

Praxis “Making Science Fun”

Eggsellent Easter – Classic Egg Drop Experiment

An experiment should be structured so that it presents a puzzle and not an illustration of what is already known. Well designed experiments involve repetition with slight improvements each time as you predict how the one thing that you change, the variable, will affect the outcome. Today’s experiment is such an activity. Can you create a "package" that will protect a raw egg when it's dropped from a height of a door (about 2 metres)?



Materials:

- Raw eggs
- 500 ml plastic yogurt or cottage cheese container with lid
- Various packing materials
- Scissors or knife
- Paper towel (clean-up)
- Tape

Procedure: (Remember to be sure to have your parent’s permission and they have the time to watch and help you.)

- Place the packing material with the egg in the centre into your 500 ml container.
- Tape the lid shut.
- Hold the container the height of a door (about 2 metres) and let it drop. (You might want to do this outside!)
- Check your results.
- Repeat the experiment using different packing materials to see which works best.

What's happening?

Different packing material may give you the same results. Some will work better than others.

Egg shells are both fragile and strong. Even though egg shell is thin, the domed shape makes the egg very strong against pressure such as when a mother hen sits on it. Effective packing material reduced the shock of impact when the container hits the ground, only allowing the egg to feel a little pressure. (PS The oval shape means that an egg wobbles and makes it less likely to roll away from the hen.)

Extension:

Try repeating your test by adding a parachute to your container. Did your egg break?

Want a real test? See if it can survive a drop out of a two or three story window! Check out the egg drop competition on Wikipedia at http://en.wikipedia.org/wiki/Egg_drop_competition.

This activity is based on our seasonal “Easter” Learning Kit. Our teaching kits (described on our website) are loaned out FREE to provide classroom teachers and parents of home schooled children an opportunity to explore Science in interesting ways. Please consider volunteering as one of our classroom speakers or allow your business as a field trip location.



The next major event that Praxis is involved with is Operation Thoth on April 20th. For more information check out our Praxis website www.praxismh.ca/Thoth.html.

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PRAXIS, “Making Science Fun”. Contact Praxis at praxis@praxismh.ca, www.praxismh.ca, Tweet or follow us @PraxisMedHat, or friend us on Facebook. Address: c/o 200 7th Street S.W., Medicine Hat, AB, T1A 4K1 Phone: 403-527-5365, Fax: 403-527-6570.