

# Scientific Demonstrations and Illustrated Talks

A scientific demonstration uses the steps used by scientists to answer questions and solve problems. The scientific process includes the following steps:

1. Ask a question.
2. Form a hypothesis of what you expect the answer to your question to be.
3. Test the hypothesis by conducting an experiment.
4. Analyze the results of the tests and information you have gathered.
5. Draw conclusions regarding the hypothesis from the tests.
6. Communicate the results.

The speaker will use posters or equivalent visual aids to enhance the teaching process. The visual aids will include a title, question, hypothesis, test, and an analysis card. This presentation style will have a minimum of 5 poster cards or equivalent multimedia presentation.

This presentation style can either be in the form of a demonstration where the experiment is performed in its entirety or in representative parts. If the experiment can not be performed, then it will be an illustrated talk. The cards are the same for either a demonstration or illustrated talk.

An individual presentation is delivered by one speaker. A team presentation is delivered by up to three speakers. Team members should divide work and speaking parts equally. An uneven distribution of work or speaking parts will impact the scoring of the "Presentation" skill.

The presentation can range in length from three minutes for an individual primary presentation to 15 minutes for a senior team presentation. The complexity of the topic, age of participants, and audience interest should dictate the appropriate length.

Speakers are encouraged to relate the presentation to current project work or 4-H activity. School assignments or science fair displays are not appropriate for this style of presentation.

The presentation work area should be used to the speaker's best advantage. Product labels should be limited to generic names. Elevation boards and mirrors can be used by the speaker to enhance the visibility of the work area.

Speakers may not use notes. Posters should provide any necessary prompting.

Judges may ask questions in this format.