



Horrible Science Downloadable Experiments – 4 THE INCREDIBLE WOBBLING BRAIN

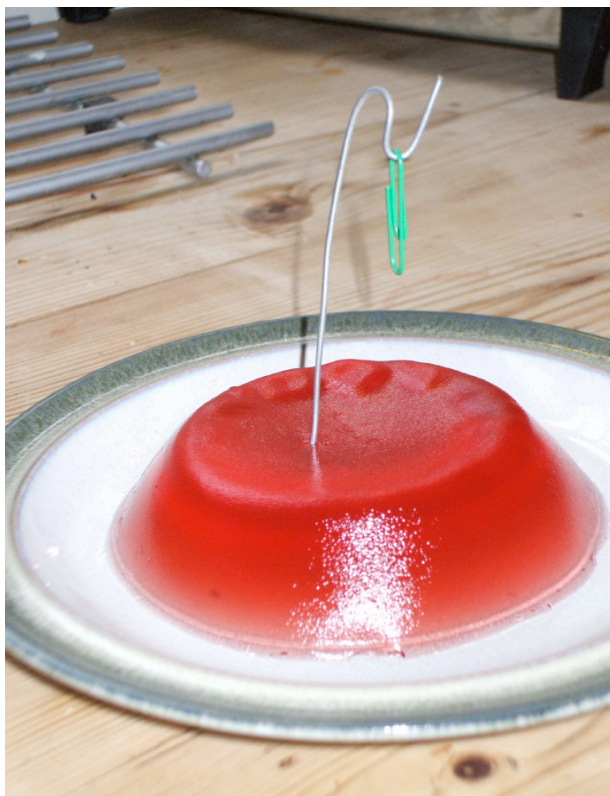
Do you have a secret ambition to measure the brainwaves on a real human brain? If your local hospital won't let you borrow an EEG machine or a real brain for the weekend you can try this cheap n' cheerful version. And there are loads more boggling brain experiments in **BULGING BRAIN EXPERIMENTS** published by Scholastic in 2008.

WHAT YOU NEED:

- Plate
- Spoon for stirring
- Measuring jug
- A small pudding basin.
- Strawberry-flavoured jelly (or you could use lime-flavour to make a green alien brain)
- A 15 cm length of thin wire (florist's wire is ideal)
- A paper clip

WHAT YOU DO:

- 1 Heat water in a kettle. Younger readers must ask their adult assistant to do this job.
- 2 Ask your adult assistant to place eight cubes of jelly in the basin and to pour 280 ml of very hot water over it.
- 3 They should CAREFULLY stir the mixture until all the cubes have dissolved.



This takes ages so if you're feeling kind you let your assistant put their feet up. The lumps will dissolve slowly on their own.

4 Place the basin in the fridge overnight and make sure your little brother/sister/pet wombat doesn't scoff it in a midnight raid.

5 When the jelly has set solid, tip it upside down onto the plate. Stick the wire in the jelly and bend the end as shown. Hang the paperclip on the little hook and get ready to make a few brainwaves. Oh by the way, your experiment ought to look like the photo.

6 Gently and slowly tap the tabletop with the underside of your finger. After a while repeat the taps, but this time you can tap faster.

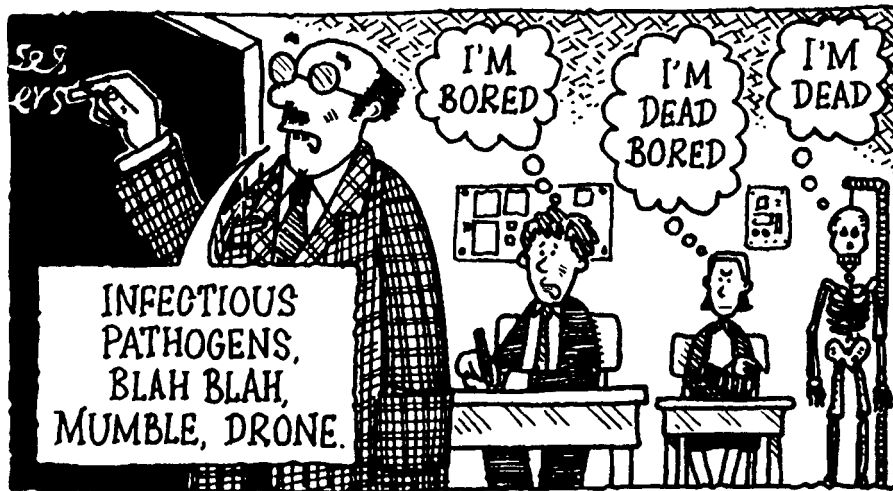


WHAT HAPPENS:

When you tap the table slowly the paperclip swings gently. The faster you tap the table, the faster the paperclip sways. You're making vibrations (waves of movement) in the jelly and they're a bit like brainwaves. In fact you might like to know that a scientist once detected brainwaves in a jelly using an EEG machine. No, it wasn't a super-intelligent strawberry jelly. The jelly was picking up vibrations from people moving around.

THIS IS BECAUSE:

Brainwaves are waves of electrical activity in your brain. The gentler they are the more relaxed your brain is. Very gentle waves mean you're in a deep sleep. No waves mean you're dead.



Bet you never knew!

In 2002 a Norwegian thief got a nasty shock. He opened a package he'd just stolen from a hospital and found ... a human brain. The thief left the brain in a street where it was found by teenagers on their way home from a party. A spokesman for the hospital at Ullevaal might have said "HELP SOMEONE STOLE MY BRAIN!!!" But he probably didn't.