

Communicating Science



What to do

1. Choose a scientific concept
2. Research the concept
3. Choose a target audience e.g. preschool students, aged pensioners, English teachers
4. Choose a communication medium e.g. poster, game, webpage, comic strip, model or video
5. Develop the chosen medium within the constraints listed below.
6. Write a report about your research, audience and medium

What makes a winning entry?

- The approach should be original, creative and resourceful.
- The report should:
 - clearly explain and justify the scientific concept you have chosen;
 - include your background research information, references and permission to use copyrighted material (if applicable)
 - identify and describe the target audience (examples could be: preschool students, aged pensioners without a scientific background, the general community)
 - justify your choice of communication medium for your target audience
 - explain how you designed your entry (eg worked out what to do)
 - discuss what was the most challenging part and what you would do differently next time.
- The chosen medium should be well made, elegant and easy to follow.

A note on originality, authenticity and Copyright

- All work must be original. Any images used must either
- not be subject to copyright or
 - include a letter stating that you have received permission to use the work accompanies the entry.
 - Entries containing any unauthorised content will be disqualified.

Constraints for the Communication Mediums

Cartoon/Comic Strip

- Detail a single or series of cartoons which are hand drawn or computer generated.
- Photos or PDF/PPT/SWAY of the cartoon/comic strip must be submitted for judging.

Game

- The game may be a board or a computer-generated game which communicates a scientific concept.
- The game must be an original piece of work.
- A video of you playing the game and clear Instructions for running the program must be included.

Poster

- Present a single or series diagrams/paintings/drawings with or without text.
- Diagrams must be hand drawn or computer generated.
- Text must be your own words.
- Photos or PDF/PPT/SWAY of the poster must be submitted for judging.

PowerPoint Presentation

- Prepare a series of slides with/without sound Video/ DVD/ Animation/Simulation
- Create a visual media presentation
- The presentation must be an original piece of work no longer than 5 minutes.

Website

- Clear Instructions for using the website must be included.

Model

- Should be well made, elegant and easy to use. It should have dimensions not exceeding 76cm in depth, 122cm in width and 100cm in height)
- Video or photos explaining the use/function of the model must be submitted for judging.

Video/DVD/Animation/Simulation

- Each video/DVD/Animation/Simulation must be no longer than 300 seconds (3-5 minutes). All video should be clearly audible and easy to watch. The film technique will not be judged, however judges need to gain an understanding of your project. Maximum file size 1G, format .mp4 .avi or .mov)
- Ensure that all content in your presentation (including footage, music, images, props, etc.) is your own. If you include any copyrighted or trademarked content, you must be able to provide written permission for its use.

Some ideas to get you started • A PowerPoint presentation about buoyancy • A comic strip about why things dissolve
• A game about how diseases are transmitted • A model of how the human heart pumps blood

Judging Criteria

COMMUNICATING SCIENCE

		5	4	3	2	1	0	
		Exceed expectations of student's learning level		Evident and appropriate to learning level			Not Evident	
Process	Choice of Topic	Identification of a problem that can be investigated scientifically and creating plausible aims for the project						
		Informed explanation of the problem and its significance linking to background research						
		Description of how project fits into a wider scientific context						
	Plan of the Project	Selection of appropriate communication medium to meaningfully communicate the concept						
		Justification of how the communication medium is suited to the identified target audience						
		Planning of the design of the communication medium						
		Application of science knowledge to effectively communicate the scientific concept.						
	Messaging	Summarising data using graphs, tables and other representations, appropriate use of scientific language and Imagery, description of trends and relationships						
	Findings and Conclusions	Identification of limitations of medium in addressing the problem and aims						
		Coherent communication of scientific concept						
Communication Focus	Validity	Visually appealing and effective use of design principles for the selected medium						
	Understanding	Meets specifications for the category – cartoon/comic strip; Game; Poster; PowerPoint; Presentation; website or model or video						
	Creative	Suggests effective improvements to device/product						
Evidence of ownership	Acknowledgements	Demonstrates and original and creative approach to solving the problem showing ingenuity/originality						
		Acknowledges resources used (including reference materials, books, websites etc and assistance from other people).						
	Evidence	Permission to use copyrighted material where applicable						
		Has provided detailed evidence of work (such as draft, workings and/or notes) ensuring the product or device is a true representation of the student's learning and understanding.						
		TOTAL						