

B1 Understanding Organisms

Topic: B1a Fitness and health

FITNESS AND HEALTH

- blood pressure and how to measure it
- fitness and its link to blood pressure.
- types of fitness (ht)

HEART DISEASE

- Causes of heart disease
- Symptoms of heart disease
- Effects of high blood pressure

http://kidshealth.org/kid/grownup/conditions/heart_disease.html

<http://www.patientlinx.com/highcholesterol/highcholestersymptoms.cfm>

http://www.bbc.co.uk/schools/gcsebitesize/science/ocr_gateway/understanding_organisms/fitness_healthrev1.shtml

Lonsdale revision guide page 4 and 5

Topic: B1b Human health and diet

PROTEINS CARBOHYDRATES AND FATS

- uses of macronutrients
- food tests
- components of a balanced diet.

<http://www.bbc.co.uk/learningzone/clips/a-balanced-diet/10609.html>

OBESITY AND DEFICIENCY

- causes of obesity
 - effects of dietary deficiency
- prevention of obesity and deficiency.

<http://www.cyh.com/healthtopics/healthtopicdetailskids.aspx?p=335&np=152&id=2462>

http://www.bbc.co.uk/schools/gcsebitesize/science/ocr_gateway/understanding_organisms/dietrev1.shtml

Lonsdale revision guide page 6 and 7

Topic: B1c Staying healthy

PATHOGENS AND CAUSES OF DISEASE

- types of pathogen
- classification of disease by pathogen.
- how diseases are spread

PREVENTION OF DISEASE

- hygiene
- healthy diet and it's link to prevention of disease
- vaccination

[HTTP://WWW.BBC.CO.UK/LEARNINGZONE/CLIPS/SIR-ALEXANDER-FLEMING-THE-DISCOVERY-OF-PENICILLIN/2884.HTML](http://www.bbc.co.uk/learningzone/clips/sir-alexander-fleming-the-discovery-of-penicillin/2884.html)

[HTTP://WWW.GUARDIAN.CO.UK/WORLD/VIDEO/2009/APR/30/SWINE-FLU-ADVICE](http://www.guardian.co.uk/world/video/2009/apr/30/swine-flu-advice)

CANCER AND NON INFECTIOUS DISEASE

- types of cancer
- causes of cancer including carcinogens and genetic effects
- lifestyle and cancer risk
- treatments for cancer
- difference between benign and malignant tumours

<http://www.bbc.co.uk/learningzone/clips/cancer-in-the-developed-world/5703.html>

IMMUNISATION AND TESTING OF DRUGS

- history of vaccines
- social issues with vaccination
- herd immunity
- how drugs can be used to fight disease
- how vaccines work

[HTTP://WWW.BBC.CO.UK/LEARNINGZONE/CLIPS/WHAT-ARE-VACCINES-AND-HOW-QUICKLY-CAN-THEY-BE-MADE/7134.HTML](http://www.bbc.co.uk/learningzone/clips/what-are-vaccines-and-how-quickly-can-they-be-made/7134.html)

<http://www.bupa.co.uk/individuals/health-information/directory/m/mrsa#3>

IMMUNISATION AND TESTING OF DRUGS

- testing drugs
- processes involved in getting a drug to market.
- animal testing
- placebos

<http://www.bbc.co.uk/learningzone/clips/clinical-trials-regulation-and-ethics/1465.html>

http://www.bbc.co.uk/schools/gcsebitesize/science/ocr_gateway/understanding_organisms/staying_healthyrev1.shtml

Topic: B1d The nervous system

THE EYE AND SENSES

- the five senses
- how the eye works
- structure of the eye
- binocular vision
- long and short sightedness
- use of lenses to correct vision.

<http://faculty.washington.edu/chudler/introb.html>

<http://www.bbc.co.uk/learningzone/clips/the-structure-of-the-eye/6016.html>

NERVOUS SYSTEM AND STRUCTURE

- structure of neurones
- the reflex arc
- function of neurones
- reaction times

http://www.bbc.co.uk/schools/gcsebitesize/science/ocr_gateway/understanding_organism/s/nervous_systemrev1.shtml

Lonsdale revision guide page 12 to 14

Topic: B1e Drugs and you

ILLEGAL DRUGS

- legal versus illegal drugs
- differences between legal and illegal drugs
- harmful nature of all drugs
- social issues surrounding use of drugs
- key words associated with drugs.

Topic: B1f Staying in balance

SMOKING

- effects of smoking
- long term consequences of smoking
- timeline of understanding about smoking and cancer link
- carcinogens
- statistics associated with cigarette smoking

ALCOHOL

- effects of alcohol on the body
- consequences of drinking alcohol.
- drink driving
- statistics associated with alcohol.

<http://www.nhs.uk/livewell/women4060/pages/alcoholfaceyellow.aspx>

http://www.bbc.co.uk/schools/gcsebitesize/science/ocr_gateway/understanding_organisms/drugs_and_yourev1.shtml

Lonsdale revision guide page 15 to 16

HOMEOSTASIS

- definition of homeostasis
- maintenance of body temperature, water level and blood sugar.
- negative feedback
- importance of homeostasis
- what happens when homeostasis goes wrong

<http://www.bbc.co.uk/learningzone/clips/skin-and-sweating/12231.html>

INSULIN AND DIABETES

- causes of diabetes
- symptoms of diabetes
- hormones vs nerves
- how insulin works
- type 1 and type 2 diabetes

<http://www.gosh.nhs.uk/children/general-health-advice/health-features/living-with-diabetes/?locale=en>

<http://www.bbc.co.uk/learningzone/clips/the-effect-of-high-sugar-intake-on-blood-sugar-levels/5371.html>

http://www.bbc.co.uk/schools/gcsebitesize/science/ocr_gateway/understanding_organisms/staying_in_balancerev1.shtml

Lonsdale revision guide page 15 to 16

Topic: B1g Controlling plant growth

PLANT GROWTH AND HORMONES.

http://www.biology-online.org/11/10_growth_and_plant_hormones.htm

PLANT HORMONES AND COMMERCIAL USES.

http://www.bbc.co.uk/schools/gcsebitesize/science/ocr_gateway/understanding_organisms/control_plant_growthrev1.shtml

Lonsdale revision guide page 19

Topic: B1h Variation and inheritance

INHERITANCE

- causes of variation
- chromosomes, dna and genes
- inheritance vs environment

HIGHER TIER ONLY

INHERITANCE AND CHROMOSOMES

- dominant and recessive alleles
- monohybrid crosses
- punnet squares
- phenotype and genotype

[HTTP://WWW.BBC.CO.UK/LEARNINGZONE/CLIPS/DOMINANT-AND-RECESSIVE-CHARACTERISTICS/4197.HTML](http://www.bbc.co.uk/learningzone/clips/dominant-and-recessive-characteristics/4197.html)

[HTTP://WWW.BBC.CO.UK/LEARNINGZONE/CLIPS/INHERITANCE-OF-EYE-COLOUR/10651.HTML](http://www.bbc.co.uk/learningzone/clips/inheritance-of-eye-colour/10651.html)

GENETIC DISEASE

- cystic fibrosis
- inheritance of simple genetic diseases
- effects of genetic disease
- genetic modification to eliminate disease.

<http://www.genesareus.org/keystage4/>

http://www.bbc.co.uk/schools/gcsebitesize/science/ocr_gateway/understanding_organisms/variation_inheritancerev1.shtml

Lonsdale revision guide page 20 and 21