

Biology		Chemistry	Physics
1	<p>206 bones make up an adult human skeleton. The skeleton has 4 specific roles:</p> <ul style="list-style-type: none"> • Support the body • Protects organs • Allows movement • Produces blood cells 	<p>Atoms: the smallest part of an element that can exist. Made of Proton's [+], Neutrons [neutral] and electrons [-]. Elements: Pure substance made of only one type of atom Compound: 2 or more elements chemically bonded to form a new substance.</p>	<p>A force is a push or pull on an object that is caused by an interaction. Forces are either contact or non-contact forces. Contact forces: Friction, air resistance, tension. Non-contact: Gravity, Magnetic, Electrostatic. Forces are measured in Newtons (N)</p>
2	<p>Muscles either contract or relax. There are 3 types of muscle: Skeletal muscle allow you to move and are attached to the skeleton. Cardiac muscle - muscles of the heart (involuntary) Smooth muscle is found in the walls of hollow organs like your intestines and stomach. (Involuntary)</p>	<p>The periodic table is made of rows called periods and columns called groups. Each element has a unique number called its atomic number. EG Hydrogen (H)1. Group 1 – Alkali Metals, Group 2 – Alkali Earth Metals, Middle of the periodic table are transition metals. Group 7 – halogen gases. Group 0 – Noble gases.</p>	<p>Gravity attracts all masses. But you only notice it when one of the masses is really big. Example: Planet Earth. Weight & Mass are not the same. Mass (kg) is the amount of 'stuff' in an object. The same anywhere in the universe. Weight is the force acting on an object due to gravity. $Weight = Mass \times Gravitational \text{ field strength.}$</p>
3	<p><u>Classification of Joints:</u> Synovial, Cartilaginous, Fixed (Immovable) <u>Types of synovial Joints:</u> Pivot, Hinge, Ball & Socket, Saddle, Gliding, Condyloid</p>	<p>The Dalton model of the atom.</p> <ol style="list-style-type: none"> 1. All matter is made up of atoms. 2. There are different types of atom. 3. Each elements contains a different type of atom 	<p>In physics, a field, is a region in which each point is affected by a force. An electric field surrounds an electric charge, a gravitational field surrounds a large mass.</p>
4	<p>Blood is pumped around the body by the heart called the circulatory system. The heart has 4 chambers; Left & Right Ventricle and Left & Right Atrium separated by valves.</p>	<p>Electrons are arranged in shells around the nucleus of the atom, each shell represents a different energy level. The lowest energy level is shown by the shell that is nearest to the nucleus. The electrons in an atom occupy the lowest available energy level they can.</p>	<p>All magnets have 2 poles (North and South). All magnets have a magnetic field. Two poles that are the same will repel each other. Two poles that are different will attract each other.</p>
5	<p>Arteries – Carry oxygenated blood away from the heart. Veins – Carry deoxygenated blood back to the heart. Capillaries – are tiny blood vessels connecting Arteries and Veins.</p>	<p><u>Law of conservation of mass.</u> The total mass of reactants is exactly the same as the mass of the new product. No additional mass is gained or lost – mass is conserved.</p>	<p>Electromagnets is a magnet whose magnetic field can be switched on and off with an electric current. Electric currents can create magnetic fields. The strength of electromagnets can be increased by wrapping a wire around an iron core. (Solenoids)</p>

Quiz Time

Week 1 Quiz

How many bones make up the human skeleton?
What 3 particles make up an atom?
Describe the difference between contact and non-contact forces
Identify the difference between a compound and an element
Identify 2 roles of the human skeleton

Week 4 Quiz

What system pumps blood around the body?
How many chambers does the heart have?
True or False the highest energy electron shell is closest to the nucleus?
Magnets have 2 poles, what are they called?
2 poles the same, will _____ each other?

Week 2 Quiz

Identify the 3 types of muscle
A table showing all the elements is called _____?
Describe the term Gravity
Explain the difference between Weight and Mass
True or False, on the moon my Mass is the same as it is on Earth?

Week 5 Quiz

What is the law of conservation of mass?
Arteries carry blood _____ the heart
Veins carry blood _____ the heart
What blood vessel connects veins and arteries?
Describe an electromagnet

Week 3 Quiz

Identify 3 types of synovial joints.
What type of joint is the knee joint?
Describe the Dalton model of the atom
Describe a 'field' in Physics terms.
What charge is an electron?

Week 6 Quiz