

Unit F090: Principles of health and social care

P20 Recap questions for Equality, diversity and rights in health and social care

1. Diversity means differences. An area with a diversity of religion and beliefs would consist of people who have many different beliefs and follow a range of different religions. Care plans should include needs and wishes relating to religion and beliefs, religious festivals should be celebrated. Multifaith rooms can be made available. Staff should have training in key customs and beliefs.
2. Equality is where people have the same opportunities regardless of their differences.
3. Confidentiality is where personal information is kept securely and only disclosed to those that need to know and that the service user has agreed to.
4. Consultation with service users is important to ensure that they have control over their own lives. Their needs and wishes are more likely to be met if they have been consulted.
5. Prejudice is where someone makes up their mind about someone based on a particular characteristic they have (such as their race) often without having met them. Discrimination is where an individual is treated less favourably because of a characteristic they have.
6. An example of gender discrimination could be not providing support for a woman who is looking after their disabled husband because it is presumed that they are comfortable with the caring role.
7. Intentional discrimination is where the person doing the discrimination is aware that they are treating someone less favourably than others. Unintentional discrimination is where a person treats someone less favourably than someone without realising or intending to. This could be because they do not know enough about the individual or the group that they belong to and have failed to take something into consideration.
8. An example of unintentional discrimination in a GP surgery could be introducing an online only booking system as this could exclude certain groups of patients such as the elderly and those with dementia or learning disabilities.
9. Examples of social care settings include the following (choose two): community centre, day centre, food bank, homeless shelter, residential care home, retirement home, social services department, support group.
10. Gender reassignment is when a transgender person (someone who has a different gender to their biological sex) has taken steps to live as the gender that they identify with.
11. People from a lower socioeconomic background have statistically poorer health than those from higher socioeconomic backgrounds including a shorter life expectancy.
12. Being patronising is an example of discriminatory behaviour because it causes people to be treated like they do not have the abilities that they do. This is an example of prejudice based on a specific characteristic such as a person's age or the fact they have a disability.
13. An example of psychological abuse is threatening someone.

14. Financial abuse could occur in a residential care home where a resident could be pressured into giving money to a member of staff.
15. Abuse and bullying are just two examples of types of discrimination that could lead to poor mental health. In fact, any type of discrimination could lead to poor mental health.
16. Fear can lead to anxiety and depression.
17. Ethnicity relates to having a shared background with others of the same ethnicity. This could include language, traditions, ancestry, religion and cultural identity.
18. An atheist does not believe in a god or follow any religion. Atheists can be supported in a health and social care setting by detailing the person's beliefs and preferences in their care plan and training staff on different religions including lack of faith.

P20 Revision quiz for Equality, diversity and rights in health and social care

1. People who have direct caring responsibility for the children in the home would need enhanced DBS checks such as managers and the caring staff.
2. A health and social care professional can demonstrate commitment by learning from their mistakes, undertaking training to improve their skills so that they provide the best service they can to their service users.
3. Compassion is important for a GP because it will help them make a connection with the individual who will feel more able to discuss their symptoms with the GP. This will help the GP make an accurate diagnosis and prescribe treatment that will suit the individual.
4. Someone with visual impairment can be supported in a social care setting by making adaptations to the setting to make it easier to get around independently, providing information in audio or large print, training staff on how to support people with a visual impairment.
5. Care home staff may need to undertake training in moving and handling techniques and safeguarding (recognising and responding to abuse).
6. The nine protected characteristics under the Equality Act are: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation.
7. People in care homes need to be trained to use hoists because some of the service users in the home are not able to transfer themselves e.g. from the bed to a chair. A hoist is used to protect both the service user and the staff from harm during the transfer.
8. An advocate speaks on behalf of the child, for example during meetings. The child has a right to have their opinions and wishes taken into account and having an advocate makes this more likely.
9. Cleaning materials contain chemicals that could harm vulnerable service users who live in a residential care home. The resident may spill the chemical on themselves or swallow it. Locking the cleaning chemicals away will prevent this.
10. Any incidences of reportable illnesses in the health and social care setting should be reported to the UK Health Security Agency under the legislation RIDDOR. Examples include: hepatitis A, B and C; tuberculosis; covid-19; legionnaire's disease; measles; and acute meningitis.

11. It is a requirement under the Data Protection Act (GDPR) for organisations which handle individuals' personal data to appoint a Data Protection Officer.
12. The Health and Safety at Work Act ensures a safe environment for residents of a care home giving them more confidence in the service and staff.

P32 Recap questions for managing hazards, health and safety in health and social care settings

1. A hazard is something that could harm someone.
2. A hazard could cause someone harm whereas the risk is the likelihood of that hazard causing harm.
3. Blood is an example of a biological hazard in a hospital. Both service users or staff who are exposed to it could pick up infections and diseases such as HIV and hepatitis.
4. Clinical waste is an example of biological waste that might cause harm to people in a hospital ward. It can spread infection. The hospital should use clinical waste bins to dispose of the waste properly.
5. X-ray machines give off radiation which can harm people's DNA and increase the risk of cancer. A member of staff in a clinic may need to carry out x-rays on many patients which could increase their risk to the harmful radiation.
6. A risk assessment is a process and associated document which first identifies the risks associated with something (an activity, an environment, an individual) and then sets out ways of working, equipment and other adaptations that will lower the risk.
7. Hazards in a hospice that PPE will not protect people against could include any of the following (choose one): Medication, incorrect moving and handling, general equipment, slipping on wet floors, tripping on loose carpets, poor security in the hospice.
8. If a person in care home goes missing the following steps should be taken: search the building, contact the police, interview staff and residents for more information and to track movements of the individual, check the care plan in case there is more detail on where the individual might go if they go missing, inform family, complete an incident report form.
9. If a fire were to break out in a pharmacy the staff should call emergency services, ask any customers to leave immediately, lock up any medication that is out (providing it is safe to do so) and leave the building by the nearest safe exit. They should assemble at the designated meeting point. After the incident they should complete an incident report form.
10. The Health and Safety Executive is a government organisation which monitors health and safety in workplaces in the UK. The following incidents should be reported to them: accidents that lead to staff absence of 7 or more consecutive days, accidents that cause specific injuries, hoists that collapse, when hazardous substances are spilled, explosions and major equipment failure.
11. A control measure is something that is put in place following a risk assessment to reduce the risk of harm from a hazard. It could be equipment, training, ways of working, adaptations to buildings.
12. Poor security systems in a homeless shelter could allow unauthorised people to gain access to the shelter who may harm the staff or steal from them. Security systems in a

homeless shelter should also take account of the service users of the shelter who may threaten staff due to their life situation and possible mental health problems.

13. Many people in a hospital are unable to transfer themselves easily due to their condition or while they are having an operation. Staff working at a hospital will need to help service users transfer on a regular basis. If they were not given training in manual handling they could move people in a way that could hurt themselves or their patients.

P32 Revision quiz for managing hazards, health and safety in health and social care settings

1. An example of physical abuse that might be seen in a residential home could be restraining a service user. Others could be hitting, punching or kicking them.
2. Integrated Care Boards plan local NHS services whereas Integrated Care Partnerships focus more on prevention of illness by creating long-term plans to support health and wellbeing of the population.
3. Neglect may have the following social impacts on a child: restriction in their interactions with other people, difficulty forming positive relationships with people, lack of trust in others, not feeling like they belong.
4. Elderly residents of a care home should be treated with dignity so that they feel respected and comfortable. They also have a right to be treated with dignity.
5. Two health care settings could include any of the following: dental practice, GP surgery/health centre, hospice, hospital, mobile health screening unit, nursing home, opticians, pharmacy, walk-in centre.
6. To prevent discrimination of same-sex couples in a maternity ward the staff should be given training on promoting equality, the wishes of the couple should be recorded in the birth plan, the ward should welcome the presence of anybody who has been chosen by the birth mother to be present at the birth.
7. Reasonable adjustments for physical disabilities at a GP surgery could include: having accessible entrances such as ramps and wide entrances, automatic doors, some consulting rooms on the ground floor, accessible toilets, equipment (such as a hoist) to enable a disabled person to have examinations.
8. Direct discrimination is when a person actively treats someone less favourably than others because of a characteristic they have. An example of direct discrimination is refusing care to a person because of their sexual orientation. Indirect discrimination, on the other hand, is when a policy, decision or way of working used by a setting has a more negative impact on one group of people than another. An example of indirect discrimination could be providing activities that can only be carried out by people with good mobility. This would exclude people with physical disabilities.
9. People with learning disabilities have disproportionately poorer health outcomes than people without learning disabilities. This is often because health and social care workers do not understand the impact of learning disabilities or how to communicate effectively. Because of this, it is a requirement of the Health and Care Act 2022 that people who work in health and social care undergo mandatory learning disability and autism training.

10. Integrated Care Boards plan local NHS services. This means that the NHS services in a particular area are designed to meet the needs of the local population. So, Integrated Care Boards make it more likely that service users will be able to access the care and support they need.
11. The Equality Act ensures that a same-sex couple in a maternity ward can feel confident that their needs will be met and they will not be judged or treated less favourably because of their orientation. If they do feel that they have been discriminated against they can prosecute the maternity ward under the legislation.

P42 Recap questions for legislation in health and social care settings

1. One of the nine protected characteristics of the Equality Act is “disability” which means that disabled service users are protected from discrimination under the act. It is illegal to discriminate against someone who is disabled either directly or indirectly. It requires the setting to make reasonable adjustments to take account of the disabilities.
2. A protected characteristic under the Equality Act is a character or feature of a person that makes them more likely to be discriminated against. The act makes it illegal to discriminate against anyone on the grounds of a protected characteristic.
3. An Integrated Care Board is a group of professionals and members of the community that plan which services the NHS should provide in the local area.
4. Virginity testing is a check, usually carried out by medical practitioners, to check that a woman or girl’s hymen is intact. The hymen is a thin tissue that partially covers the vagina. It is incorrectly thought by some to indicate that the woman or girl is still a virgin if it is intact. Virginity testing is illegal under the Health and Care Act 2022.
5. The Health and Care Act 2022 requires information to be shared across different services.
6. Advertising restrictions on high-fat and high-sugar foods aims to prevent children and young people from being encouraged to eat these unhealthy foods. The impact should be that they will be healthy as a result and obesity rates will decrease.
7. The paramountcy principle is part of the Children Act 2004. When services have any involvement with a child, it is their duty to put the needs of the child first – to make the needs paramount.
8. The Children Act aims to protect children from harm by ensuring that agencies and local authorities work together to protect children. It also requires local authorities to set up Local Safeguarding Children Boards which work to reduce abuse and harm to children and carry out investigations into safeguarding concerns.
9. The Children’s Commissioner is a role introduced by the Children Act. The commissioner promotes the rights and interests of children, gathers views of children so that they can be taken into account when designing services and supports initiatives which promotes children’s wellbeing.
10. Data minimisation is one of the seven principles of the Data Protection Act (GDPR). It means that only the information absolutely necessary for an organisation to carry out its role should be kept about individuals.
11. The impact of GDPR on people who visit the optician is that the service will have information it needs to provide the service such as their vision prescription and results

of any tests carried out. However, the personal information held about them will be kept securely, will only be the information needed and will be accurate.

12. When a GP surgery is being “transparent” about its use of patient data it means that they inform the patients what information they hold about them and what it is used for.
13. Two employer responsibilities under the Health and Safety at Work Act are to create and maintain health and safety policies and to carry out risk assessments to prevent harm.
14. Two employee responsibilities under the Health and Safety at Work Act are for employees to follow the requirements of risk assessments and to attend training and apply what they have learned.
15. Manual handling is a term used to describe movements of people or objects that require an employee to lift, carry, push or pull heavy objects.
16. Two ways to reduce risks associated with manual handling are: using equipment such as hoists and have enough staff available to do the task.
17. Two substances that are found in hospitals that are hazardous to human health are: body fluids and medication.
18. Controlled medication is medication which has extra controls under the law because they are at a higher risk of being misused.
19. An accident book should record the following details about each accident: the date and time of the incident; details of who was involved; details of any injuries; actions taken following the injury; details of any witnesses; any follow-up steps taken.
20. Under RIDDOR an outbreak of any of the recordable illnesses must be reported to the UK Health Security Agency. One example is measles.

P43 Revision quiz for legislation in health and social care settings

1. Staff meetings help health care workers apply best practice because they allow workers to share methods of working that work well to share good practice. It allows them to talk about difficulties they are having with their work so they can get good advice off their colleagues and managers. They will also improve teamwork between the workers.
2. A hazard in a hospital could lead to financial loss because it could lead to a person needing to take time off work to recover from an accident. They may also need to spend more money to recover such as to buy equipment that will help them recover or live with a permanent disability caused by the accident.
3. Disclosure means sharing information about abuse such as that a person has been the victim of abuse or even that they have carried out abuse.
4. Young people may experience discrimination in a health care setting if their concerns are not taken seriously because of their age. For example, they may not be believed if they complain of pain because that symptom is less common in younger people. This will lead to them not getting the support they need.
5. A blended family is when children from previous relationships become part of a new family.
6. Lack of adequate supervision may be a hazard in a day centre because staff may not have the experience or training to carry out the tasks needed such as moving and handling service users. This could lead to harm.

7. Incidents that need to be reported to the CQC include any of the following (choose one): safeguarding alerts relating to the setting, any incidents where police have needed to be contacted, events that have had an impact on the ability of the setting to provide care such as the breakdown of a lift, incidents or accidents that result in harm to service users.
8. One example of discriminatory behaviour in a hospital could be neglect of a vulnerable patient such as leaving them without support to go to the toilet for long periods of time. Another is stereotyping a patient by making presumptions about them based on a characteristic. For example, their complaints of being in pain may be ignored because they have dementia.
9. Five rights individuals have in a health and social care setting are: choice, confidentiality, consultation, equal and fair treatment and protection from abuse and harm.
10. Clinical waste is material left over from carrying out a clinical intervention. It could include body fluids such as blood, used needles and used dressings.
11. An example of age discrimination in a hospital could be not offering the same diagnostic tests to an older person than they would to a younger person because it is presumed that their symptoms are due to “old age”.
12. The term “socio-economic background” refers to people who have a low income and who do not have social status that comes with high profile jobs.
13. Disempowerment of a young person with learning disabilities may mean that they are not able to get the treatment they need, it may lower their self-esteem or cause them to withdraw from relationships. They will not be able to make decisions about themselves even if they are capable of doing so.

P52 Recap questions for best practice in health and social care settings

1. Dignity means treating a person as a valued individual. Respect means valuing the individual and recognising their rights.
2. Independence is an important value for someone attending a day centre because they may lose their abilities if they are not allowed to be independent. Because they attend a day centre it is likely that they live at home and losing abilities will affect their ability to care for themselves in their own home.
3. Other person-centred values include any of the following (choose two): Individuality, choice, rights, privacy, partnership and encouraging service users’ decision-making.
4. To treat a person with compassion means to develop a connection with them and understand the situation from their point of view.
5. The rest of the 6 Cs are as follows (choose two): care, competence, communication, courage and commitment.
6. The 6Cs are important because they are an easy reminder of the traits that should be shown by health and social care workers. They ensure that service users are treated with dignity and respect.
7. The aim of safeguarding is to protect the health and wellbeing of vulnerable people.

8. A designated safeguarding lead is a specific person within an organisation who has been appointed to take responsibility for safeguarding work for the organisation.
9. Staff working in a children's residential home require a DBS check to ensure they have not been convicted of a criminal offense that indicates that they could be a threat to the health and wellbeing of the children they are going to be looking after.
10. People with learning disabilities may need safeguarding because they have cognitive difficulties which may mean they might not understand that they are being abused, they may not be able to communicate concerns about how they are being treated, and they may be less likely to be believed if they did complain of being abused.
11. If there was a lack of safeguarding within a care home, there is likely to be an increase in the number and severity of safeguarding incidents within the home. This would leave the residents at a much higher risk of being mistreated.
12. Sexual abuse is when someone is forced or coerced into taking part in any form of unwanted sexual behaviour. It can include touching, use of sexual language, being forced to look at sexual images and rape. People who have sex with someone under the age of 16 are also guilty of sexual abuse.
13. People receiving domiciliary care may be at risk of financial abuse because they could be very dependent on their carer (formal or informal) who may take advantage of them and take their money or belongings. They may live alone so there will be less chance that the financial abuse will be spotted by someone else.
14. A manager of a homeless shelter could show best practice by ensuring that they communicate clearly with their staff and the service users, or that they ensure the staff have adequate training and development opportunities.

P53 Revision quiz for best practice in health and social care settings

1. a) the person-centred values of care are: individuality, choice, rights, and independence. B) Person centred values are important because they make the service user the most important person when deciding how to provide care and support. They make sure that the person is treated as a valued individual who is listened to and have their needs met.
2. Examples of neurological disorders include (choose one): Alzheimer's disease, Parkinson's disease, Huntington's disease, epilepsy, stroke, acquired brain injury.
3. An infectious disease is a disease which can be passed to other people because they are caused by microorganisms such as bacteria.
4. A health and safety policy and procedure is a document developed by a specific organisation or setting. It will comply with all the requirements of health and safety legislation and will set out how this legislation will be implemented within the setting including who is responsible for different aspects of health and safety.
5. A person's clothing choice may be influenced by their culture in that it helps someone to express their belonging to a particular culture. It is also what the person has become used to growing up. Clothing is a form of self-expression and so is very important to many individuals.
6. Too much noise in a hospital setting could have a detrimental effect on their recovery because they will be unable to relax during the day leading to increase in stress. Noise at night will disrupt sleep which will also have physical and mental health impacts.
7. Race is related to a person's genetic inheritance and shows itself in physical features such as skin colour and facial features. Ethnicity, on the other hand, relates to having a

shared culture which can include a shared language, shared beliefs and shared traditions.

8. It is important for a care home to understand the cultural identity of its residents so that it does not accidentally insult the person by not taking their beliefs into account. It also helps the home provide care that aligns with the beliefs and preferences of the individual.
9. The Herbert Protocol is a safeguarding initiative in the UK to help find people with dementia if they go missing. It involves having a file with information about the individual which will help police and others find them more easily.
10. An Integrated Care Partnership (ICP) is a group of organisations in a specific area that plan long-term services and interventions to support the health and wellbeing of residents of that area.

Unit FO91: Anatomy and physiology for health and social care

P66 Recap questions for cardiovascular system

1. Less than 1% of blood volume is made up of white blood cells.
2. Plasma helps the blood to flow easily through the blood vessels and carries dissolved substances such as nutrients and blood proteins with it.
3. Red blood cells are adapted to carry more oxygen by not having a nucleus or other organelles which allows more room for haemoglobin (which carries the oxygen). They are biconcave in shape to increase the surface area to pick up more oxygen.
4. Fibrin is a protein found in blood plasma that is produced when blood clotting factors are activated. Fibrin forms a network of insoluble strands which forms part of a blood clot.
5. The four chambers of the heart are: right atrium, left atrium, right ventricle and left ventricle.
6. The ideal range of blood pressure readings is between 90/60mmHg and 120/80mmHg.
7. Three differences between veins and arteries are: veins have semi-luna valves along the length, veins contain blood at low pressure, veins have a wider lumen.
8. Two symptoms of angina are chest pains that spread to the arms, neck and jaw; and breathlessness.
9. A non-surgical treatment for angina is using a Nitrolingual pump which delivers medication under the tongue where it is absorbed quickly.
10. A smoker is more likely to develop angina than a non-smoker because the chemicals in the smoke damage the blood vessels making narrowing of the blood vessels in the heart more likely. Smokers can carry less oxygen in the blood which increases the strain on the heart.
11. Deep vein thrombosis is a condition caused when a blood clot develops in a vein which lies deep in the body (often the leg).
12. A venography can diagnose DVT as it specialist x-ray which shows up blood clots when the individual has been injected with a special dye.
13. Some physical impacts of DVT include pain and damage in the affected area, movement of the clot into the lungs causing a pulmonary embolism which is a very serious condition.
14. To control DVT an individual can stop smoking, reduce fat and salt in their diet and drink more water.

P66 Revision quiz for cardiovascular system

1. a) the person-centred values of care are: individuality, choice, rights, and independence.
B) Person centred values are important because they make the service user the most important person when deciding how to provide care and support. They make sure that the person is treated as a valued individual who is listened to and have their needs met.

2. Examples of neurological disorders include (choose one): Alzheimer's disease, Parkinson's disease, Huntington's disease, epilepsy, stroke, acquired brain injury.
3. The humerus is the long bone in the upper arm.
4. An eye test can help diagnose diabetes as it looks for damage to the retina (diabetic retinopathy) caused by the diabetes.
5. Obesity makes the development of gallstones more likely because it increases the levels of cholesterol which is partly what gallstones are made out of.
6. The role of the trachea is to transfer air from the nose and mouth down into the lungs and back again. On the way it helps warm, moisten and filter the air of dust, pollution and pathogens.
7. A diffusion gradient is a difference in concentration of a substance across two different areas such as between the blood and the alveoli of the lungs.
8. Symptoms of carpal tunnel syndrome include (choose one): numbness in the hands, tingling in the hands, pain and swelling in the arms and hands, weakness in the hands and wrists.
9. A peak flow meter is a small hand-held device which you blow into to detect how fast air can be exhaled. It gives an indication of problems with the lungs such as asthma and helps to track improvements or deteriorations.
10. Emotional impacts of gallstones include (choose one): anxiety about the condition, depression caused by regular pain and not being able to eat things you enjoy.
11. A ball and socket joint allows the greatest amount of movement.
12. During absorption of nutrients the role of tissue fluid is to bathe the cells with fluid which contains the nutrients dissolved in it. This allows the nutrients to diffuse through the membranes of the cells into the cytoplasm.
13. Risk of ischaemic strokes can be reduced by giving up smoking, taking more exercise, changing the diet to include less fat (particularly saturated fat) and less salt. Losing weight and reducing weight will also help.
14. An x-ray of a joint affected by osteoarthritis will show that the cartilage in the joint has become worn away. Bone spurs will also be visible. The x-ray will show denser areas at the ends of the bone.
15. A peripheral nerve is are nerves that are not part of the central nervous system. They extend throughout the rest of the body.
16. FSH is a hormone called follicle stimulating hormone which helps control reproductive systems. In women it stimulates the follicle (which contains an immature egg or ovum) to develop during the menstrual cycle.

P77 Recap questions for respiratory system

1. The ribcage protects the heart and lungs from damage. They are used during breathing to expand the chest cavity to draw air into the lungs during inhalation.
2. The diaphragm and the intercostal muscles are involved in breathing.
3. Oxygen diffuses along a concentration gradient from the air in the alveoli, across the alveoli wall, across the capillary wall and into the blood. Carbon dioxide diffuses along

its concentration gradient from the blood, through the walls of the capillary, through the wall of the alveoli and into the air in the alveoli.

4. Mitochondria are small structures (organelles) within a cell which are needed for aerobic respiration to convert nutrients into energy (ATP) which can be used by the cell.
5. Cellular respiration is a series of reactions which take place within the cells to break down nutrients such as glucose to release energy which is stored as ATP.
6. ATP is an energy which is created from ADP using the energy from cellular respiration. It is used as a quick source of energy within the cell to allow it to carry out its functions.
7. The main differences between aerobic and anaerobic respiration are that aerobic respiration uses oxygen whereas anaerobic respiration does not. Aerobic respiration generates significantly more energy (ATP molecules) than anaerobic respiration.
8. During an asthma attack the walls of the airways become inflamed, the muscles in the airways constrict and more mucus is produced. All these will narrow the airways making it harder to breathe.
9. A spirometer is used to diagnose and monitor people with asthma. It can measure the volume of air they are able to breathe out, and how forcefully they can breathe out.
10. Steroid tablets can help someone with asthma by reducing inflammation of the airways.
11. Nebulisers are quite big and need to be plugged in so are not suitable to use in many places, they take longer to work, and the machine will need regular cleaning.
12. Two things that can trigger an asthma attack are allergens (things the person is allergic to) and smoke.
13. Regular exercise can help control asthma as it strengthens the respiratory and cardiovascular muscles as well as helping the individual keep their weight down.
14. During a bacterial pneumonia infection bacteria enter the lungs and start to grow and reproduce. This causes inflammation of the alveoli making it harder for gas exchange to occur. The alveoli also fill with puss.
15. Bacterial pneumonia will cause breathlessness and make the individual feel uncomfortable. It may lead to difficulty sleeping and will mean the individual will not have enough energy.
16. A sputum test where sputum (mucus from the respiratory system) is sent to the laboratory to test for bacteria.
17. Intravenous antibiotics are much quicker to act than tablet antibiotics and stronger doses can be given.
18. A flu vaccination helps prevent the individual from getting flu. Having flu weakens the immune system making it easier for other infections such as bacterial pneumonia to take hold.

P77 Revision quiz for respiratory system

1. Regular exercise can help prevent DVT because the movement of the leg muscles helps squeeze the blood in the veins back to the heart making it less likely that clots will form.
2. An atheroma is a build-up of fatty plaque under the lining of arteries such as the coronary artery.

3. During the menstruation phase of the menstrual cycle levels of both oestrogen and progesterone are low.
4. Physical impacts of type 2 diabetes include (choose two): lack of energy, need to go pass urine more often, vision problems, wounds take longer to heal, increased risk of many other conditions including heart disease, kidney disease, strokes and circulatory problems.
5. The wrist is an example of a gliding or sliding joint.
6. Common symptoms of gallstones include (choose two): abdominal pain, jaundice, fever and nausea.
7. Tachycardia is when the heart rate is fast (over 100 beats per minute) when resting.
8. Two substances assimilated by the body are glucose and amino acids.
9. The epididymis is part of the male reproductive system. It is a coiled tube which is where sperm mature and can be stored.
10. Homeostasis is the process used by the body to maintain stable internal conditions.
11. The pancreas makes and secretes digestive enzymes which are released into the small intestine and digest different types of food.
12. Old bone cells might need to be removed so that they can be replaced with functioning bone cells to help maintain the structure of the bone.
13. An electromyography is a nerve test used during the diagnosis and monitoring of carpal tunnel syndrome to test whether the median nerve has been affected.
14. The brain stem manages basic functions such as breathing.
15. A thrombectomy is a procedure used to remove blood clots as treatment for deep vein thrombosis.

P86 Recap questions for digestive system

1. The role of the gall bladder is to store a substance called bile which is made by the liver and is used in the digestive system to emulsify fats to make them easier to digest.
2. During chemical digestion of proteins, protease enzymes break the bonds between amino acids so the large protein molecule is broken down into the much smaller amino acids.
3. Mechanical digestion takes place both in the mouth and in the stomach.
4. Assimilation is the process of changing nutrients into substances needed by the body.
5. Hydrostatic pressure forces fluid out of capillaries in tissues. The fluid becomes tissue fluid and surrounds the cells. It has nutrients dissolved in it which are taken up by the cells.
6. A gallstone is made of crystals of either cholesterol or a substance called bilirubin which is made when red blood cells are broken down.
7. Jaundice is a condition that causes the individual's skin and whites of their eyes to turn a slightly yellow colour. It is caused by a build-up of bilirubin in the blood.
8. Lifestyle changes that can reduce the risk of bowel polyps include (choose two): having a diet high in fibre, maintaining a healthy weight, taking regular exercise and stopping smoking.

9. Surgical treatments for gallstones include (choose one): laparoscopic cholecystectomy or open cholecystectomy.
10. People who drink a lot of alcohol are more at risk of developing gallstones because the liver is occupied neutralising the alcohol and so does not make the bile properly leading it to form gallstones.
11. Being female increases the risk of developing gallstones because oestrogen increases cholesterol levels which most gallstones are made from.
12. Emotional impacts of gallstones include (choose one): anxiety, depression, difficulty adjusting to required lifestyle changes.
13. A colonoscopy is a procedure involving inserting a tube with a camera through the rectum into the colon. It is used to diagnose, and sometimes treat, intestinal polyps.

P87 Revision quiz for digestive system

1. Emotional impacts of angina include (choose two): anxiety about the condition, difficulty adapting to changes in lifestyle, feeling that they are to blame for the condition, low self-esteem.
2. Capillaries carry blood through tissues and enable exchange of substances between the blood and the cells of the tissues.
3. Emotional impacts of osteoarthritis include (choose one): low mood, frustration about not being able to do normal day-to-day tasks, feeling of being a burden.
4. Older people are more likely to develop DVT because their veins are less elastic so blood collects and clots form more easily, they are often less active, they are more likely to have developed other circulatory problems which increase the risk of DVT.
5. The quadriceps are muscles at the front of the thigh.
6. Endometrial tissue is the tissue that lines the uterus. It becomes thicker during the menstrual cycle and is shed during menstruation.
7. A negative feedback mechanism is used in homeostasis to monitor levels of specific factors such as body temperature. If this factor moves away from its normal set point, the brain stimulates effectors to take action to bring it back to normal. When it is back to normal the receptors stop stimulating the brain to make changes.
8. During expiration the diaphragm relaxes and springs back into its relaxed position which is dome-shaped with the dome pointing up into the chest cavity, giving the lungs less room.
9. Inflammation thickens the walls of the airways during an asthma attack which narrows the lumen. This makes it harder to breathe enough air.
10. Treating bacterial pneumonia with oxygen means that the individual will have to stay in hospital during the treatment. They may also find the oxygen mask uncomfortable and restrictive.
11. Physical impacts of carpal tunnel syndrome include (choose one): pain and discomfort, disturbed sleep, difficulty gripping things.
12. Type 2 diabetes is a condition caused when either not enough insulin is made by the pancreas or insulin resistance means that the body does not respond to insulin like it should, or a combination of both.

13. The pituitary gland is a gland in the endocrine system which makes and secretes many different hormones including ADH which is used to control fluid levels.

P98 Recap questions for musculoskeletal system

1. The ribcage protects the heart and lungs from damage and expands and contracts during breathing to empty and fill the lungs with air.
2. Cartilage is often found at the ends of bones in the joints. It can also be found as part of the ribcage and at the tip of the nose and as part of the outer ears.
3. Osteoclasts and osteoblasts are both bone cells. Osteoclasts break down bone to release minerals such as calcium whereas osteoblasts lay down new bone tissue.
4. A ligament is a strong connective tissue which joins one bone to another.
5. The role of the articular membrane in a synovial joint is to produce synovial fluid.
6. The base of the thumb is an example of a saddle joint.
7. Hinge joints can be found in the elbow and knee.
8. The gastrocnemius muscle is in the calf.
9. The function of the hamstrings muscle is to bend the leg during walking and to stabilise the knee joint during standing.
10. Carpal tunnel syndrome causes tingling in the hands because the condition puts pressure on the median nerve which carries messages from the hands to the brain. Due to the pressure, the messages are interrupted and do not get through properly.
11. Other symptoms of carpal tunnel syndrome are (choose one): numbness in the hands, pain in the arms and hands, weakness in the hands and wrists.
12. Ultrasound is used to diagnose carpal tunnel syndrome by scanning the wrist with high frequency sound which is used to make a picture of the components of the wrist. It can detect swelling around the median nerve.
13. Advantages of using wrist splints to treat carpal tunnel syndrome include that it is a non-invasive treatment and so carries less risk than surgery and that it does not involve taking drugs.
14. Pregnancy causes hormone changes which encourage fluid retention. When fluid does not drain properly from the wrist area, it causes swelling which puts pressure on the median nerve.
15. Osteoarthritis is caused by the wearing away of the articular cartilage which covers the ends of the bones in joints.
16. Advantages of joint fusing as a treatment for osteoarthritis include (choose one): it prevents bones from rubbing together and so causes less pain, it stabilises the joint.
17. Disadvantages of non-steroidal anti-inflammatory drugs as treatment for osteoarthritis include (choose one): they can damage the stomach if not taken with food, can cause kidney problems when used long term, can increase the risk of heart attack and stroke.
18. Exercise can help prevent osteoarthritis because it strengthens and stabilises the joints by strengthening the muscles which surround the joint. Exercise also acts as a natural pain killer and increases flexibility to maintain good mobility at the joints.

19. Some possible social impacts of osteoarthritis include being less willing to go out and socialise with people due to pain and mobility difficulties.
20. A bone spur is an uneven growth of the bone caused by the pressure and the friction on the joints due to osteoarthritis.

P99 Revision quiz for musculoskeletal system

1. A thrombolytic drug is a type of medication which can remove blood clots by breaking them down.
2. The testes produce the hormone testosterone.
3. People at risk of developing deep vein thrombosis might be given anticoagulant drugs.
4. The large intestine is wider and shorter than the small intestine. The small intestine is used for digestion and absorption of nutrients whereas the large intestine is used for absorption of some vitamins and for reabsorption of water.
5. People with type 2 diabetes can make changes to their diet to lose weight and to reduce their intake for food which produce large glucose spikes. They can also take regular exercise to use up more glucose.
6. Heartbeats are triggered by a structure called the sino-atrial node (SAN) in the heart.
7. Symptoms of menopause include (choose two): irregular periods, hot flushes, night sweats, sleep problems, tender breasts, brain fog, weight gain and mood changes.
8. The function of the synaptic knob in a neurone is to transmit nerve impulses to nearby neurones by releasing neurotransmitters which will diffuse across the synapse.
9. Haemoglobin is a molecule contained within red blood cells which binds with oxygen in the lungs.
10. Emotional impacts of testicular cancer include (choose one): anxiety due to the cancer diagnosis, embarrassment due to it being cancer of the testes, feelings of being less masculine.
11. Aerobic respiration requires oxygen and a nutrient (such as glucose). Energy is produced in the form of the molecule ATP, and the waste products carbon dioxide and water are produced.
12. Bile is a substance produced by the liver that is used to emulsify fats to make them easier to digest. It is made from a combination of cholesterol and bilirubin.
13. During the luteal phase of menstruation, the follicle becomes the corpus luteum and secretes oestrogen and progesterone. This causes the endometrium to thicken.
14. The two types of inhalers available to treat asthma include the reliever inhaler which is used to relieve symptoms and the preventer inhaler which contains steroids and is used to reduce inflammation and prevent asthma attacks.
15. The central nervous system's role is to receive and interpret information from sense cells via sensory neurones, to coordinate a response and to send messages to muscles and glands via motor neurones. It is also responsible for thoughts, decisions, communication and memory.

16. An MRI scan (magnetic resonance imaging) is where strong magnets are used to help take images of the internal organs so that various diseases and conditions can be diagnosed.
17. Physical impacts of endometriosis include (choose one): pain, heavy periods, fatigue due to low oxygen, difficulty getting pregnant.

P112 Recap questions for control and regulatory systems

1. The central nervous system's role is to receive and interpret information from sense cells via sensory neurones, to coordinate a response and to send messages to muscles and glands via motor neurones. It is also responsible for thoughts, decisions, communication and memory.
2. The autonomic nervous system controls automatic functions which you do not have conscious control over such as control of breathing and heart rates.
3. A sensory neurone is a specialised nerve cell which transmits nerve impulses from a sense cell to the central nervous system.
4. The hypothalamus acts as a link between the central nervous system and the endocrine system. It regulates some basic homeostatic functions such as body temperature.
5. The meninges are a set of three membranes which surround the brain and spinal cord.
6. Schwann cells wrap themselves around the long processes (axons and dendrons) of some neurones and make up the myelin sheath.
7. Neurotransmitters transmit a nerve impulse from one neurone to another across a tiny gap called a synapse.
8. The role of antidiuretic hormone (ADH) is to prevent water from being lost from the blood into the urine in the kidneys. When ADH is secreted, it stimulates the kidneys to reabsorb more water back into the blood.
9. Insulin and glucagon are both hormones that control blood sugar levels. Insulin lowers blood sugar levels whereas glucagon raises blood sugar levels.
10. Effectors when the body get too cold act to warm up the body and reduce heat loss. They are contraction of arterioles in the skin to allow less blood to the surface of the body, contraction of the erector pili muscles which raise hairs to trap air near the skin to act as an insulation layer, skeletal muscles contract and relax rapidly (shiver) to generate more heat.
11. An ischaemic stroke is when a blood clot blocks a blood vessel in the brain causing part of the brain to be deprived of oxygen and die.
12. Someone who has suffered an ischaemic stroke may have slurred speech if the area of the brain that controls speech has been damaged because the blood clot blocked oxygen and nutrients from reaching that area of the brain.
13. Thrombolysis is a term used to describe the breakdown of a blood clot. Thrombolytic drugs break down clots in blood vessels for people who have deep vein thrombosis or ischaemic stroke.
14. Beta blockers lower blood pressure. They reduce the risk of ischaemic strokes because high blood pressure damages the blood vessels and encourage blood clots to form.
15. Symptoms of type 2 diabetes include (choose two): fatigue, unexplained weight loss, excessive thirst and increased urination.

16. Metformin is a drug used to treat type 2 diabetes. It makes the body more sensitive to insulin, so the individual is better able to control their blood glucose levels.
17. Regular exercise helps prevent type 2 diabetes because it helps you control your weight and it uses up more glucose so naturally lowers blood glucose levels.

P112 Revision quiz for control and regulatory systems

1. In an ECG the QRS wave represents the contraction of the ventricles of the heart.
2. A healthy diet helps relieve symptoms of endometriosis because it helps reduce inflammation which makes the symptoms worse.
3. The bicuspid valve is located between the left atrium and the left ventricle in the heart.
4. Luteinising hormone (LH) stimulates ovulation during the menstruation cycle.
5. The epiglottis is made of elastic cartilage and is located at the entrance of the larynx (voice box). It moves across the trachea during swallowing so that food will go down the oesophagus instead of down into the lungs.
6. Working with vibrating tools increases the risk of carpal tunnel syndrome because the vibration can cause damage to the area and increases inflammation which puts pressure on the median nerve.
7. Menopause is caused by reductions in levels of both progesterone and oestrogen.
8. Symptoms of bowel polyps include (choose two): blood in the stools, diarrhoea, constipation and abdominal pain.
9. Stress increases blood pressure which damages blood vessel linings and makes plaque more likely to develop. It is the build-up of plaque in the lining of the coronary artery that causes angina.
10. Anaerobic respiration takes place in the cytoplasm of the cell (not the mitochondria which is where aerobic respiration takes place).
11. An anti-coagulant is a drug which prevents the formation of blood clots.
12. The first role of the vagina in reproduction is to provide an entrance to the female reproductive system which connects the outside to the uterus. During birth, the vagina forms part of the birth canal (with the uterus and cervix).
13. Physical impacts of pneumonia include (choose one): Feeling constantly out of breath, difficulty sleeping, not having enough energy.
14. Villi are small projections in the lining of the small intestine which point into the lumen of the small intestine. They greatly increase the surface area of the intestinal walls so that nutrients can be absorbed from the small intestine into the blood.
15. Inflammation in the joints causes the tissues of the joint to swell making them more painful and stiff.
16. Menopause usually occurs between the ages of 45 and 55.
17. Joint fusing is a surgical treatment used to relieve pain and stabilise the joints of some people with osteoarthritis.

P122 Recap questions for the reproductive system

1. Eggs are normally fertilised in the fallopian tube.
2. The role of the uterus is to protect and nourish the foetus as it is developing and to form part of the birth canal during birth.
3. During the follicular phase of the menstrual cycle the follicle develops.
4. The four hormones which control the menstrual cycle are oestrogen, progesterone, luteinising hormone and follicle stimulating hormone.
5. Menopause is defined as when a woman has not had a period for 12 months.
6. The vas deferens is a tube in the male reproductive system which connects the testes to the urethra.
7. Endometriosis is a condition where endometrial tissue grows elsewhere in the body than the uterus. This tissue will also get thicker and be shed during the menstrual cycle.
8. When examining a patient for endometriosis a doctor may conduct a physical examination in order to feel for cysts and nodules in the abdomen caused by the condition.
9. Hormone treatments for endometriosis work quickly to reduce pain, they slow the progression of the disease including the amount of scarring and there are several different types to choose from.
10. Disadvantages of hysterectomies to treat endometriosis include (choose two): surgery is risky, it stimulates early menopause, the surgery cannot be reversed, and the individual will no longer be able to have children. It may not remove all the endometriosis tissue so some symptoms may remain.
11. Intellectual impacts of endometriosis include the condition affecting school or work and so affecting intellectual development. The pain will cause difficulty concentrating.
12. A germ cell is a cell that produces eggs or sperm.
13. An orchidectomy is a surgical procedure where both or one of the testes are removed.
14. An ultrasound can be used to help diagnose testicular cancer because it can show up a tumour and tell the difference between a cyst and a tumour.
15. People who have had radiotherapy for something else are at a higher risk of developing testicular cancer because the radiation used can damage DNA and lead to cancer.
16. Social impacts of testicular cancer include (choose two): embarrassment, difficulty confiding in people about the disease, impact on sexual health and low sex drive or impotency which might put a strain on relationships.
17. Symptoms of testicular cancer include (choose one): a lump in the testicle, feeling of heaviness in the testicles, pain, firmness of the testicle.
18. People who have shorter menstrual cycles have a greater risk of endometriosis because they will have more frequent exposure to menstrual blood which can trigger the disease.
19. Advantages of chemotherapy for treating testicular cancer include (choose one): it can help prevent the cancer from spreading or treat cancer that has spread and it can remove cancer that has not been removed by the surgery.

P122 Revision quiz for the reproductive system

1. During an angioplasty a balloon is inserted into the blocked coronary artery to open it. A stent (wire mesh) is then inserted to keep the artery open before the balloon is removed.
2. Bronchioles are small airways in the respiratory system that connect bronchi to alveoli.
3. A tendon is made of tough connective tissue and is used to connect a muscle to a bone.
4. Adaptations of the small intestine include (choose two): it is very long, it has internal folds, it contains villi, and the cells of the villi have microvilli. All these increase the surface area for absorption of nutrients.
5. Common signs of DVT include (choose one): pain in the affected area, swelling, redness.
6. Age is a risk factor for type 2 diabetes because we produce less insulin as we get older and we have less muscle mass and muscles use up more glucose.
7. A pulmonary embolism is a blood clot in the lungs and is a serious condition.
8. Risk factors for carpal tunnel syndrome include (choose one): wrist fractures, obesity, family history, working with vibrating tools, rheumatoid arthritis and hormone changes during pregnancy and menopause.
9. Alveoli walls are very thin which helps with gas exchange because the oxygen and carbon dioxide will have less far to travel.
10. Physical impacts of ischaemic strokes include (choose two): weakness or paralysis down one side, poor vision, fatigue, speech difficulties.
11. Compact bone is dense bone tissue containing bone cells and collagen fibres as well as minerals such as calcium. It makes up the outer layer of bones.
12. A lipase enzyme digests fats.
13. Age is a risk factor for osteoarthritis because there has been more time to wear away the protective layer of cartilage.
14. The role of the pancreas in blood glucose regulation is that it produces the two hormones insulin and glucagon which regulate blood glucose levels.