

Chemistry in Your Shopping Basket

Peter Hoare



Anne Willis



RSC Teacher Fellows 2008-2009



Getting used to the “zappers”

- You can only vote when the green “**polling open**” box is displayed on the menu bar at the top of the screen.
- Press the appropriate button (or buttons, one at a time) to vote.
- The LED above button “1” should light up **green** for a second or two.
- You can change your mind whilst voting is open – the system “remembers” the last answer you give!

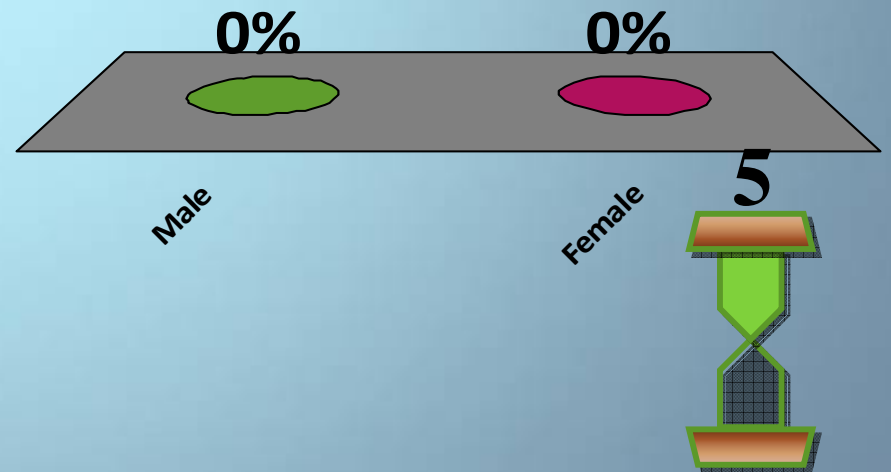
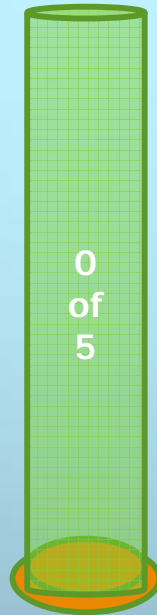


Are you male or female?

1. Male



2. Female



Which year group are you in?

1. Six



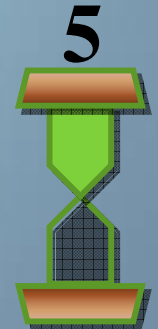
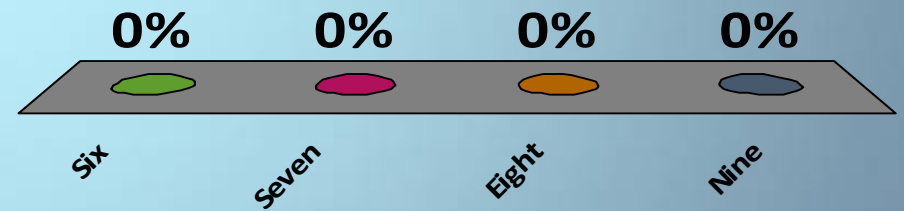
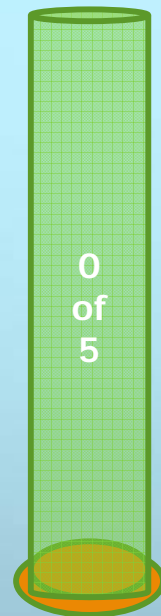
2. Seven



3. Eight



4. Nine



And now for some
questions about
chemistry

Which of the following is not a metal?

1. Gold



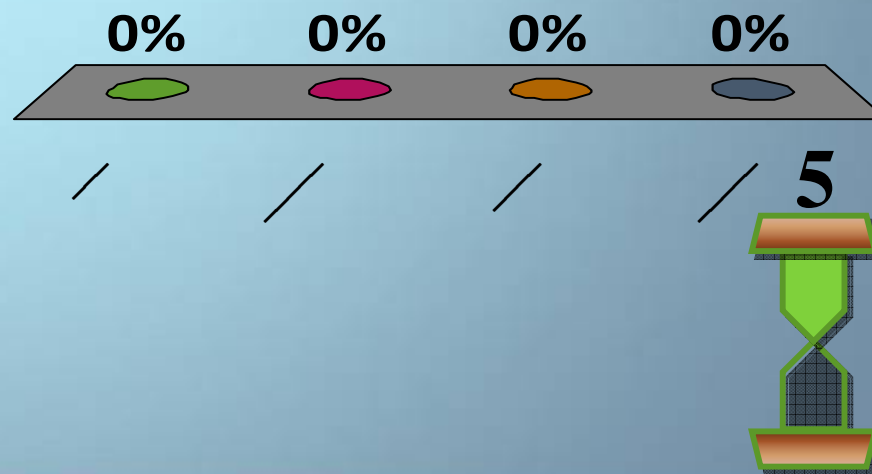
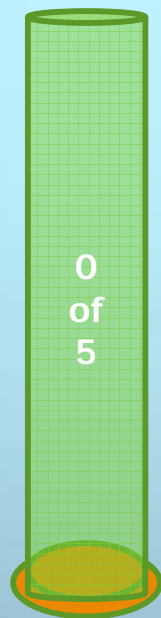
2. Silver



3. Glass



4. Copper



Which of the following have the formula H_2O ?



1. Ice



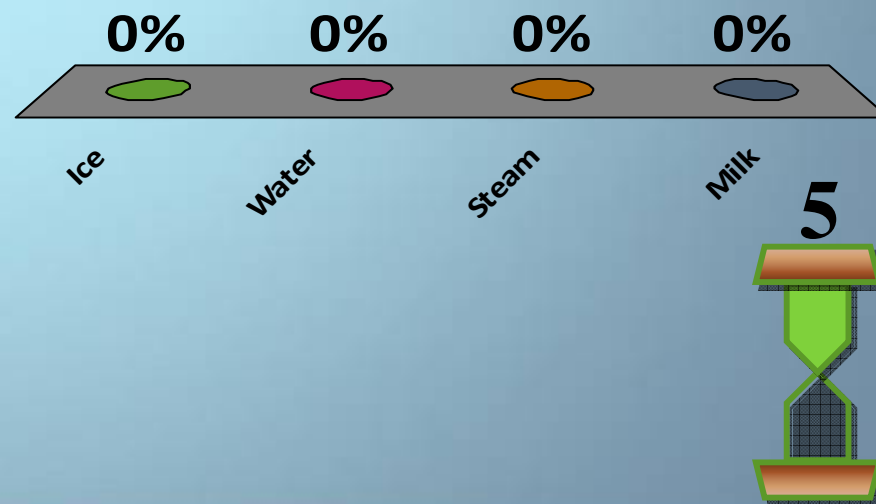
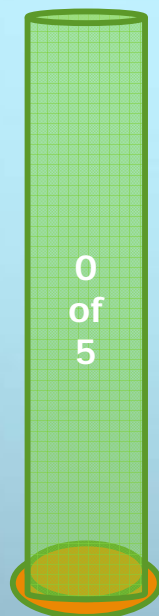
2. Water



3. Steam



4. Milk



Which of the following products have chemicals in them?

✓ 1. Orange juice



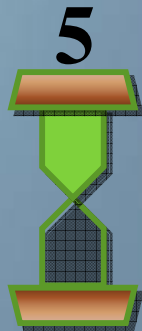
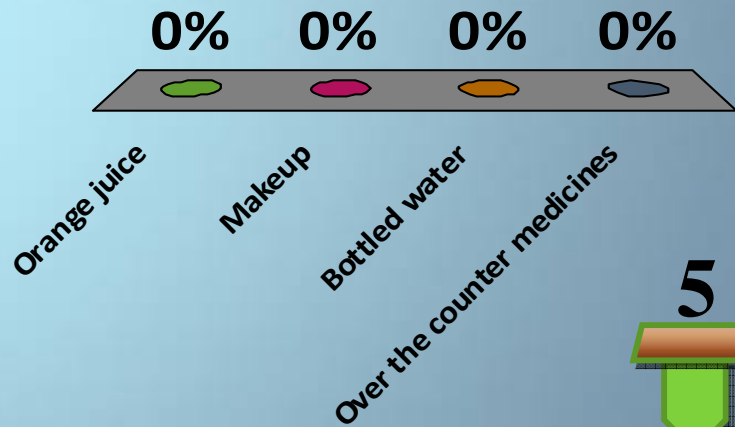
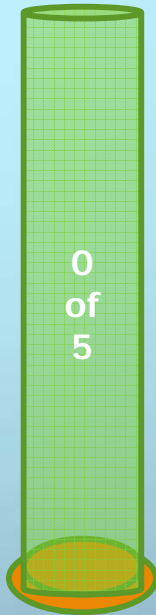
✓ 2. Makeup



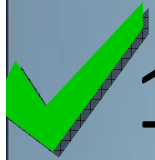
✓ 3. Bottled water



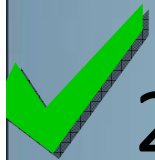
✓ 4. Over the counter medicines



Which of these products needed a chemist to get them into production?



1. Paint



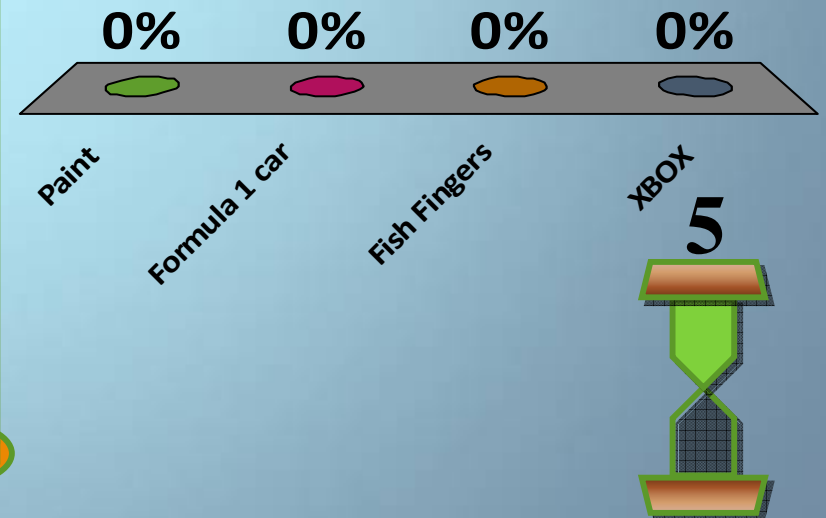
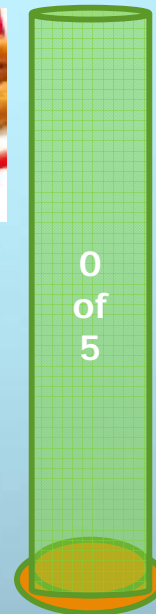
2. Formula 1 car



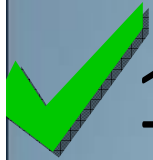
3. Fish Fingers



4. XBOX



Which of the following clothing materials had to be made by a chemist?



1. Nylon tights



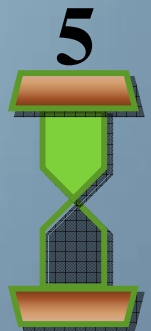
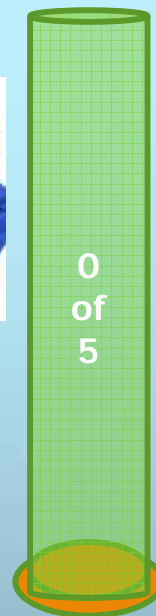
2. Cotton t-shirt



3. GORE-TEX jacket



4. Silk blouses



What is in my Shopping Basket?



And what has it got to do with
CHEMISTRY?

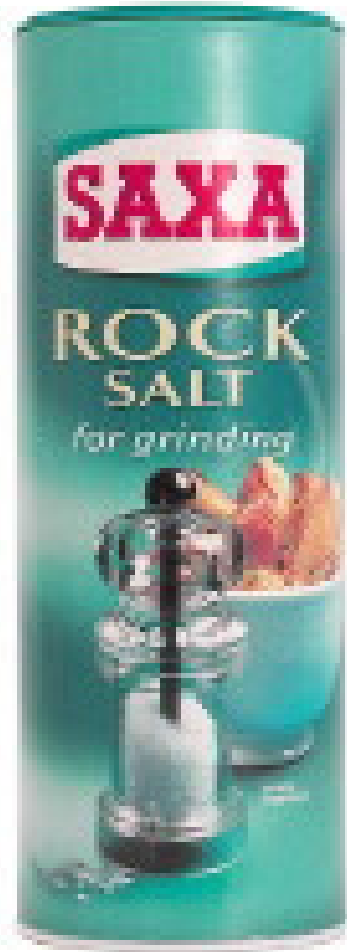
What is a chemist?

- Chemist – a scientist who specialises in chemistry
- Chemistry - the science of matter; the branch of the natural sciences dealing with the composition of substances and their properties and reactions

What links these four items?



Sodium Chloride – NaCl (Common salt)



What links these four items?



Carbon dioxide - CO₂



What links these four items?



Crude Oil



What links these four items?



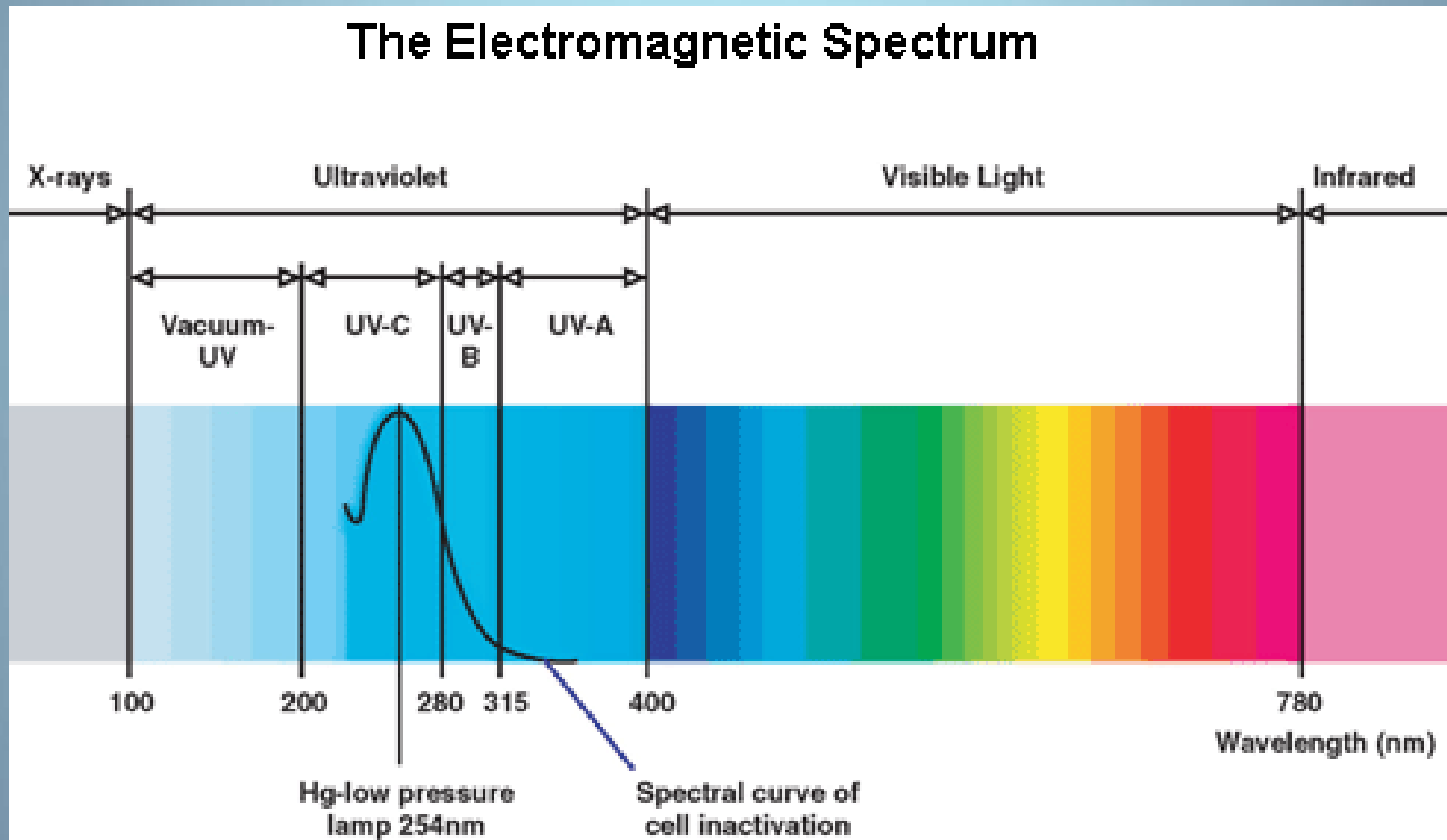
Nitrogen – N₂



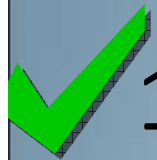
What links these four items?



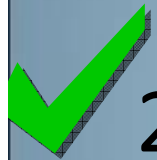
Ultra Violet Light – U.V.



Who is the chemist?



1. Pharmacist



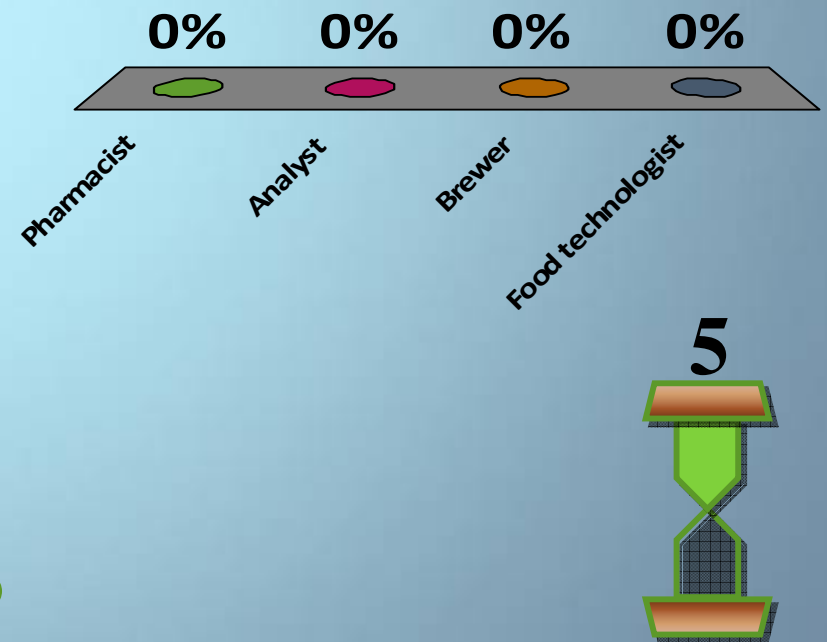
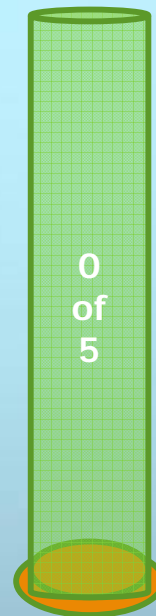
2. Analyst



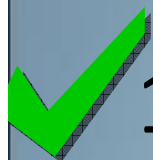
3. Brewer



4. Food technologist



Who employs chemists?



1. Boots



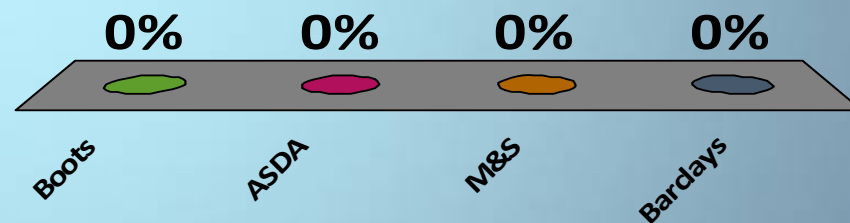
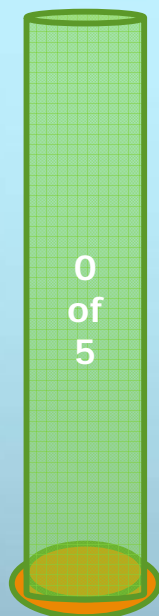
2. ASDA



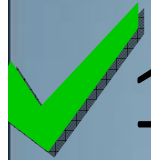
3. M&S



4. Barclays



If you go to University and get a chemistry degree which of these jobs could you go on to do?



1. Journalist



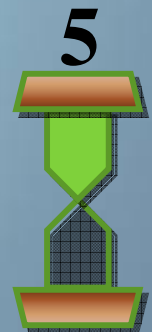
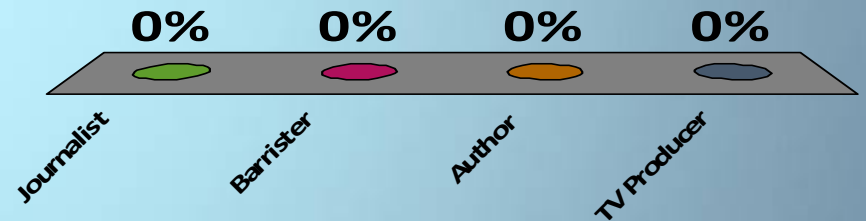
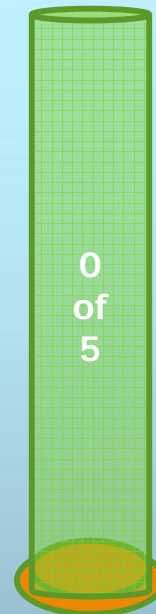
2. Barrister



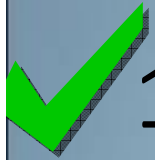
3. Author



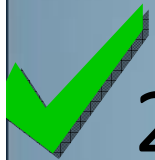
4. TV Producer



Which of the following jobs require you to have chemistry at A level?



1. Doctor



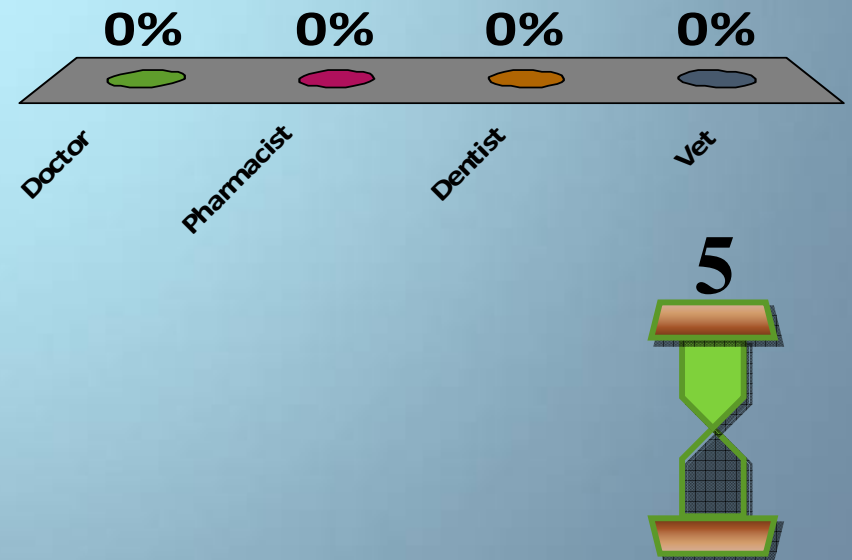
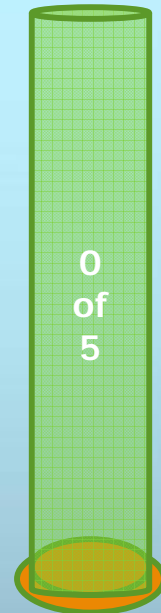
2. Pharmacist



3. Dentist



4. Vet

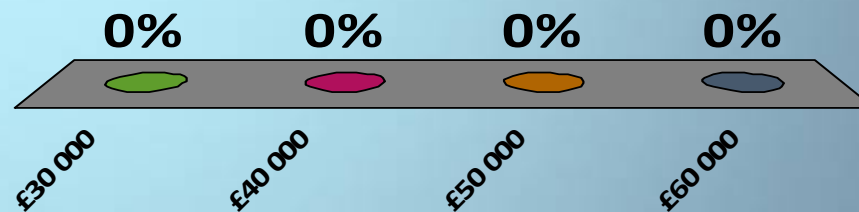
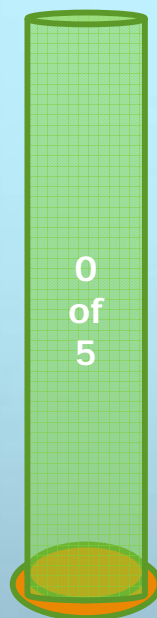


Do chemists earn good money?

In a lifetime how much extra does a chemist earn?

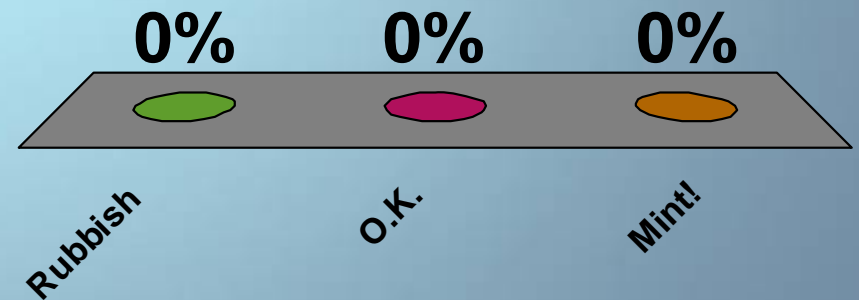
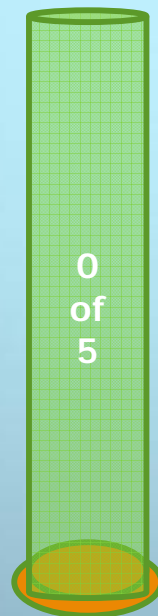
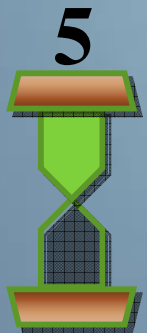
1. £30 000
2. £40 000
3. £50 000
- ✓ 4. £60 000

(Pricewaterhouse Coopers report *The Economic Benefits of Higher Education Qualifications*, 2005)



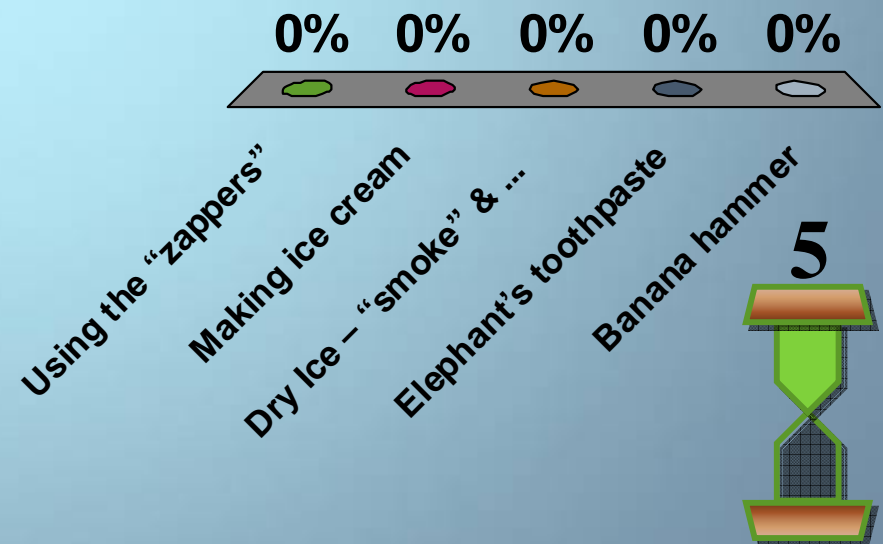
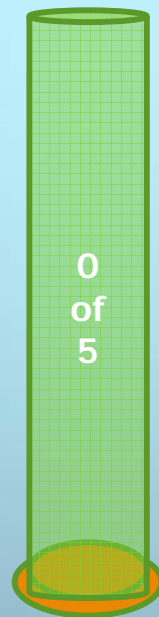
What did you think of today?

1. Rubbish
2. O.K.
3. Mint!



Which was your favourite part?

1. Using the “zappers”
2. Making ice cream
3. Dry Ice – “smoke” & balloons
4. Elephant’s toothpaste
5. Banana hammer



What is in my Shopping Basket?



Lots of Chemistry! 😊