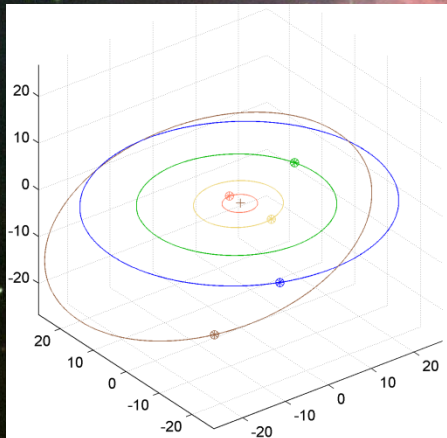
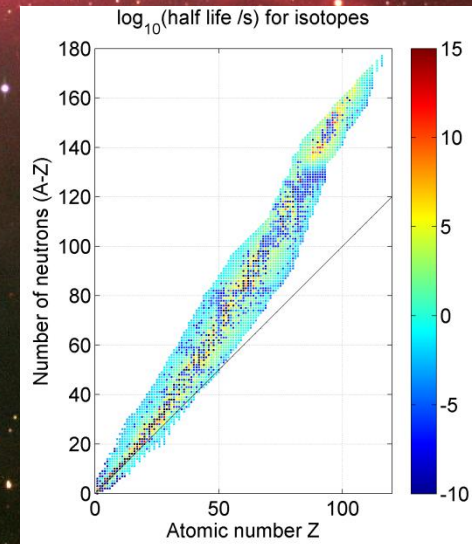


Atomic Number	Atomic Weight*	Symbol	Name	Electron Configuration**
1	1.01	H	Hydrogen	1s ¹

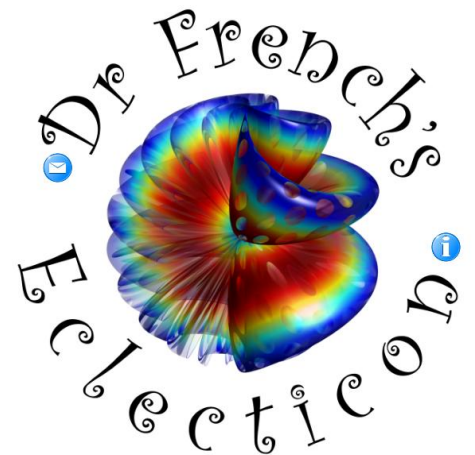
The Universe by Numbers



Dr Andrew French
July 2016

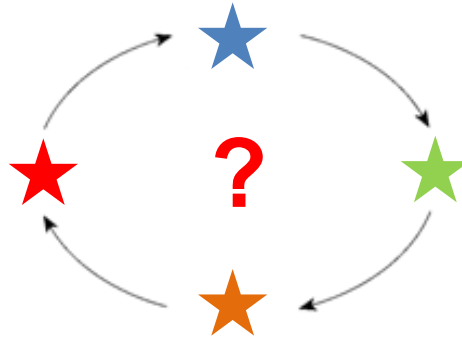


- How to get the most out of this (and perhaps any) course
- Course contents
 - Day 1 What is Science? How do we *quantify* the Universe?
 - Day 2 What is the Universe made of? How do its constituent parts interact?
 - Day 3 Energy and Heat
 - Day 4 Mechanics and Machines
 - Day 5 Sound, Light and other Waves
- Further resources at www.eclecticon.info



How to get the most out of this (and perhaps *any*) course

David Kolb pointed out that Learning is a *cyclical process*



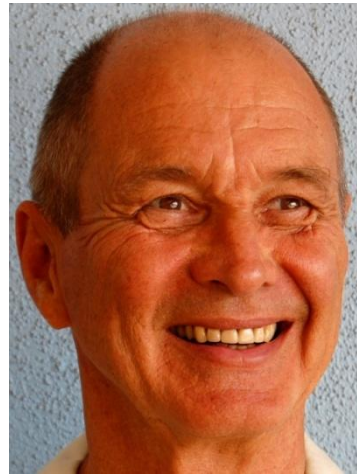
The more times you complete the cycle, the better you will know something!



Activist ★
Having an
experience

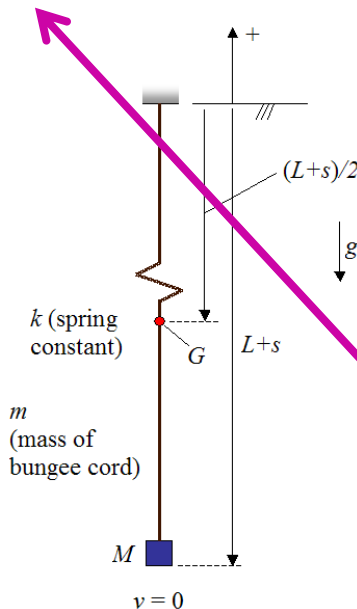


★ **Pragmatist**
Planning the
next steps

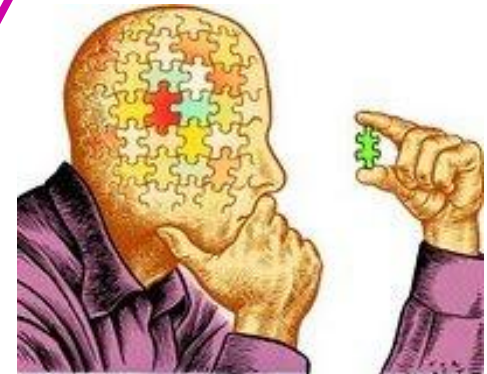


[David A. Kolb](#)
(1939-)

Reflector ★
Reviewing the
experience



Theorist ★
Concluding from
the experience



[Honey & Mumford's](#)
(1982) interpretation of
Kolb's *Learning Styles*

★ Have an experience

We'll **introduce** an idea via:

- Presentations (like this one)
- Discussions
- Calculations
- Experiments
- Games ...

Reflect ★
Reviewing the
experience

You need to take **really good notes** so you can **reflect** upon what you have experienced

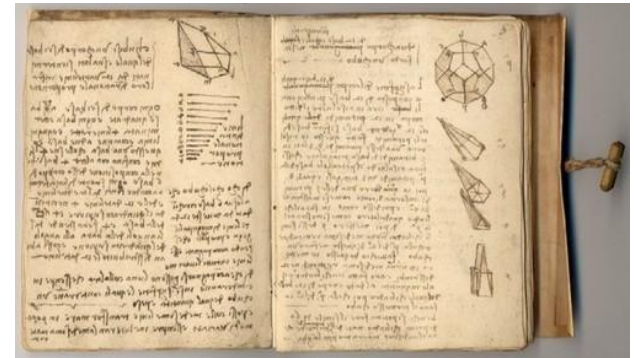
★ Planning the next steps

You may have many
questions!

You will become more adept
after this course, but the
learning of Science
has only just begun...



"I wrote everything down"



With **review** and **practice**, hopefully many ideas
will start to consolidate in your mind

**Concluding from the
experience** ★

