Science

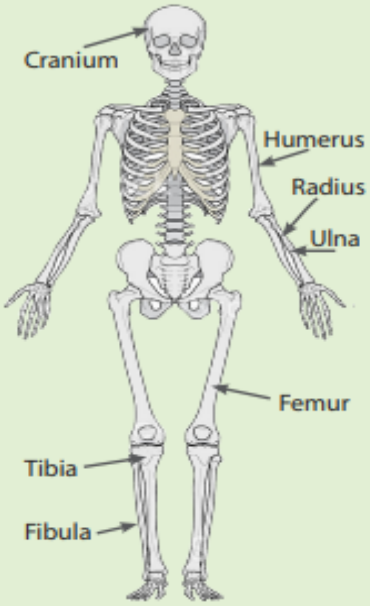
Year 7 | Term 2 | Trinity MAT

Movement

FUNCTION: The skeletal system provides support, movement, protection & blood production.

Antagonist and **agonist muscles** often occur in pairs called **antagonistic** pairs. As one **muscle** contracts, the other relaxes.

An example of antagonistic pairs is the **biceps** and **triceps**. When the triceps relax the biceps contracts to lift your arm.



Diet

Deficiency diseases

Kwashiorkor (lack of protein)

Scurvy (lack of vitamin C)

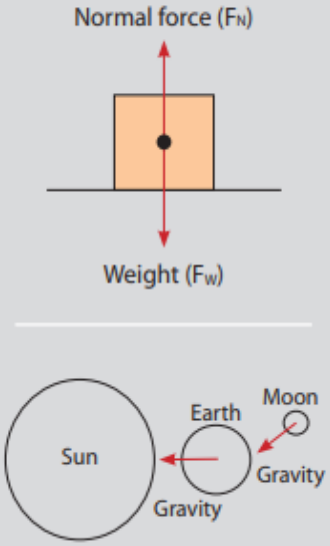
Brittle bones (lack of calcium)

Rickets (lack of vitamin D)

Obesity is associated with other disease such as arthiritis, heart disease, diabetes, and breast cancer.

	Where do we get this nutrient?	Function in the body
Carbohydrates	Bread, Pasta, Rice, Potatoes	Provides the body with energy
Proteins	Fish, Meat, Nuts, Eggs	Important for growth and repair
Fats	Butter, Cheese, Oil, Chocolate	Used as an energy store and for insulation
Fibre	Bran flakes, Oatmeal, Cereal	Keeps the digestive system healthy
Vitamins & Minerals	Fruit & Vegetables	Helps your body to work properly and boost your immune system

Gravity



Space

Scientists use the **light year** as a unit of astronomical distance. It is the distance travelled by light in one year.

A **galaxy** is a group of stars held together by gravity. Our solar system is within the **Milky Way** galaxy.

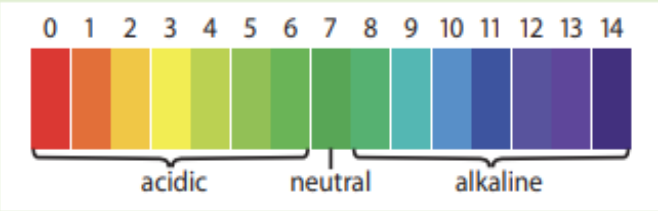
Andromeda is the next closest galaxy to the Milky Way.

Acids & Alkalis

Examples of **acids**: battery acid, vinegar, orange juice

Examples of **alkalis**: bleach, blood, toothpaste, dishwasher tablets

These colours are seen when **universal indicator** is placed in acids & alkalis.



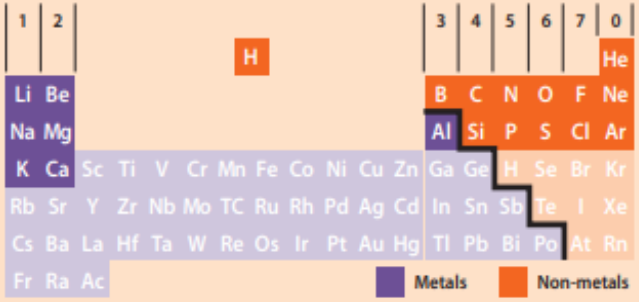
Neutralisation reaction: Acid + Alkali → Salt + Water

	Colour of red litmus	Colour of blue litmus
Acid	stays red	turns red
Alkali	turns blue	stays blue
Neutral	turns blue	stays blue

Periodic Table

All metals, except Mercury, are solid at room temperature.

Metals conduct electricity & heat, are **malleable**, dense and **sonorous** (ring like a bell). **Non-metals** do not conduct electricity and heat, are **brittle** and have a low **density**.



Non-metals: Hydrogen, Helium, Boron, Carbon, Nitrogen, Oxygen, Fluorine, Neon, Silicon, Phosphorus, Sulphur, Chlorine, Argon

Metals: Lithium, Beryllium, Sodium, Magnesium, Aluminium, Potassium, Calcium