**B1 Revision Booklet**

B1.1 Keeping Healthy

B1.1.1 Diet and Exercise

Complete the table to describe the uses of groups:

|  |  |  |
| --- | --- | --- |
| **Food Group** | **Uses** | **Examples** |
| Carbohydrate |  |  |
| Fats |  |  |
| Proteins |  |  |
| Vitamins and Minerals |  |  |

What is meant by the term “malnourished”?

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What are some of the effects of not having a balanced diet?

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How is energy content related to body mass?

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What is metabolic rate and what affects it?

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Give an example of an inherited factor that can affect our health?

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B1.1.2 How Our Bodies Defend Themselves Against Infections Diseases

What is a pathogen?

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How do bacteria and viruses make us feel ill?

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How do white blood cells help to defend about pathogens?

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What does a phagocyte do?

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What do lymphocytes do?

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How does immunity develop?

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What impact did Semmelweiss’ research have?

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How are painkillers useful?

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What are antibiotics are what can they be used for?

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What is one of the impacts of the overuse of antibiotics?

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Why is it so difficult to treat viral infections?

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**HT-Only. How do individual pathogens develop resistance?**

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Describe the action vaccinations on the body?

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What does the MMR vaccine protect people against?

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Why must petri dishes be sterilised before use?

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When using inoculating loops to transfer bacteria what must be done to avoid contamination? ................................................................................................................................................... ......................................................................................................................................................................................................................................................................................................

Why must petri dishes be taped shut?

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What is the maximum temperature that cultures can be incubated to in a school?.......................................

Why is this?

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Why would higher temperatures be used in industrial situations?

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1.2 Nerves and Hormones

1.2.1 The Nervous System

What is the nervous system needed for?

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What is a receptor for? ................................................................................................................................................... ......................................................................................................................................................................................................................................................................................................

Complete the following table, indentifying the stimuli for each detector:

|  |  |
| --- | --- |
| **Receptor** | **Stimuli** |
| Eyes |  |
| Ears |  |
| Skin |  |
| Tongue |  |
| Nose |  |

Draw and label a diagram of a light receptor cell:

What is a neurone?

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What three neurones are involved in a reflect action?

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Complete the table:

|  |  |
| --- | --- |
| **Neurone** | **Function** |
| Sensory |  |
| Relay |  |
| Motor |  |
| Receptor |  |
| Effector |  |
| Synapse |  |

Describe what happens in a reflex arc:

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B1.2.2 Control in the Human Body

Water leaves the body via the …………… when ……………………, via the …………. when and via ………………. when…………………

Ions are lost from the body via the…………………. when …………………… and via ………………. when………………….

Why do we need to maintain a constant body temperature?

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What is a hormone?

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Where are hormones produced?

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How do hormones travel around the body? ................................................................................................................................................... ......................................................................................................................................................................................................................................................................................................

What is a gland?

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Which glands control the menstrual cycle?

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What is the role of follicle stimulating hormone (FSH)?

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What is the role of luteinising hormone (LH)?

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What is the role of oestrogen?

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What impact do the hormones in oral contraceptives have on the hormones in the body?

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How have birth control pills changed over time and why?

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Which hormones will be included in “fertility drugs”?

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What happens during *in vitro* fertilisation (IVF)?

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B1.2.3 Control in Plants

List three things that plants are sensitive to:

1. ……………………………………..
2. ……………………………………..
3. ……………………………………..

Describe the direction that shoots grow in, relating to the things that they are sensitive to.

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Describe the direction that roots grow in, relating to the things that they are sensitive to.

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What is the name of the hormone in plants?

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What is phototropism?

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Use diagrams to show how auxin controls phototropism.

What is geotropism?

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Use diagrams to show how auxin controls geotropism.

How can plant growth hormones be used in agriculture?

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B1.3 The Use and Abuse of Drugs

B1.3.1 Drugs

What occurs during pre-clinical drug trials?

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Describe the three phases of clinical trials that drugs go through

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What are statins used for?

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What is Thalidomide?

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What impact can the misuse of drugs have on the body? ......................................................................................................................................................................................................................................................................................................

Why is the overall impact of legal drugs much greater than illegal drugs?

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What is addiction?

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What is withdrawal?

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Athletes are banned from using drugs to enhance their performance. What are the impacts of the following:

Stimulants

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Anabolic Steroids

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