

Global Precipitation Measurement Mission

Giving Presentations in Middle Schools: Best Practices

General Tips:

- Middle school classes are either on a “regular schedule”, meaning they have seven 45 to 50 minute class periods per day, or on a “block schedule”, meaning they have four 90-minute class periods per day. You should plan on having your presentation run for about 40 minutes, leaving a few minutes for questions. Of course, you will want to check with the teacher and see how much time they have set aside for your visit, and be sure to stay within those guidelines.
- Most science teachers teach multiple classes. If you can’t stay for all of the classes, you might suggest that the session is taped and then shown to the other classes. When their classmates are involved and are shown interacting with the speaker, it is reinforcing to students and will increase their interest in the taped presentation. Another option is to bring a few science classes together in a large room, and include other teacher’s science classes as well. If you and the teacher decide to do this, ask that all of the teachers remain to assist with their students and to hear the presentation. You also may ask how seating and being able to view the presentation will be managed if there are a lot of students in one room.
- While having a hands-on activity is a great idea, it is also very time-consuming and may be better to leave behind for the teacher to do in class at another time. Demonstrations work best as they require fewer transitions for the students. You might have the students do the hands-on activity before or after your visit, depending on the content and the teacher’s determination of what will work best.
- Middle school students have amazing energy and are very social animals. That being said, they may not respond to your questions initially as they do not want to appear either too eager or uninformed to their peers. On the other hand, some students may disrupt your presentation by commanding too much attention. The teacher should stay in the classroom the entire time, and should serve as a behavioral guide. If you ever feel that you need help, you might work on a sign with the teacher ahead of time to cue him/her to assist you. This cue might be as inconspicuous as holding up a bottle of water up or simply saying the teacher’s name.
- Middle school students are often hesitant to be asked questions to answer near the beginning of your talk. You can engage students to answer questions initially with a simple “thumbs up or thumbs down” if they have experienced certain things or think an answer is true or false, as to avoid needing to call upon specific students. They will warm up once they get more familiar with you and the content.

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- Sometimes students will desperately want to ask questions, which can interfere with the flow of your presentation. A good technique is to give students an index card at the beginning of your talk, and encourage them to write their questions on the card. Let them know that you will try to get to their questions as your talk progresses. Tell them that if there are questions that you don't get to during the talk, you will collect the cards at the end of your presentation and try to respond. It may be possible to answer most of the questions in an email after your talk, but don't feel compelled to respond to each one! In my experience, students often forget they asked questions in the first place, and they can focus on the presentation when they have written their questions down.

Before your visit:

- Take a few minutes to talk to the teacher and share your ideas for the presentation. If possible, email the presentation to the teacher so it can be ready to show when you get to the classroom. Sometimes the computers and projectors can be difficult to swap out, and may be set up ahead of time for your visit. It is always a good idea to have your presentation on a flash drive as well. If you plan to use links to the Internet, be sure the teacher knows that and makes sure that Internet connectivity is available.
- Email the teacher a picture of you and a short bio, as well as a link or two where the class can learn a little more about your work. This will acclimate the class and have students feel that they already know a little bit about you and your work.
- Make sure you have the correct address for the school! Don't laugh- I have had scientists call me to tell me they had arrived at the old school address or at another school entirely.
- Be sure you find out where and when you are supposed to meet your teacher. Sometimes the teacher is in class, and will send a student to meet you.
- Be prepared to need to show your Driver's License to the office staff upon your arrival to the front office. Most schools will have you wear a nametag for your entire visit, and will ask that you check out with them after your visit.

During your visit:

- Begin your presentation by spending about five minutes telling students about yourself and your job. You might want to include a few slides that describe your work in fairly simple terms. Middle school students will also be interested in the type of education that you need to get into your position, so you may talk a bit about the kinds of classes and interests that are helped you get into your position. Other things to cover include: What got you interested

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- in your field in the first place? What are some neat experiences you have had? Do you travel?
- Stay cognizant of the time, as students will need to leave and proceed to the next class when the bell rings. You will need to make sure you are keeping the presentation going and are covering the most important aspects of your talk. You may need to skip some slides, and it is a good idea to have some “extra” slides at the end of your presentation just in case you end up with extra time (although that happens much less often than not having enough time).
 - Remind students to write their questions down on their index cards, and stop from time to time to answer just a few questions. Sometimes you can get sidetracked with questions and lose some of the other students’ attention, and it can be a fine line between taking advantage of a “teachable moment” and not getting a chance to give important aspects of the presentation.
 - Try not to rush through your presentation, as that can create a situation in which students don’t end up grasping the content being presented. As you get going with your presentation, you can use the students’ body language to assist you with their focus and interest levels. A word of advice though—sometime middle school students have not mastered the art of being polite and keeping their heads off their desk and looking at the speaker. You might ask the teacher if he/she will monitor and assist students with this if it becomes an issue. Some speakers and teachers choose to ignore this behavior, whereas others use it as a teaching tool to help students learn appropriate behavioral norms for instances when people are giving presentations.

After your visit:

- If you have time to respond to some of the students’ questions, you can send the teacher an email with the answers. Do not worry about trying to respond to each question. You can look over the questions and provide urls that the teacher and students can visit to find the answers and/or learn additional information.
- You might send the teacher an email requesting some feedback on your presentation. By asking a few direct questions; such as “Was this presentation at the right conceptual level for these students?”, “How might I modify this presentation?”, and “Can you think of something I can add to make this presentation more engaging to students?”; you will probably get some good feedback that will allow you to continue to improve your presentation.

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Questions to Ask the Classroom Teacher

1. What content do you want me to cover?
2. What have students already learned about this content?
3. How long should the presentation last?
4. How many students will be there?
5. Will I have access to a computer, a projector, and Internet connectivity?
6. Is there a “quiet signal” that students are used to responding to?
7. What time should I arrive and where shall I meet you?