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

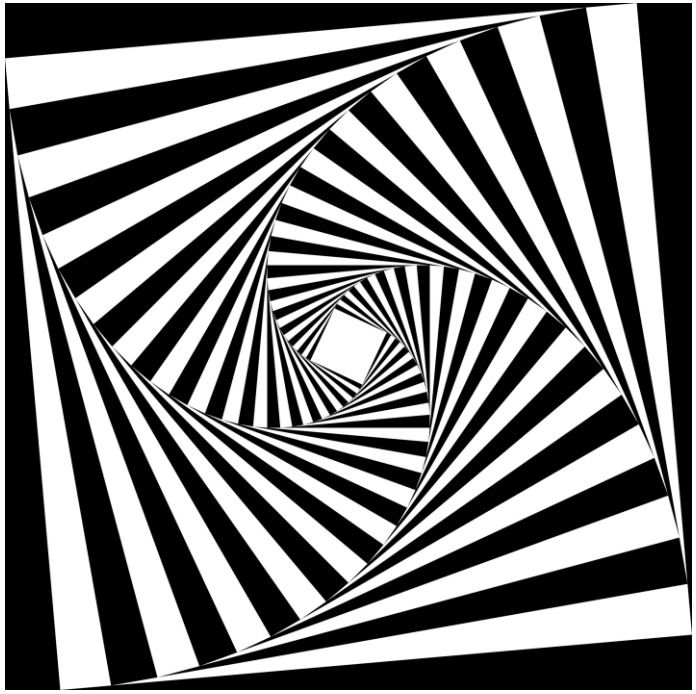
As engineers we will.....

Take part in the STEM project in conjunction with Millom School as well as a K'nex Robotic Workshop!

STEM Project: Creating Land Yachts

- Investigating existing robotic cars
- Understanding the energy used to make the car move.
- Make working small scale to test different features of the cars

Maths link – ratio and proportion; recognising and learning different angles, positional language



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 linking to the action of art.
- Making **spin art** – energy based art

As geographers we will.....

- Investigate energy in the **Natural World**.
- Physical geography
- Causes and consequences of **Natural Disasters.**

As authors we will be writing:

1. **Autobiography**
2. **Discussions / Debates**: advantages and disadvantages of topical debates for the Year 6 children!
3. **Persuasive Letters** to 'Wind Cluster Foundation'
4. **Discussion / Debates:** linking to football, mobile phone / technology / e-safety.
5. **Information Leaflets:** focusing on different energy forms
6. **Flash Back Stories**: Short stories focusing on children being trapped in a natural disaster.
7. **Instructions:** linking to science experiments they have conducted.

Spellings, Short Bursts of Grammar and Handwriting sessions will also be taught daily.

As mathematicians we will be.....

- **Arithmetic Focus'**: written methods for the 4 calculations, rapid recall of multiplication and division facts (inc. whole numbers & decimals); +, - and x fractions.
- **Place value**: reading, writing, ordering rounding numbers past 1 million inc. negative numbers.
- **Fractions, decimals & percentages:** ordering, simplifying, finding equivalents.
- **Statistics:** gathering data, analysing data and interpreting data.
- **Shape:** properties of 2d and 3d shapes; perimeter and area of compound shapes.

NB: All children are expected to apply these above skills to solve word problems on a regular basis.

As athletes we will.....

- Take part in **Cross Country** and **Sports Hall** athletic activities.
- Develop our basic skills.
- Develop our understanding of 'Healthy Minds' and a 'Healthy you/Us' through the '**Phunky Foods'** programme.

Mr Knowles will be teaching Year 6 P.E

As philosophers we will be....

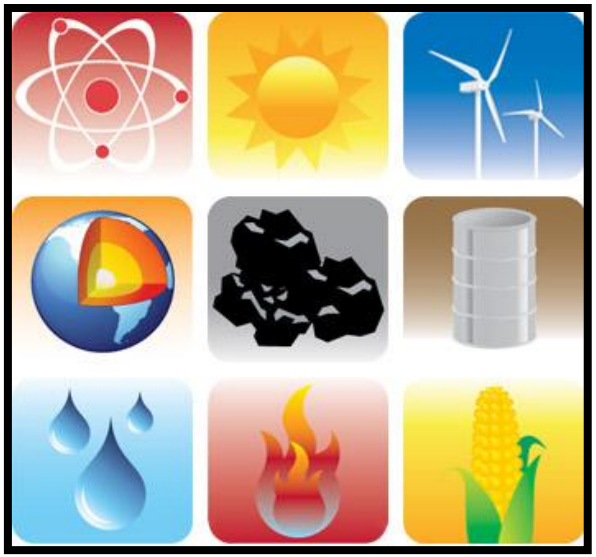
Developing listening skills and the language needed to develop and maintain discussions about:

- **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 be listening to a range of musical pieces ranging from **Mozart and Enya**!

Mrs Phillips will be teaching Year 6 music and drama.



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**