# Science

# Science is the systematic study of the natural world

Its also fun, exciting and important





#### What is science?

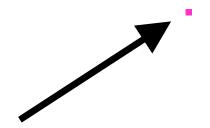
- Questions
- What is stuff made of?
- Why does it have that colour/ smell/ feel/ texture/ weight/ flexibility?
- What happens to it when I heat it up?
- Or cool it down?
- Or when I mix it with something else?
- Or when I put an electric charge on it?
- Or exert a force on it?

#### Three main branches

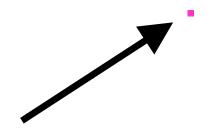
- Chemistry
- Biology
- Physics

But there are many others

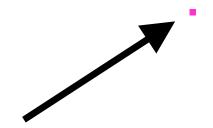
Atoms (building blocks)



- Atoms (building blocks)
- Molecules



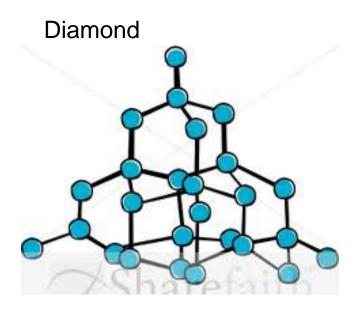
- Atoms (building blocks)
- Molecules
- Reactions



# Hydrogen + Oxygen = Water

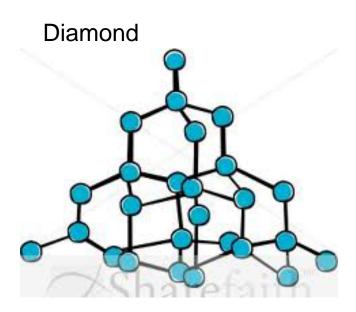


## Carbon



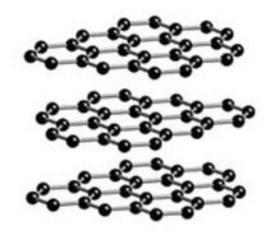


# Carbon









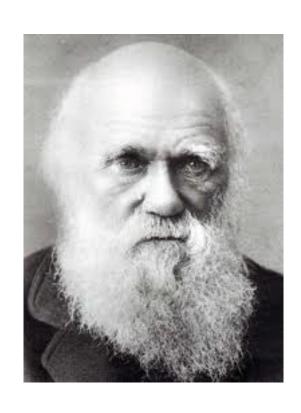


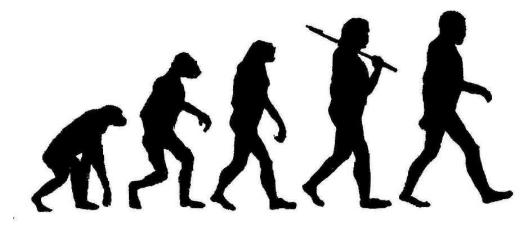
# Biology

# Biology

- Humans
- Animals
- Fish
- Plants
- Evolution

#### **Evolution**





# **Physics**

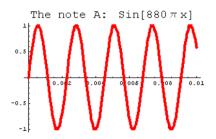
- Sound
- Light
- Heat
- Electricity
- Magnetism
- Forces

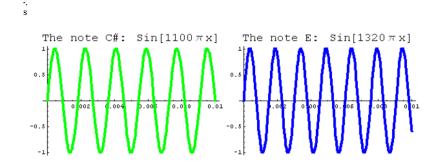
# **Physics**

- Sound
- Light
- Heat
- Electricity
- Magnetism
- Forces

Energy

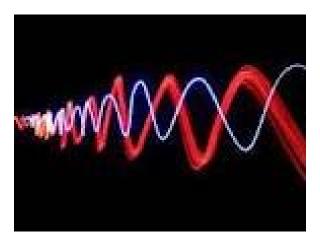
# Sound and light





Sound wave

Sound travels at 700 mph



Light wave

Light travels at 186,000 mph!

Physics in action: lightning storm



#### Others

- Earth Science/Geology
- Environmental Science
- Ecology
- Zoology
- Botany
- Archaeology
- Psychology
- etc.

## Earth Science/Geology









#### Science is all mixed up!

DNA – vital molecule for all living things



#### What do scientists do?

- They work in
  - Universities
  - Medicine
  - Chemical laboratories
  - Food science laboratories
  - On oil rigs
  - For the government
  - At the rubbish dump!
  - In supermarkets
  - In the field (finding new resources, e.g. oil, gas, metals, coal)
  - Discovering new species (biology), new minerals
  - Making new materials for medicine, for agriculture, for environmental protection
  - Studying the planets, e.g. Mars

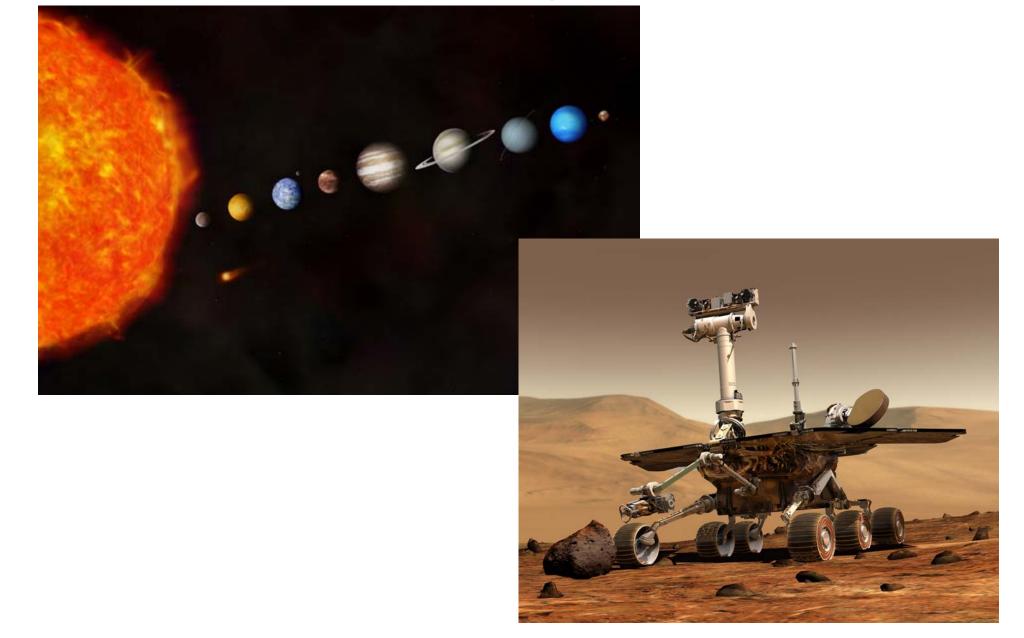
# Example from the South Pole ©



# Who likes mosquitoes?



## Who'd like to go to Mars?

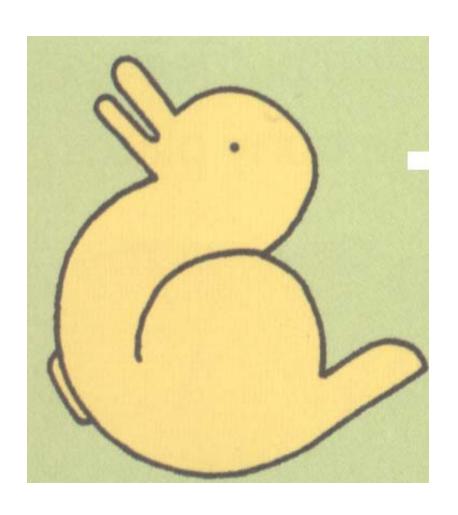


### Food science



k8171126 www.fotosearch.com

### Science of the mind



# What should I do if I'm interested in science?

- Borrow science books from the library
- Watch science programmes on TV
- Find good science websites on the internet
- Study your mathematics and science at primary and secondary school level!
- Do your own research to find the answers to scientific questions
- Loads of fun and interesting jobs to do in science

#### Homework!

• What is this?



# Thank you!

