

# Creativity and Change



## Da Vinci and friction (Week 1)

- **Leonardo Da Vinci** was born in Italy on the 15<sup>th</sup> April 1452.
- He is famous because he was an artist, scientist and inventor.
- **Innovation-** The new idea, something discovered or invented that is new.
- **Implementation-** How the new idea or creation happened.
- **Impact-** How the innovation changed people's lives and ideas and its lasting legacy.
- **Friction-** A force which acts when two surfaces rub together.
- The amount of friction, depends on the type of **surface**. Smooth surfaces will cause less friction than rough surfaces.
- **Heat** is a by-product of **friction**. Meaning that when two objects rub together, known as friction, heat can be created. This can be useful at times, such as creating a Stone Age fire or when you need to warm up your hands.

## William Gilbert and Magnetism (Week 2 and Week 3)



**William Gilbert** was born in Colchester, England on the 24<sup>th</sup> of May, 1554.

He is famous because he was a physicist.

**Innovation-** Magnetism

**Implementation-** Discovered that the Earth is split into two hemispheres and that they are magnetised at the poles.

**Impact-** Helped understand the world and enabled compasses to be used for navigation etc.

**Hemisphere** – The Earth is split into two hemi (half) spheres. The Northern hemisphere includes The Arctic circle, Europe and North America, The southern Hemisphere includes places such as the Antarctic, Africa and Oceania.

**Magnetism** – The North and South Poles are magnetic and metals are attracted to the North Pole. That magnets have a magnetic field that metal objects are attracted to and can react to.

**Magnetic Field-** The force generated by a magnet. The more powerful the magnet, the bigger the magnetic field and the more effect it will have on objects around it.

## Nina Simone and Music (Week 4)



**Nina Simone** was born in North Carolina, USA on the 21<sup>st</sup> of February, 1933.

She is famous for being a musician and civil rights activist.

**Innovation-** Wrote a protest song about a bomb attack on a black church.

**Implementation-** Against the advice of her record company, she recorded and performed a protest song.

**Impact-** Became a regular song at the rallies of Martin Luther King and caused many Southern

USA radios stations to break it into two pieces and return it.

**Compose-** To create a new song or piece of music.

**Tempo-** The speed of the music.

**Genre-** The style of music the song belongs to.

## Marie Curie - Skeletons (Week 5)



**Marie Curie** was born in Warsaw, Poland on the 7<sup>th</sup> November, 1867.

- **Innovation-** Took the X-ray and made it smaller and more mobile.
- **Implementation-** Created truck sized mobile X-ray units for use in the First World War.
- **Impact-** Saved the lives of thousands of soldiers in the First World War and opened up the use of X-rays for a range of uses.

**X-Ray-** An electromagnetic wave that allows you to 'see' through/ inside opaque objects.

**Opaque-** An object that doesn't allow light to pass through easily so appears solid

**Skeleton-** The internal framework of bone and/ or cartilage that holds a body in position.

**First World War-** A global conflict that effected many of the countries of Europe, Africa and Asia between 28<sup>th</sup> July 1914 and 11<sup>th</sup> November 1918.

## William Morris (Week 6)



William Morris was born in Walthamstow, Essex on the 24<sup>th</sup> of March, 1834.

- **Innovation-** Decorative art in different forms of textiles and materials.
- **Implementation-** Designed furniture and more famously, wallpaper with designs from the natural world such as flowers and birds.
- **Impact-** The design and use of repeating patterns for wall paper in a more cost effective way.

**Architect-** Someone who designs structures and buildings.

**Design-** A drawing or plan that shows what something looks like or how it works. A drawing or a pattern

**Natural World-** The countryside and living things not created by human hand.