

Liquid Nitrogen Video Conference

Pre-class experiments to be performed prior to the video conference

The unique aspects of video conferencing introduce new challenges when presenting science workshops and shows. Interactivity is paramount and as such we ask that your class have run some experiments prior to the video conference.

Experiment: Freeze lettuce

You will need:

- 1 iceberg lettuce leaf
- 1 plastic container and a freezer
- A student to demonstrate
- 1. Run this prior to the conference.
- 2. Place a lettuce leaf in front of the class. Have students note observations (flexibility, colour etc)
- 3. Place the lettuce leaf in a plastic box and store in a freezer overnight. Check the leaf the next day.
- 4. Have students discuss why the leaf may have changed in texture, colour, shape (etc).

Experiment: Supercool water

You will need:

- 4 bottles of very pure water, distilled water is best
- 1 bowl and a freezer
- Lots of patience this can be a difficult experiment to reproduce!
- 1. Take the labels off the bottles of water.
- 2. Place the bottles in a freezer and leave undisturbed for several hours.
- 3. Once the bottles have have cooled, gently remove them from freezer.
- 4. Shake one of the bottles and watch the ice crystals form instantly!
- 5. Try stirring one of the bottles with a straw, or perhaps adding a piece of ice or dirt to the solution.
- 6. Try carefully pouring the supercooled water into the bowl, can you produce the cool ice towers!







Over 100 free science experiments with full descriptions for extra lesson plans

http://www.fizzicseducation.com.au/Free+experiments.html

Join us on the FizzicsEd Podcast!









Copyright Fizzics Education Pty Ltd

The Australian Copyright Act 1968 (the Act) allows 10% of the number of words of this paper to be reproduced and/or communicated by any educational institution for its educational purposes provided that the educational institution (or the body that administers it) has given a Notice to Copyright Agency Limited (CAL) under Part VB of the Act. Unless indicated, all images, photos and videos were created by and remain the property of Fizzics Education Pty Ltd. For details of the CAL license for educational institutions contact:

Copyright Agency Limited Level 15, 233 Castlereagh Street Sydney NSW 2000 Telephone: (+612) 9394 7600 Facsimile: (+612) 9394 7601 E-mail: <u>info@copyright.com.au</u> Website: <u>www.copyright.com.au</u>

Except as permitted under the Act (for example for the services of the Crown or in reliance on one of the fair dealing exceptions i.e. a fair dealing for the purposes of research or study) no part of this paper may be reproduced, stored in a retrieval system, communicated or transmitted in any form or by any means without prior written permission. All inquiries should be made to the copyright owner at;

Fizzics Education Pty Ltd 10/55 Fourth Ave Blacktown NSW 2148 Australia





Ph: +612 9674 2191 10/55 Fourth Ave, Blacktown, NSW Australia 2148