imascientist.or.ke/teachers*

Activity 1 - "You're the Judges!" Without thinking, students may just vote for the scientist with the nicest photo, or the best joke. This activity 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.

Activity 2 - "Meet the Scientists" This activity encourages students to examine the scientists' profiles and think about what they might like to ask them. It's a chance for students to discuss the interesting things they've found and maybe do some extra research before their live chat. You might want to print the profile pages in advance.

Activity 3 - "Live Chat" 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.

Activity 1: You're the Judges!

Activity 1 – You're the Judges!
- Introduce I'm a Scientist.
- Choose and rank criteria by which to judge the scientists.

Learning objective:
- Consider a range of criteria and understand that different (important) values may need to be weighed against each other.

Other learning outcomes:
- Encourages students to consider criteria to use in deciding which scientist to vote for and how to judge their work.
- Promotes use of sophisticated criteria, not trivial issues.
- Gives students ownership of criteria.

Resources:
- Scientist rating criteria cards from your teacher pack. Scientist ratings criteria can also be downloaded and printed from imascientist.or.ke/teachers.
- Access to I'm a Scientist website (imascientist.or.ke)

Format

Introduction: 5 minutes
Explain the I'm a Scientist event briefly (allow the students to see the site if possible). The students have the power to decide who wins. What ideas do they have about science at the moment? Will they change?

Activity: 30 minutes
1) Display the criteria list.
2) Get the class to choose the most important criteria. Write the five criteria on the board.
3) Get the class to rank the five most important criteria.

Discussion: 15 minutes
- Brainstorm any other criteria that aren't on the list, that students might consider important when judging scientists.
- Overall message: this will help you judge the scientists as scientists.

Suggested Homework:
Look at the website and see how each scientist in your zone performs on the five most important criteria your class selected.

Suggested adaptations

Support:
Less justification necessary. Lead students into the rationale behind their decisions.

Extension:
Ensure full justifications and explanations are given whenever they express an opinion.

Activity 2: Meet the Scientists

Activity 2 - Meet the Scientists
Scientific networking, a fun, exciting way to 'meet' the scientists.

Learning objective:
• Get to know the scientists in-depth in a structured way.

Other learning outcomes:
• Stimulate interest and raise questions they may want to ask.

Resources:
• List of the top five criteria decided on in Activity 1: You're the Judges!
• Five copies of the Assigned Questions in 'Activity 2 - Meet the Scientists' sheet at imascientist.or.ke/teachers
Alternatively, these questions are also shown at the bottom of this page.
• Printed downloads of each of the scientists' profiles in your zone.

Format

Introduction: 10 minutes
1) Tell students they will be getting to know the scientists. Split students into five groups and number them 1-5.
2) Assign each group a scientist from your zone and hand them a print out of the scientist profile from the I'm a Scientist website. Get each group to read out their scientist name and job role.
3) Remind the students of the five most important criteria they chose in Activity 1: You're the Judges! for rating scientists.

Activity: 30 minutes
1) Get the students to read through their scientist's profile as a group.
2) Split each group in half, into A's and B's, to end up with ten groups for scientific speed-dating. Those in Group A are students who will go around and question the scientists. Group B are the scientists who will use the printed scientist profile pages on which to base their answers.
3) Hand the Group A students the list of Assigned Questions to ask the Group B scientists. They can also ask questions of their own. If the answer is not available on the scientist profile the group can speculate as to what their answers could be.
4) The Group B scientists will stay seated and the Group A students will rotate between each scientist, asking questions. Ring a bell every 3 minutes to move the students on to new scientists.

Discussion: 10 minutes
All the students discuss the scientists as a class. Go over the questions for each scientist to make sure they got the right answers. Did they like the questions? Did they feel they got to know the scientists? Would they ask similar questions or others?

Suggested Homework:
Bearing in mind the five most important criteria decided on in Lesson 1:
You're the Judges! think of three questions to ask the scientists. Research how a well known scientist (e.g. Tebello Nyokong, Stephen Hawking, Mae Jemison, Dorothy Hodgkin) would answer your three questions.

Suggested adaptations

Support:
Do the activity as a group with five student volunteers as the five scientist standing at the front of the classroom.

Extension:
Concentrate more on their own questions rather than the assigned questions. Go back to the ASK section on the website and submit the questions for the scientists to answer.

Assigned Questions

1. What kind of place do you work?
2. What do you do?
3. What's your favourite band?
4. Do you work alone or as part of a team?
5. How long have you done your job?
6. What is your research trying to find out?
7. Will your research affect people?
   If so how many people and in what way?

Activity 3: Live chat

Activity 3 - Live chat
Chat to real scientists in our online chatroom.

Learning outcomes:
- Broaden the students' perceptions of scientists and science.
- Increase the relevance of science to everyday life.

Other learning outcomes:
- Get to know the scientists.
- Prompt more thoughtful questions.
- Opportunity to interact with real scientists.

Resources:
- Live chat booking (important). Go to imascientist.or.ke/live-chat in advance of your session to book your live chat.
- Multiple computers where students may work alone, in pairs, or threes. Alternatively, the whole class can do it together using one computer (ideally with a projector) with the teacher leading.

Format

Introduction: 5 minutes
Go over the important criteria from Activity 1: You're the Judges!, Assigned Questions from Activity 2: Meet the Scientists. In this live chat session the students can get to know the scientists better, in real time. Remind them that they have a big responsibility because each student gets a vote to decide which scientist wins 50,000 KSh.

Note – *Scientists are busy and working full time. It's likely that not all 5 scientists will be able to make every live chat booked so try to manage the students' expectations. Usually expect 2 or 3 scientists per chat. The important thing is that they get to 'meet' real scientists and find out they are human too.*

Activity: 35 minutes
1) Log on to the website (imascientist.or.ke) with username and password given on the student log in cards. Students can either log in individually, or the teacher can log in if the whole group are doing it together via one computer.
2) Click on the CHAT icon to join the live chat. The chat will open 5 minutes before the booked time.
3) Live chat with the scientists, as individuals, pairs or small groups.
4) After the live chat, remind the students to VOTE for their favourite scientist. They can also click the ASK button to ask more questions to the scientists.

Summing Up and Discussion: 10 minutes
- Sum up what they have learnt about the scientists
- Are there any other questions they didn't get to ask?
- Did they learn anything that surprised them?
- Remind students that they can use the site to ask questions at home if they have access to the internet.

Suggested Homework:
Pick one of the scientists' areas of work. Find out more about an issue facing that area. Either research an issue that came up in the live chat, or if none arose write about the biggest issue facing that area of work.

Live chats

Before live chat session

- Make sure you have computer and internet access.
- Book a live chat session using the online booking form at imascientist.or.ke/live-chat, or email admin@imascientist.or.ke with the time and date you would like to arrange your live chat session.
- Do some preparation with your group (we suggest Activity 1: You're the Judges! and Activity 2: Meet the Scientists).

During the session

Explain to your students that they are going to talk in a chatroom with some real scientists. Encourage the students to challenge the scientists and discuss the answers. 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 disruptive pupils.

- Log in and use your Teacher account to join in the chat – anything you say will have one of these icons next to it:

- 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 group dynamics.
- Don't be embarrassed if your group are boisterous or mess about. The moderators will deal with this.
- Remind your students to ask any questions the scientists didn't manage to answer during the chat under ASK, and to VOTE for their favourite scientist to make sure they stay in the competition.

Teacher tips - other teachers' experiences

The event has been running in the UK since 2008, after 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 preparing students
Run activites 1 and 2 before the live chat

> *"We have just had our live chat. It was the best yet (I think) because we had spent much more time on preliminary activities so we had loads of questions to ask"*

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

2. Involve more students
Involve more students, and get them to ask questions about the scientists and their work

3. Encourage your students to be creative with their questions
There are better ways to use the event than finding answers to questions which could be found in textbooks or on the internet.

After the event

- Please do fill in the feedback survey we email you. You are the expert on what happened in your school. Your feedback will help us to continuously improve the event.
- Please also encourage your students to fill in the student survey on their profiles after the event.
- In each zone the scientists and moderators pick a student winner (who they think has asked good questions and really engaged with the event). They get a certificate and a 3,000 KSh prize voucher. We'll let you know if this is one of your students.
- To help all the students feel they have done something important, we have created student participation certificates which can be downloaded and printed from your profile page after the event.

Contact

If you need any help please email admin@imascientist.or.ke
For further information please visit: imascientist.or.ke/teachers