

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>In solids the particles are very close together. In liquid the particles are close together but can move in any direction. In a gas the particles are very far apart and move quickly in all directions.</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>Solids – difficult to squash, can't be poured, can't change shape Liquids – difficult to squash, can be poured, can change shape Gas – can be squashed, can be poured, can change shape Intermolecular forces hold particles in their positions</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 x Gravitational 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><u>Pure substance</u> – contains only one type of particle. <u>Mixture</u> – made up of at least two pure substances.</p>	<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>Simple distillation can separate a liquid and a solid. Fractional distillation can separate a mixture of liquids like crude oil.</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>Chromatography is a lab technique for separating components of a mixture – they travel through paper at different speeds.</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

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

Week 4 Quiz

1. What system pumps blood around the body?
2. How many chambers does the heart have?
3. True or False the highest energy electron shell is closest to the nucleus?
4. Magnets have 2 poles, what are they called?
5. 2 poles the same, will _____ each other?

Week 2 Quiz

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

Week 5 Quiz

1. What is the law of conservation of mass?
2. Arteries carry blood _____ the heart
3. Veins carry blood _____ the heart
4. What blood vessel connects veins and arteries?
5. Describe an electromagnet

Week 3 Quiz

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

Week 6 Quiz