

As scientists we will.....

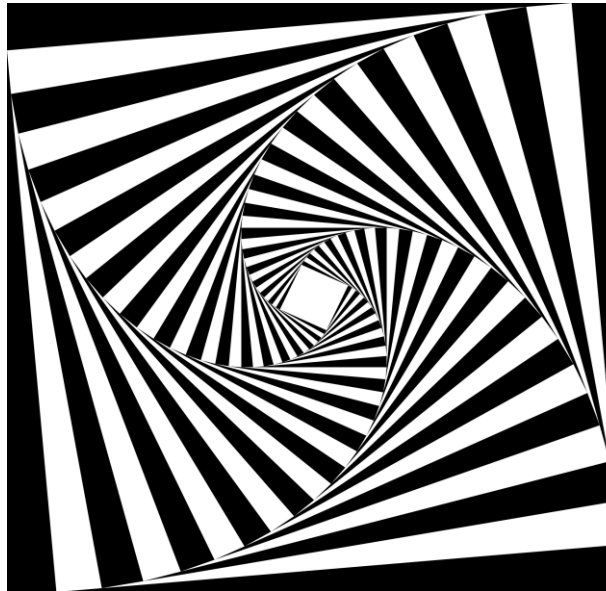
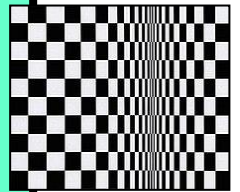
1. **Discover where all Energy comes from?** The sun is the source of all energy. The sun's energy is stored in coal, petroleum, natural gas, food, water and wind.
2. **Understand the CONCEPT - What is energy?** Energy gives us the ability to do things such as climb a mountain, play football and even think. Energy causes movement. Every time you see something move, energy is being used. A leaf moving in the wind, a pot of boiling water, and a school bus travelling to school are all evidence of energy being used.
3. **Investigate how energy can be classified in many different ways:**
 - **M Mechanical energy** (kinetic-energy); its counterpart is stored energy (potential energy) – investigating and making wind up toys. Creating devices to show potential (stored) energy – investigating how far a rubber band will travel when stretched to different lengths/marshmallow catapults
 - **R Radiant energy** or sunlight or solar – making a simple solar oven
 - **S Sound energy** – investigating soundwaves – dancing oobleck
 - **C Chemical energy** – food – baking a high energy bar – slow release carbs/ batteries
 - **H Heat energy** – black paper in the window – taking temperature
 - **E Electrical energy** – creating a simple electrical circuit to power a doodle bugs
 - **N Nuclear energy** – gaining a simple understanding of the nuclear reaction process and how this is used to produce electricity.
4. **Understand that all living things and natural processes require energy** Activity - where does it get its energy from? We will be looking at different everyday objects and identifying their energy source.
5. **Recognise that energy occurs in many forms and one energy form can be changed into another energy form.** Activity – solar energy creates wind, wind can be turned into mechanical/motion energy / turning lights on converts electrical energy to light and heat energy/battery powered = chemical to motion

As engineers we will.....

Take part in Lego Robotic Workshop!

Focus: To create a Lego Robot

This project will be led by the STEM team (Sellafield) and Millom School Engineers.



As artists we will.....

Study a range of artists and illustrators to create our own interpretations of their art forms:

- Brigit Riley “**op art**”- creating art that has an energy, feeling of movement
- Jackson Pollock – creating **potential energy art** - big art – the action of art.
- Making **spin art** – energy based art

As geographers we will.....

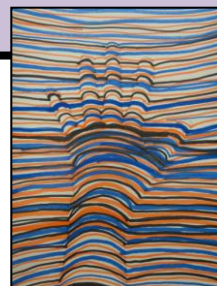
- Investigate energy in the **Natural World** – physical geography: volcanoes, earthquakes...

As writers we will be:

1. **Autobiography:** about themselves and a
2. **Biography** about a famous scientist or someone who inspires them.
3. **Discussions / Debates:** advantages and disadvantages of wind power
4. **Discussion / Debates:** linking to football, school uniform, mobile phones
5. **Persuasion through Advertising:** children to advertise the science fair alongside a new invention.
6. **Information Leaflets:** children to choose their own topic (Cars , football, etc)
7. **Short Stories :** Short stories focusing on a natural disasters.
8. **Instructions:** mine craft game, review of a mine craft game,

As athletes we will.....

1. **Develop our basic skills** of – throwing catching; speed and agility.
2. **Develop our understanding** of ‘Healthy Minds’ and a ‘Healthy you’.



As mathematicians we will be.....

1. **Decimals:** ordering, comparing, adding and subtracting: (context of money, length and weight)
2. Links between **Fractions, Decimals and Percentages**
3. **Basic Skills Work:** + x - ÷ numbers mental and written methods; finding squared numbers, factors (HCF), primes and multiples (LCM), x and ÷ 10,100,1000
4. **Weekly Mastery Maths Problems** – solving as a whole class
5. **Shape:** (3D, nets, 2D, properties, angles – measuring and calculating)

As computing experts we will be...

- Creating **Video clips:** explanations of science experiments / recording for the science fair.
- Creating persuasive **Adverts / Posters:** Comicstrip' APP
- **Publishing leaflets** for the Science Fair
- **E-Safety**

As philosophers we will be....

Developing listening skills and the language needed to develop and maintain discussions about:

- **self esteem/determination** - developing who we are and how we see ourselves - what are we each good at – our strengths - this is me boxes
- **Co-operation** – listening to what we each have to say, thinking about it and developing these thoughts further – valuing contributions.
- Developing **self management** strategies and promoting **independence** and **collaborative group work**.
- Learn how to be **tolerant** and **respectful** through work focusing on **Christianity**.



As musicians we will be....

- be building on their existing skills to play a range of **percussion instruments**. Children will begin **composing** their musical piece for the music festival.
- children will be listening to a range of musical pieces ranging from **Mozart and Enya!**

As tolerant and respectful citizens of the world we will learn about through RE and British Values-

Christianity – Epiphany – 6th January

Importance of Belonging to the Christian faith and important Celebrations – Easter (New Life) and Christmas (Birth of Christ)

Parables: Feeding of the five thousand' (Kindness); The Good Samaritan' (Judging before understanding – (tolerance)

