

Biology		Chemistry	Physics
1	Variation between species occurs because their genes are all very different. Variation within a species occurs because of: differences in genes & environmental factors. Characteristic features – differences between members of the same species. EG Hair colour.	<p><u>Abundance</u> If there is a lot of something, it is described as being abundant.</p> <p><u>Atmosphere</u> The layers of gases that surround the Earth. The important gases in the atmosphere are nitrogen, oxygen and carbon dioxide.</p> <p><u>Core</u> The core is the innermost part of the Earth.</p> <p><u>Crust</u> The outer layer of the Earth on top of the mantle.</p> <p><u>Mantle</u> A zone of hot rock in the interior of the earth located between the outer crust and the molten core. It has the properties of a solid, although it can also flow, very slowly.</p>	<p>Solids – Particles very close together, strong forces of attraction.</p> <p>Liquids – Particles close together, weak forces of attraction.</p> <p>Gases – Particles are far apart. Very weak forces of attraction.</p>
2	The <b>male reproductive system</b> is mostly located outside of the body. These external <b>organs</b> include the penis, scrotum and testicles. The <b>male reproductive system</b> is responsible for sexual function.		<p>Melting →Solid to a liquid</p> <p>Boiling →Liquid to a Gas</p> <p>Condensing →Gas to a liquid</p> <p>Freezing →Liquid to Solid</p> <p>Subliming →Solid to Gas</p>
3	A female's internal reproductive organs are the <b>vagina, uterus, fallopian tubes, ovary</b> . The main <b>function</b> of the <b>female reproductive system</b> is to produce eggs to be fertilised, and to provide the space and conditions to allow a baby to develop.	<p><b>Igneous rock</b> – minerals randomly arranged in interlocking crystals. Magma from the mantle is pushed to the Earth's surface and cooled. Extrusive – Cooled quickly. (Basalt) Intrusive – Cooled slowly below ground. (Granite)</p> <p><b>Metamorphic Rock</b> – May contain layers or tiny crystals. Existing rocks are exposed to heat and pressure causing their structure to change. (Marble)</p>	<p>Convection is where energetic particles move away from hotter to cooler regions.</p> <p>Conduction is the process where vibrating particles transfer energy to neighbouring particles.</p> <p>Radiation process where objects emit invisible waves that transfer energy to their surroundings.</p>
4	Sex cells are called gametes.  Menstrual cycle: monthly sequence of events (after puberty) that prepares the uterus in case it receives a fertilised egg.	<p><b>Sedimentary Rock</b> – Layers of sediment cemented together by minerals. Compressed in lakes / seas over millions of years. Often contain fossils. (Limestone, Chalk)</p>	<p>Hotter objects transfer energy to cooler objects by heating. Temperature does not tell us how much heat something contains.</p> <p>Heat is a form of Energy and is measured in joules. Temperature tells us how hot something and is measured in degrees Celsius.</p>
5	Fertilisation – the nucleus of a sperm cell combines with the nucleus of an egg. Fertilised egg divides to form an embryo, which implants into uterus wall. Gestation – time between fertilisation and baby being born. Embryo develops into a baby	<p><u>The rock cycle takes millions of years to complete.</u></p> <p>Weathering – Rocks broken into smaller bits.</p> <p>Erosion – Rocks worn down, eg by rain.</p> <p>Transportation – eroded bits of rock moved around the world.</p>	<p>Density is a measure of how much mass is packed into a given volume. The density of an object depends on what it is made of.</p> <p>Sand is highly dense, so will sink in water. Wood is less dense, so will often float in water.</p>

# Quiz Time

## Week 1 Quiz

1. Describe an exothermic reaction
2. Describe particle arrangement in a solid
3. Describe particle arrangement in a liquid
4. Describe particle arrangement in a gas
5. Describe variation and how it happens

## Week 4 Quiz

1. What are sex cells called?
2. Describe combustion
3. Describe the difference between heat and temperature
4. True or False colder objects transfer energy to hotter objects during heating
5. Describe / Explain the menstrual cycle

## Week 2 Quiz

1. Identify key parts of the male reproductive system
2. Describe an endothermic reaction
3. Changing a Solid to a liquid is called \_\_\_\_\_
4. Changing a gas to a liquid is called \_\_\_\_\_
5. Changing a liquid to a gas is called \_\_\_\_\_

## Week 5 Quiz

1. Describe the term fertilisation (human reproduction)
2. Describe the term Density
3. Describe the difference between weight and mass
4. Identify the difference between Exothermic and Endothermic reactions.
5. Changing a solid to a gas is called \_\_\_\_\_

## Week 3 Quiz

1. Identify the key parts of the female reproductive system
2. What speeds up a chemical reaction without changing itself?
3. Describe convection
4. Describe conduction
5. Draw the particle arrangement of a solid, liquid and a gas

## Week 6 Quiz