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Diploma in General Science Checklist

Diploma in General Science

Progress Indicator

Name: Yann GEFFROTIN
Progress: **100.00%** 0% 100%
Total Time: **06:04:24**
Points: **10**
Last Access: **2011-09-24 16:07:31**
Certified: **Yes** **(Claim your Certificate)**

The table below shows your progress in details, it also show you what topic/modules you failed or did not study. Click on the module link where you want to complete or re-attempt.

Detailed Course Completion Report

Diploma-in-General-Science: **Organisms, Nutrients and Digestion**

First access: Sunday, 10 July 2011, 09:29 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 09:55 AM (76 days 7 h)

Report:

- Biology
- Biology
- The characteristics of living things
- ✓ The characteristics of living things
  - **Status:** completed
  - **Total Time:** 00:00:11
- ✓ The characteristics of living things continued
  - **Status:** completed
  - **Total Time:** 00:00:22
- ✓ All living things are made of cells
  - **Status:** completed
  - **Total Time:** 00:00:40
- Instruments for viewing organisms
- ✓ Introduction
  - **Status:** completed
  - **Total Time:** 00:00:19
- ✓ Instruments used to view organisms
  - **Status:** completed
  - **Total Time:** 00:00:10
- ✓ Hooke's microscope
  - **Status:** completed
  - **Total Time:** 00:00:03
- ✓ Parts of a light microscope
  - **Status:** completed
  - **Total Time:** 00:00:03
- Magnification
- ✓ Magnification introduction

- **Status:** completed
- **Total Time:** 00:00:01

- How to calculate magnification

- **Status:** completed
- **Total Time:** 00:00:02

- Field of view

- **Status:** completed
- **Total Time:** 00:00:01

- Magnifying your field of view

- **Status:** completed
- **Total Time:** 00:00:29

- Calculating the diameter of the field of view

- **Status:** completed
- **Total Time:** 00:00:00

- Determining the size of a magnified object

- **Status:** completed
- **Total Time:** 00:00:00

- How large are cells?

- **Status:** completed
- **Total Time:** 00:00:00

- Animal cells

- A typical animal cell

- **Status:** completed
- **Total Time:** 00:00:06

- The nucleus

- **Status:** completed
- **Total Time:** 00:00:03

- Cell membrane

- **Status:** completed
- **Total Time:** 00:00:14

- Cytoplasm

- **Status:** completed
- **Total Time:** 00:00:15

- Mitochondria

- **Status:** completed
- **Total Time:** 00:00:13

- Structure and function of animal cells

- **Status:** completed
- **Total Time:** 00:00:10

- Summary - animal cells

- **Status:** completed
- **Total Time:** 00:00:09

- Plant cells

- A typical plant cell is different to an animal cell

- **Status:** completed
- **Total Time:** 00:00:07

- Cell wall

- **Status:** completed
- **Total Time:** 00:00:08

- Chloroplasts in the cytoplasm

- **Status:** completed
- **Total Time:** 00:00:05

- Cytoplasmic streaming

- **Status:** completed
- **Total Time:** 00:00:07

- Vacuoles

- **Status:** completed
- **Total Time:** 00:00:09

- Summary - plant cells

- **Status:** completed
- **Total Time:** 00:00:09

- Cell basics

- Staining cells

- **Status:** completed
- **Total Time:** 00:00:12

Sectioning

- **Status:** completed
- **Total Time:** 00:00:15

Unicellular organisms

- **Status:** completed
- **Total Time:** 00:00:17

Cilia and flagella

- **Status:** completed
- **Total Time:** 00:00:19

Unicellular organisms have to eat too

- **Status:** completed
- **Total Time:** 00:00:21

The importance of surface area and volume

- **Status:** completed
- **Total Time:** 00:00:20

The surface area to volume ratio

- **Status:** completed
- **Total Time:** 00:00:22

Multicellular organisms

- **Status:** completed
- **Total Time:** 00:00:22

Viruses

- **Status:** completed
- **Total Time:** 00:00:21

Summary - cell basics 1

- **Status:** completed
- **Total Time:** 00:00:20

Summary - cell basics 2

- **Status:** completed
- **Total Time:** 00:00:13

Further characteristics of living things

Growth

- **Status:** completed
- **Total Time:** 00:00:07

Movement

- **Status:** completed
- **Total Time:** 00:00:11

Reacting to the environment

- **Status:** completed
- **Total Time:** 00:00:15

Respiring

- **Status:** completed
- **Total Time:** 00:00:15

Reproduction

- **Status:** completed
- **Total Time:** 00:00:17

Reproduction in bacteria

- **Status:** completed
- **Total Time:** 00:00:16

Sexual reproduction

- **Status:** completed
- **Total Time:** 00:00:15

Excretion

- **Status:** completed
- **Total Time:** 00:00:12

Nutrition

- **Status:** completed
- **Total Time:** 00:00:15

Do viruses live?

- **Status:** completed
- **Total Time:** 00:00:14

How organisms are classified

- How organisms are classified
  - **Status:** completed
  - **Total Time:** 00:00:09
- Dichotomous keys
  - **Status:** completed
  - **Total Time:** 00:00:14
- Alternative presentation of dichotomous keys
  - **Status:** completed
  - **Total Time:** 00:00:15
- Choosing characteristics for dichotomous keys
  - **Status:** completed
  - **Total Time:** 00:00:17
- The species concept
  - **Status:** completed
  - **Total Time:** 00:00:21
- Donkeys and horses - are they different species?
  - **Status:** completed
  - **Total Time:** 00:00:21
- Common names
  - **Status:** completed
  - **Total Time:** 00:00:20
- Carl Linnaeus invents binomial names
  - **Status:** completed
  - **Total Time:** 00:00:18
- Binomial names
  - **Status:** completed
  - **Total Time:** 00:00:19
- Hierarchy of classification
  - **Status:** completed
  - **Total Time:** 00:00:14
- Remembering the hierarchy
  - **Status:** completed
  - **Total Time:** 00:00:14

- The kingdoms of living things
  - Introduction to the five kingdoms
    - **Status:** completed
    - **Total Time:** 00:00:12
  - Characteristics of kingdom prokaryotae
    - **Status:** completed
    - **Total Time:** 00:00:13
  - Characteristics of kingdom Protista
    - **Status:** completed
    - **Total Time:** 00:00:18
  - Characteristics of kingdom Fungi
    - **Status:** completed
    - **Total Time:** 00:00:12
  - Kingdom Plantae
    - **Status:** completed
    - **Total Time:** 00:00:07
  - Characteristics of kingdom Plantae
    - **Status:** completed
    - **Total Time:** 00:00:06
  - Kingdom Animalia
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Characteristics of kingdom Animalia
    - **Status:** completed
    - **Total Time:** 00:00:05
  - Characteristics of the five kingdoms
    - **Status:** completed
    - **Total Time:** 00:00:07
  - A dichotomous key for the kingdoms
    - **Status:** completed

- **Total Time:** 00:00:04
- Summary - classification
  - **Status:** completed
  - **Total Time:** 00:00:04

- Food and water
  - Food and water
    - **Status:** completed
    - **Total Time:** 00:00:19
  - Types of nutrients
    - **Status:** completed
    - **Total Time:** 00:00:18
  - Water
    - **Status:** completed
    - **Total Time:** 00:00:16
- Carbohydrates
  - Carbohydrates
    - **Status:** completed
    - **Total Time:** 00:00:01
  - Mono, di and polysaccharides
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Monosaccharides
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Disaccharides
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Polysaccharides
    - **Status:** completed
    - **Total Time:** 00:00:56
  - Dietary fibre
    - **Status:** completed
    - **Total Time:** 00:00:54
- Lipids
  - Lipids
    - **Status:** completed
    - **Total Time:** 00:00:51
  - Energy, insulation and lipids
    - **Status:** completed
    - **Total Time:** 00:00:50
  - Structure of lipids
    - **Status:** completed
    - **Total Time:** 00:00:00
- Proteins
  - Proteins
    - **Status:** completed
    - **Total Time:** 00:00:49
  - Structure of proteins
    - **Status:** completed
    - **Total Time:** 00:00:50
- Vitamins and minerals
  - Vitamins and minerals
    - **Status:** completed
    - **Total Time:** 00:00:00
  - The role of vitamins
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Minerals
    - **Status:** completed
    - **Total Time:** 00:00:00
  - The role of minerals
    - **Status:** completed

- **Total Time:** 00:00:01
- Food crossword
  - Food for thought
    - **Status:** completed
    - **Total Time:** 00:00:00
- Digestion
  - Digestion
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Mechanical digestion
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Chemical digestion
    - **Status:** completed
    - **Total Time:** 00:00:00
  - The digestive system
    - **Status:** completed
    - **Total Time:** 00:00:00
- Mechanical digestion in the mouth
  - Mechanical digestion in the mouth
    - **Status:** completed
    - **Total Time:** 00:00:05
  - Teeth - incisors and canines
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Teeth - molars and premolars
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Saliva
    - **Status:** completed
    - **Total Time:** 00:00:03
- digestion, from the pharynx to the anus
  - Pharynx and oesophagus
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Chemical digestion in the stomach
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Mechanical digestion in the stomach
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Absorption of nutrients from the stomach
    - **Status:** completed
    - **Total Time:** 00:00:00
  - The small intestine
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Villi and microvilli in the small intestine
    - **Status:** completed
    - **Total Time:** 00:00:00
  - The regulatory role of the liver
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Absorption from the small intestine
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Absorption from the large intestine
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Digestive thoughts
    - **Status:** completed
    - **Total Time:** 00:00:00
- Worksheets

- Activity 1, definitions
  - **Status:** completed
  - **Total Time:** 00:00:00
- Activity 2, looking at cells
  - **Status:** completed
  - **Total Time:** 00:00:17
- Activity 3, animal cells
  - **Status:** completed
  - **Total Time:** 00:00:00
- Activity 4, plant cells
  - **Status:** completed
  - **Total Time:** 00:00:03
- Activity 5, cells
  - **Status:** completed
  - **Total Time:** 00:00:00
- Activity 6, the characteristics of living things
  - **Status:** completed
  - **Total Time:** 00:00:00
- Activity 7, classification
  - **Status:** completed
  - **Total Time:** 00:00:01
- Activity 8, food
  - **Status:** completed
  - **Total Time:** 00:00:00
- Activity 9, the digestive system
  - **Status:** completed
  - **Total Time:** 00:00:00

- Glossary
  - **Status:** completed
  - **Total Time:** 00:00:23

Diploma-in-General-Science: **Cell theory**

First access: Sunday, 10 July 2011, 09:28 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 09:28 AM (76 days 7 h)

Report:

- Cell theory
  - How cell theory relates to survival
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Survival Mechanisms Introduction
    - **Status:** completed
    - **Total Time:** 00:00:00

Diploma-in-General-Science: **Main activities and principles of cells**

First access: Sunday, 10 July 2011, 09:28 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 09:28 AM (76 days 7 h)

Report:

- Main activities and principals of cells
  - Main activities of cells
    - **Status:** completed
    - **Total Time:** 00:00:15
  - Principles
    - **Status:** completed
    - **Total Time:** 00:00:15
  - Cell specialisation and differentiation
    - **Status:** completed
    - **Total Time:** 00:00:14

- Structure and dimensions of cells
  - **Status:** completed
  - **Total Time:** 00:00:14
- Levels of organisation
  - **Status:** completed
  - **Total Time:** 00:00:13
- Chemical composition of cells and overview
  - **Status:** completed
  - **Total Time:** 00:00:13

Diploma-in-General-Science: Types of Cells

First access: Sunday, 10 July 2011, 09:29 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 09:29 AM (76 days 7 h)

Report:

- Types of Cells
  - Types of Cells
    - **Status:** completed
    - **Total Time:** 00:00:19
  - Generalised Eukaryotic Cells: main structures, their features and functions
    - **Status:** completed
    - **Total Time:** 00:00:19
  - Eukaryotic Cells – Continued
    - **Status:** completed
    - **Total Time:** 00:00:17
  - Generalised Prokaryotic Cell
    - **Status:** completed
    - **Total Time:** 00:00:17
  - Generalised Plant and Animal Eukaryotic Cells
    - **Status:** completed
    - **Total Time:** 00:00:17
  - Living Things – The Five Kingdoms
    - **Status:** completed
    - **Total Time:** 00:00:16

Diploma-in-General-Science: Cellular Respiration

First access: Sunday, 10 July 2011, 09:55 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 09:55 AM (76 days 7 h)

Report:

- Cellular Respiration
  - Cellular Respiration - Introduction
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Some use of energy in cells
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Aerobic Respiration
    - **Status:** completed
    - **Total Time:** 00:00:05
  - Anaerobic Respiration: Fermentation
    - **Status:** completed
    - **Total Time:** 00:00:04
  - The ADP/ATP system
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Advantages of the ADP/ATP System
    - **Status:** completed
    - **Total Time:** 00:00:06
  - Anaerobic Respiration: Lactic acid production

- **Status:** completed
- **Total Time:** 00:00:04

Diploma-in-General-Science: Molecules found in cells

First access: Sunday, 10 July 2011, 09:56 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 09:56 AM (76 days 7 h)

Report:

- Vitamins
  - ✓ Vitamins
    - **Status:** completed
    - **Total Time:** 00:00:09
  - ✓ Nucleic acids
    - **Status:** completed
    - **Total Time:** 00:00:11
  - ✓ Lipids
    - **Status:** completed
    - **Total Time:** 00:00:11
  - ✓ Proteins
    - **Status:** completed
    - **Total Time:** 00:00:12
  - ✓ Organic compounds
    - **Status:** completed
    - **Total Time:** 00:00:10
  - ✓ Carbohydrates
    - **Status:** completed
    - **Total Time:** 00:00:09

Diploma-in-General-Science: Enzymes

First access: Sunday, 10 July 2011, 09:56 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 09:56 AM (76 days 7 h)

Report:

- Enzymes
  - ✓ Enzymes - Introduction
    - **Status:** completed
    - **Total Time:** 00:00:02
  - ✓ Enzyme information
    - **Status:** completed
    - **Total Time:** 00:00:04
  - ✓ Factors Affecting Enzyme Activity
    - **Status:** completed
    - **Total Time:** 00:00:04

Diploma-in-General-Science: Inorganic material

First access: Sunday, 10 July 2011, 09:56 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 09:56 AM (76 days 7 h)

Report:

- Inorganic material
  - ✓ Inorganic material: introduction
    - **Status:** completed
    - **Total Time:** 00:00:05
  - ✓ Carbon dioxide
    - **Status:** completed
    - **Total Time:** 00:00:06
  - ✓ Minerals

- **Status:** completed
- **Total Time:** 00:00:05

Diploma-in-General-Science: Passage Through Membranes

First access: Sunday, 10 July 2011, 09:57 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 09:57 AM (76 days 7 h)

Report:

- Passage Through Membranes
- ✓ Passage Through Membranes
  - **Status:** completed
  - **Total Time:** 00:00:03
- ✓ Structure and Function of Membranes
  - **Status:** completed
  - **Total Time:** 00:00:04
- ✓ The Rate of Movement of Substances Across Membranes
  - **Status:** completed
  - **Total Time:** 00:00:05

Diploma-in-General-Science: Life Cycle

First access: Sunday, 10 July 2011, 09:57 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 09:57 AM (76 days 7 h)

Report:

- Life Cycle
- ✓ Life Cycle
  - **Status:** completed
  - **Total Time:** 00:00:05
- ✓ Reproductive adaptations
  - **Status:** completed
  - **Total Time:** 00:00:10
- ✓ Behavioural Adaptations
  - **Status:** completed
  - **Total Time:** 00:00:13
- ✓ Functional and Physiological
  - **Status:** completed
  - **Total Time:** 00:00:13
- ✓ Feeding
  - **Status:** completed
  - **Total Time:** 00:00:12
- ✓ Attachment
  - **Status:** completed
  - **Total Time:** 00:00:11
- ✓ Adaptations and Structural Features
  - **Status:** completed
  - **Total Time:** 00:00:11
- ✓ Adaptations
  - **Status:** completed
  - **Total Time:** 00:00:10

Diploma-in-General-Science: Basal Metabolic Rate

First access: Sunday, 10 July 2011, 09:58 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 09:58 AM (76 days 7 h)

Report:

- Basal Metabolic Rate
- ✓ Basal Metabolic Rate (BMR)

- **Status:** completed
- **Total Time:** 00:00:15

- Basal Metabolic Rate (BMR)

- **Status:** completed
- **Total Time:** 00:00:04

Diploma-in-General-Science: **Regulation of Body Temperature in Animals**

First access: Sunday, 10 July 2011, 09:58 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 10:00 AM (76 days 7 h)

Report:

- Regulation of Body Temperature in Animals
  - Regulation of Body Temperature in Animals (Thermoregulation)
    - **Status:** completed
    - **Total Time:** 00:00:05
  - Physical Exercise
    - **Status:** completed
    - **Total Time:** 00:00:11
  - Freshwater Organisms
    - **Status:** completed
    - **Total Time:** 00:00:12
  - Intertidal and Estuarine Organisms
    - **Status:** completed
    - **Total Time:** 00:00:12
  - Marine Organisms
    - **Status:** completed
    - **Total Time:** 00:00:12
  - Osmoregulatory Mechanisms
    - **Status:** completed
    - **Total Time:** 00:00:11
  - Water Loss From Terrestrial Organisms
    - **Status:** completed
    - **Total Time:** 00:00:10
  - Contribution of Body Systems to Homeostasis
    - **Status:** completed
    - **Total Time:** 00:00:16
  - Regulatory Mechanisms in Animals
    - **Status:** completed
    - **Total Time:** 00:00:45
  - Physiological (homeostatic) Mechanisms
    - **Status:** completed
    - **Total Time:** 00:00:16
  - Behaviour
    - **Status:** completed
    - **Total Time:** 00:00:13
  - Countercurrent Heat Exchange Systems
    - **Status:** completed
    - **Total Time:** 00:00:11

Diploma-in-General-Science: **Responses to Environmental Effects**

First access: Sunday, 10 July 2011, 10:18 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 10:18 AM (76 days 7 h)

Report:

- Responses to Environmental Effects
  - Homeostasis – Introduction
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Failure of Homeostasis

- **Status:** completed
- **Total Time:** 00:00:10

- Surviving Under Changing Conditions – Introduction
  - **Status:** completed
  - **Total Time:** 00:00:09
- Responses to Environmental Effects
  - **Status:** completed
  - **Total Time:** 00:00:08

Diploma-in-General-Science: **Surface Area to Volume Ratio**

First access: Sunday, 10 July 2011, 10:18 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 10:18 AM (76 days 7 h)

Report:

- Surface Area to Volume Ratio
  - Surface Area to Volume Ratio
    - **Status:** completed
    - **Total Time:** 00:00:00

Diploma-in-General-Science: **Homeostasis - Feedback Mechanisms**

First access: Sunday, 10 July 2011, 10:19 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 10:19 AM (76 days 7 h)

Report:

- Homeostasis - Feedback Mechanisms
  - Homeostasis - Feedback Mechanisms
    - **Status:** completed
    - **Total Time:** 00:00:01
  - Positive Feedback
    - **Status:** completed
    - **Total Time:** 00:00:01
  - Negative Feedback
    - **Status:** completed
    - **Total Time:** 00:00:03

Diploma-in-General-Science: **Photosynthesis**

First access: Sunday, 10 July 2011, 10:19 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 10:19 AM (76 days 7 h)

Report:

- Photosynthesis
  - Photosynthesis: What Happens to the Glucose Formed?
    - **Status:** completed
    - **Total Time:** 00:00:07
  - Phases of photosynthesis
    - **Status:** completed
    - **Total Time:** 00:00:07
  - Light phase (Photolysis)
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Photosynthesis
    - **Status:** completed
    - **Total Time:** 00:00:11
  - Photosynthesis: Simplified Summary Equation
    - **Status:** completed
    - **Total Time:** 00:00:12

Diploma-in-General-Science: Disease

First access: Sunday, 10 July 2011, 10:20 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 10:20 AM (76 days 7 h)

Report:

- Disease
  - ✓ Disease
    - **Status:** completed
    - **Total Time:** 00:00:07
  - ✓ Pathogenic Organisms
    - **Status:** completed
    - **Total Time:** 00:00:13
  - ✓ Vectors
    - **Status:** completed
    - **Total Time:** 00:00:16
  - ✓ Arthropods
    - **Status:** completed
    - **Total Time:** 00:00:19
  - ✓ Worms
    - **Status:** completed
    - **Total Time:** 00:00:20
  - ✓ Fungi
    - **Status:** completed
    - **Total Time:** 00:00:20
  - ✓ Other Pathogenic Organisms
    - **Status:** completed
    - **Total Time:** 00:00:20
  - ✓ Living as a Parasite
    - **Status:** completed
    - **Total Time:** 00:00:19
  - ✓ Surviving Challenges From Organisms that Cause Disease
    - **Status:** completed
    - **Total Time:** 00:00:19

Diploma-in-General-Science: Transmission of Pathogens and Parasites in Animals and Plants

First access: Sunday, 10 July 2011, 10:21 AM (76 days 7 h)

Last access: Sunday, 10 July 2011, 10:22 AM (76 days 7 h)

Report:

- Transmission of Pathogens and Parasites in Animals and Plants
  - ✓ Transmission of Pathogens and Parasites in Animals and Plants
    - **Status:** completed
    - **Total Time:** 00:00:07
  - ✓ Control
    - **Status:** completed
    - **Total Time:** 00:00:11
  - ✓ Factors Affecting Infection
    - **Status:** completed
    - **Total Time:** 00:00:12
  - ✓ Treatment
    - **Status:** completed
    - **Total Time:** 00:00:19
  - ✓ Defence Mechanisms of Plants
    - **Status:** completed
    - **Total Time:** 00:00:17
  - ✓ Defence Mechanisms of Animals
    - **Status:** completed
    - **Total Time:** 00:00:16
  - ✓ Lines of Defence
    - **Status:** completed

- **Total Time:** 00:00:15
- Fever
  - **Status:** completed
  - **Total Time:** 00:00:14
- Human Lymphatic System
  - **Status:** completed
  - **Total Time:** 00:00:14
- Primary and Secondary Response
  - **Status:** completed
  - **Total Time:** 00:00:10
- Acquired Immunity
  - **Status:** completed
  - **Total Time:** 00:00:12
- Antibodies
  - **Status:** completed
  - **Total Time:** 00:00:12
- Antigen-Antibody Reaction
  - **Status:** completed
  - **Total Time:** 00:00:12
- The Immune System
  - **Status:** completed
  - **Total Time:** 00:00:12
- Allergic Reactions
  - **Status:** completed
  - **Total Time:** 00:00:11
- Auto-Immune Diseases, Rejection of Transplants
  - **Status:** completed
  - **Total Time:** 00:00:12
- Inflammation
  - **Status:** completed
  - **Total Time:** 00:00:12

Diploma-in-General-Science: **Plant Hormones and Their Actions**

First access: Sunday, 10 July 2011, 10:22 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:23 AM (76 days 6 h)

Report:

- Plant Hormones and Their Actions
  - Regulatory Mechanisms in Plants – Introduction
    - **Status:** completed
    - **Total Time:** 00:00:12
  - Plant Hormones and their Actions
    - **Status:** completed
    - **Total Time:** 00:00:17
  - A Balancing Act
    - **Status:** completed
    - **Total Time:** 00:00:18
  - Fungi
    - **Status:** completed
    - **Total Time:** 00:00:19
  - Hormonal Control of Plant Responses
    - **Status:** completed
    - **Total Time:** 00:00:20
  - Photoperiodism
    - **Status:** completed
    - **Total Time:** 00:00:22
  - Vernalisation
    - **Status:** completed
    - **Total Time:** 00:00:21
  - Dormancy
    - **Status:** completed
    - **Total Time:** 00:00:18

- Life Cycles, Rhythms and the Environment
  - **Status:** completed
  - **Total Time:** 00:00:18
- Hydrophytic Plants
  - **Status:** completed
  - **Total Time:** 00:00:16
- Adaptations
  - **Status:** completed
  - **Total Time:** 00:00:16
- Guard cell activity
  - **Status:** completed
  - **Total Time:** 00:00:16
- Transpiration
  - **Status:** completed
  - **Total Time:** 00:00:06
- Regulation of Water Balance in Plants
  - **Status:** completed
  - **Total Time:** 00:00:09
- Compensation Point
  - **Status:** completed
  - **Total Time:** 00:00:08
- Regulation of Carbon Dioxide Supply in Plants
  - **Status:** completed
  - **Total Time:** 00:00:07
- Plant Responses to Stimuli
  - **Status:** completed
  - **Total Time:** 00:00:05
- Movement of Water
  - **Status:** completed
  - **Total Time:** 00:00:04

Diploma-in-General-Science: Experimental Method and Design

First access: Sunday, 10 July 2011, 10:23 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:24 AM (76 days 6 h)

Report:

- Experimental Method and Design
  - Experimental Method and Design
    - **Status:** completed
    - **Total Time:** 00:00:12
  - Experimental Method and Design - Aspects to Consider
    - **Status:** completed
    - **Total Time:** 00:00:18
  - Experimental Method and Design - Results and Conclusion
    - **Status:** completed
    - **Total Time:** 00:00:14

Diploma-in-General-Science: Nervous System

First access: Sunday, 10 July 2011, 10:24 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:24 AM (76 days 6 h)

Report:

- Nervous System
  - Nervous system: Introduction
    - **Status:** completed
    - **Total Time:** 00:00:12
  - Nervous system: Organisation
    - **Status:** completed
    - **Total Time:** 00:00:17
  - Transmission of Nerve Impulses (action potential)

- **Status:** completed
- **Total Time:** 00:00:17

- Surviving Under Changing Conditions

- **Status:** completed
- **Total Time:** 00:00:15

- Comparison of Nerve and Hormonal Control in Vertebrates

- **Status:** completed
- **Total Time:** 00:00:15

- Neuron Structure

- **Status:** completed
- **Total Time:** 00:00:17

- Functioning Nervous Systems

- **Status:** completed
- **Total Time:** 00:00:15

- Nerve Pathways

- **Status:** completed
- **Total Time:** 00:00:17

- Structure and Function of Neuron Parts

- **Status:** completed
- **Total Time:** 00:00:16

Diploma-in-General-Science: Natural Selection

First access: Sunday, 10 July 2011, 10:25 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:25 AM (76 days 6 h)

Report:

- Natural Selection
  - Natural Selection: Introduction
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Variation
    - **Status:** completed
    - **Total Time:** 00:00:16
  - Variations due to environmental effects
    - **Status:** completed
    - **Total Time:** 00:00:19
  - Variation due to genetic differences
    - **Status:** completed
    - **Total Time:** 00:00:18
  - Genetic variation
    - **Status:** completed
    - **Total Time:** 00:00:18
  - Mutations
    - **Status:** completed
    - **Total Time:** 00:00:17
  - Selection pressures
    - **Status:** completed
    - **Total Time:** 00:00:19
  - Adaptations
    - **Status:** completed
    - **Total Time:** 00:00:19
  - Natural selection
    - **Status:** completed
    - **Total Time:** 00:00:17
  - Variation table
    - **Status:** completed
    - **Total Time:** 00:00:17
  - Variations
    - **Status:** completed
    - **Total Time:** 00:00:04
  - The theory of natural selection

- **Status:** completed
- **Total Time:** 00:00:18

Diploma-in-General-Science: Evolution

First access: Sunday, 10 July 2011, 10:26 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:26 AM (76 days 6 h)

Report:

- Evolution
  - Evolution
    - **Status:** completed
    - **Total Time:** 00:00:33
  - Natural selection in action
    - **Status:** completed
    - **Total Time:** 00:00:13
  - Evidence for evolution
    - **Status:** completed
    - **Total Time:** 00:00:20
  - Fossils - evidence of life in the past
    - **Status:** completed
    - **Total Time:** 00:00:21
  - Fossil records
    - **Status:** completed
    - **Total Time:** 00:00:21
  - Biogeography/geographical distribution
    - **Status:** completed
    - **Total Time:** 00:00:20
  - Differences between mammals of North America
    - **Status:** completed
    - **Total Time:** 00:00:20
  - Comparative anatomy and embryology
    - **Status:** completed
    - **Total Time:** 00:00:21
  - Biochemical comparisons
    - **Status:** completed
    - **Total Time:** 00:00:21
  - DNA hybridisation
    - **Status:** completed
    - **Total Time:** 00:00:19
  - Fossilisation
    - **Status:** completed
    - **Total Time:** 00:00:16
  - Fossils
    - **Status:** completed
    - **Total Time:** 00:00:13

Diploma-in-General-Science: Human evolution

First access: Sunday, 10 July 2011, 10:27 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:28 AM (76 days 6 h)

Report:

- Human evolution
  - Human evolution
    - **Status:** completed
    - **Total Time:** 00:00:10
  - Primates
    - **Status:** completed
    - **Total Time:** 00:00:16
  - Hominids

- **Status:** completed
- **Total Time:** 00:00:17

- Hominids - further reading

- **Status:** completed
- **Total Time:** 00:00:17

- Origin of modern humans

- **Status:** completed
- **Total Time:** 00:00:17

- Modern humans

- **Status:** completed
- **Total Time:** 00:00:20

- Modern humans - Distinctive features

- **Status:** completed
- **Total Time:** 00:00:22

- Cultural evolution

- **Status:** completed
- **Total Time:** 00:00:29

- Modern humans - further reading

- **Status:** completed
- **Total Time:** 00:00:30

- Cultural evolution - further reading

- **Status:** completed
- **Total Time:** 00:00:30

- Human intervention in the process of evolution

- **Status:** completed
- **Total Time:** 00:00:04

- Human intervention in the process of evolution - further reading

- **Status:** completed
- **Total Time:** 00:00:34

Diploma-in-General-Science: **Patterns of evolution**

First access: Sunday, 10 July 2011, 10:28 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:28 AM (76 days 6 h)

Report:

- Patterns of evolution
  - Patterns of evolution
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Convergent evolution
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Parallel evolution
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Rates of evolution
    - **Status:** completed
    - **Total Time:** 00:00:10
  - Gradualism
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Punctuated equilibrium
    - **Status:** completed
    - **Total Time:** 00:00:10

Diploma-in-General-Science: **Phylogenetic trees**

First access: Sunday, 10 July 2011, 10:28 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:28 AM (76 days 6 h)

Report:

- Phylogenetic trees
  - Phylogenetic trees (evolutionary trees or cladograms)
    - **Status:** completed
    - **Total Time:** 00:00:01
  - Case study: Baleen whales
    - **Status:** completed
    - **Total Time:** 00:00:13

Diploma-in-General-Science: **Relative dating**

First access: Sunday, 10 July 2011, 10:29 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:29 AM (76 days 6 h)

Report:

- Relative dating
  - Relative dating
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Absolute dating
    - **Status:** completed
    - **Total Time:** 00:00:08

Diploma-in-General-Science: **Biology: Meiosis**

First access: Sunday, 10 July 2011, 10:29 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:29 AM (76 days 6 h)

Report:

- Biology: Meiosis
  - Meiosis
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Meiosis Continued
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Significance of meiosis
    - **Status:** completed
    - **Total Time:** 00:00:06
  - Meiosis Revision
    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: **Mitosis**

First access: Sunday, 10 July 2011, 10:30 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:30 AM (76 days 6 h)

Report:

- Mitosis
  - Mitosis
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Mitosis Table
    - **Status:** completed
    - **Total Time:** 00:00:06
  - The Cell Cycle
    - **Status:** completed
    - **Total Time:** 00:00:06
  - Mitosis revision exercise
    - **Status:** completed

- **Total Time:** 00:00:08

Diploma-in-General-Science: Mitosis videos

First access: Sunday, 10 July 2011, 10:30 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:30 AM (76 days 6 h)

Report:

- Mitosis videos
  - ✓ The mitosis videos
    - **Status:** completed
    - **Total Time:** 00:00:01

Diploma-in-General-Science: Population genetics

First access: Sunday, 10 July 2011, 10:30 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:31 AM (76 days 6 h)

Report:

- Population genetics
  - ✓ Population genetics
    - **Status:** completed
    - **Total Time:** 00:00:07
  - ✓ Gene pool
    - **Status:** completed
    - **Total Time:** 00:00:13
  - ✓ Gene drift
    - **Status:** completed
    - **Total Time:** 00:00:15
  - ✓ Migration and gene flow
    - **Status:** completed
    - **Total Time:** 00:00:15
  - ✓ Founder effect (principle)
    - **Status:** completed
    - **Total Time:** 00:00:15
  - ✓ Extinction
    - **Status:** completed
    - **Total Time:** 00:00:15
  - ✓ Speciation
    - **Status:** completed
    - **Total Time:** 00:00:14
  - ✓ Reduction in gene flow
    - **Status:** completed
    - **Total Time:** 00:00:14
  - ✓ Reproductive isolation
    - **Status:** completed
    - **Total Time:** 00:00:14

Diploma-in-General-Science: Pedigrees

First access: Sunday, 10 July 2011, 10:31 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:31 AM (76 days 6 h)

Report:

- Pedigrees
  - ✓ Pedigrees
    - **Status:** completed
    - **Total Time:** 00:00:04
  - ✓ Pedigree analysis
    - **Status:** completed
    - **Total Time:** 00:00:09

- Inheritance of autosomal dominant characteristics
  - **Status:** completed
  - **Total Time:** 00:00:10
- Inheritance of autosomal recessive characteristics
  - **Status:** completed
  - **Total Time:** 00:00:09
- Inheritance of X-linked dominant characteristics
  - **Status:** completed
  - **Total Time:** 00:00:09
- Inheritance of X-linked recessive characteristics
  - **Status:** completed
  - **Total Time:** 00:00:08
- Analysis key
  - **Status:** completed
  - **Total Time:** 00:00:08

Diploma-in-General-Science: Inheritance

First access: Sunday, 10 July 2011, 10:31 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:31 AM (76 days 6 h)

Report:

- Inheritance
  - Inheritance
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Selective Breeding
    - **Status:** completed
    - **Total Time:** 00:00:02

Diploma-in-General-Science: Genetic inheritance

First access: Sunday, 10 July 2011, 10:32 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:32 AM (76 days 6 h)

Report:

- Genetic inheritance
  - Genetic inheritance
    - **Status:** completed
    - **Total Time:** 00:00:01
  - Genotype and phenotype
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Identical twins
    - **Status:** completed
    - **Total Time:** 00:00:07

Diploma-in-General-Science: Mendel's work

First access: Sunday, 10 July 2011, 10:32 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:32 AM (76 days 6 h)

Report:

- Mendel's work
  - Mendel's work
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Mendel's first law
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Mendel's second law

- **Status:** completed
- **Total Time:** 00:00:09

- Mendel's second law table

- **Status:** completed
- **Total Time:** 00:00:08

Diploma-in-General-Science: **Incomplete (partial) dominance**

First access: Sunday, 10 July 2011, 10:33 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:33 AM (76 days 6 h)

Report:

- Incomplete (partial) dominance
- - Incomplete (partial) dominance

  - **Status:** completed
  - **Total Time:** 00:00:06
- Co-dominance

  - **Status:** completed
  - **Total Time:** 00:00:10
- Multiple alleles

  - **Status:** completed
  - **Total Time:** 00:00:10
- Lethal alleles

  - **Status:** completed
  - **Total Time:** 00:00:11
- Polygenic inheritance

  - **Status:** completed
  - **Total Time:** 00:00:09
- Tabby Cats

  - **Status:** completed
  - **Total Time:** 00:00:09
- Lethal Example

  - **Status:** completed
  - **Total Time:** 00:00:08

Diploma-in-General-Science: **Inheritance at one gene locus**

First access: Sunday, 10 July 2011, 10:33 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:33 AM (76 days 6 h)

Report:

- Inheritance at one gene locus
- - Inheritance at one gene locus - monohybrid crosses

  - **Status:** completed
  - **Total Time:** 00:00:04
- Inheritance at one gene locus - monohybrid crosses continued

  - **Status:** completed
  - **Total Time:** 00:00:06

Diploma-in-General-Science: **Test crosses**

First access: Sunday, 10 July 2011, 10:34 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:34 AM (76 days 6 h)

Report:

- Test crosses
- - Test crosses

  - **Status:** completed
  - **Total Time:** 00:00:01

Diploma-in-General-Science: Punnett square method of calculation

First access: Sunday, 10 July 2011, 10:34 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:34 AM (76 days 6 h)

Report:

- Punnett square methods of calculation
  - ✓ Predicting results using algebraic and punnett square methods of calculation
    - **Status:** completed
    - **Total Time:** 00:00:08
  - ✓ Punnet square method
    - **Status:** completed
    - **Total Time:** 00:00:04

Diploma-in-General-Science: Chromosomes and coding instructions

First access: Sunday, 10 July 2011, 10:34 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:35 AM (76 days 6 h)

Report:

- Chromosomes and coding instructions
  - ✓ Chromosomes and coding instructions
    - **Status:** completed
    - **Total Time:** 00:00:08
  - ✓ Chromosomes and Coding Instructions
    - **Status:** completed
    - **Total Time:** 00:00:12
  - ✓ Genes
    - **Status:** completed
    - **Total Time:** 00:00:09
  - ✓ Genes
    - **Status:** completed
    - **Total Time:** 00:00:05

Diploma-in-General-Science: Protein synthesis

First access: Sunday, 10 July 2011, 10:35 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:36 AM (76 days 6 h)

Report:

- Protein synthesis
  - ✓ Protein synthesis
    - **Status:** completed
    - **Total Time:** 00:00:16
  - ✓ The DNA molecule
    - **Status:** completed
    - **Total Time:** 00:00:25
  - ✓ Formation of Functional DNA
    - **Status:** completed
    - **Total Time:** 00:00:16
  - ✓ Transcription
    - **Status:** completed
    - **Total Time:** 00:00:14
  - ✓ Ribosomes
    - **Status:** completed
    - **Total Time:** 00:00:11
  - ✓ Translation
    - **Status:** completed
    - **Total Time:** 00:00:12
  - ✓ Translation continued
    - **Status:** completed

- **Total Time:** 00:00:10
- Protein synthesis – summary
  - **Status:** completed
  - **Total Time:** 00:00:10

Diploma-in-General-Science: **Mutations and mutagens**

First access: Sunday, 10 July 2011, 10:36 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:36 AM (76 days 6 h)

Report:

- Mutations and mutagens
  - Mutations and mutagens
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Point mutation
    - **Status:** completed
    - **Total Time:** 00:00:07
  - Chromosomal mutations (karyotyping - chromosomal abnormalities)
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Mutations
    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: **DNA Science**

First access: Sunday, 10 July 2011, 10:37 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:37 AM (76 days 6 h)

Report:

- DNA Science
  - The DNA Science videos
    - **Status:** completed
    - **Total Time:** 00:00:04

Diploma-in-General-Science: **Gene expression**

First access: Sunday, 10 July 2011, 10:37 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:37 AM (76 days 6 h)

Report:

- Gene expression
  - Gene expression
    - **Status:** completed
    - **Total Time:** 00:00:04

Diploma-in-General-Science: **Gene mapping**

First access: Sunday, 10 July 2011, 10:37 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:38 AM (76 days 6 h)

Report:

- Gene mapping
  - Gene Mapping
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Calculating map distance of genes
    - **Status:** completed

- **Total Time:** 00:00:05
- Morgan's experiment
  - **Status:** completed
  - **Total Time:** 00:00:04
- Morgan's experiment continued
  - **Status:** completed
  - **Total Time:** 00:00:03
- Gene Mapping - Results
  - **Status:** completed
  - **Total Time:** 00:00:04

Diploma-in-General-Science: **Gene technology**

First access: Sunday, 10 July 2011, 10:38 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:38 AM (76 days 6 h)

Report:

- Gene technology
  - Gene technology (genetic engineering/gene manipulation)
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Gene technology
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Gene technology
    - **Status:** completed
    - **Total Time:** 00:00:03

Diploma-in-General-Science: **Tools and techniques of the biotechnologist**

First access: Sunday, 10 July 2011, 10:38 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:39 AM (76 days 6 h)

Report:

- Tools and techniques of the biotechnologist
  - Tools and techniques of the biotechnologist
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Southern blotting (named after Dr Southern who invented the process)
    - **Status:** completed
    - **Total Time:** 00:00:12
  - Probes
    - **Status:** completed
    - **Total Time:** 00:00:13
  - Autoradiography
    - **Status:** completed
    - **Total Time:** 00:00:14
  - DNA profiling
    - **Status:** completed
    - **Total Time:** 00:00:14
  - DNA amplification
    - **Status:** completed
    - **Total Time:** 00:00:13
  - Bacterial plasmids
    - **Status:** completed
    - **Total Time:** 00:00:12
  - Polymerase chain reaction (PCR)
    - **Status:** completed
    - **Total Time:** 00:00:13
  - Artificial synthesis of DNA
    - **Status:** completed
    - **Total Time:** 00:00:12

- DNA sequencing
  - **Status:** completed
  - **Total Time:** 00:00:12

Diploma-in-General-Science: Implications and Issues

First access: Sunday, 10 July 2011, 10:39 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:39 AM (76 days 6 h)

Report:

- Implications and Issues
  - Implications and Issues
    - **Status:** completed
    - **Total Time:** 00:00:07
  - Issues
    - **Status:** completed
    - **Total Time:** 00:00:07
  - Issues - Social
    - **Status:** completed
    - **Total Time:** 00:00:07
  - Issues - Moral
    - **Status:** completed
    - **Total Time:** 00:00:06
  - Issues - Scientific
    - **Status:** completed
    - **Total Time:** 00:00:07

Diploma-in-General-Science: The implications of gene technology

First access: Sunday, 10 July 2011, 10:40 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:40 AM (76 days 6 h)

Report:

- The implications of gene technology
  - The implications of gene technology video
    - **Status:** completed
    - **Total Time:** 00:00:04
  - The future of gene technology video
    - **Status:** completed
    - **Total Time:** 00:00:08
  - The genetic engineering video
    - **Status:** completed
    - **Total Time:** 00:00:08
  - The genetic screening videos
    - **Status:** completed
    - **Total Time:** 00:00:08
  - The moral issues and gene technology video
    - **Status:** completed
    - **Total Time:** 00:00:07

Diploma-in-General-Science: Karyotyping

First access: Sunday, 10 July 2011, 10:40 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:40 AM (76 days 6 h)

Report:

- Karyotyping
  - Karyotyping
    - **Status:** completed
    - **Total Time:** 00:00:01
  - Chromosomal Abnormalities

- **Status:** completed
- **Total Time:** 00:00:03

Diploma-in-General-Science: Linkage

First access: Sunday, 10 July 2011, 10:40 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:40 AM (76 days 6 h)

Report:

- Linkage
  - ✓ Linkage
    - **Status:** completed
    - **Total Time:** 00:00:03
  - ✓ Crossing Over
    - **Status:** completed
    - **Total Time:** 00:00:04

Diploma-in-General-Science: Cytokinesis

First access: Sunday, 10 July 2011, 10:40 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:40 AM (76 days 6 h)

Report:

- Cytokinesis
  - ✓ Cytokinesis
    - **Status:** completed
    - **Total Time:** 00:00:05

Diploma-in-General-Science: The periodic table

First access: Sunday, 10 July 2011, 10:41 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:41 AM (76 days 6 h)

Report:

- The periodic table
  - ✓ The periodic table
    - **Status:** completed
    - **Total Time:** 00:00:08
  - ✓ What are groups?
    - **Status:** completed
    - **Total Time:** 00:00:11
  - ✓ What groups mean
    - **Status:** completed
    - **Total Time:** 00:00:11
  - ✓ What are periods?
    - **Status:** completed
    - **Total Time:** 00:00:11
  - ✓ Why are compounds formed?
    - **Status:** completed
    - **Total Time:** 00:00:11
  - ✓ Full shells - metals and non-metals
    - **Status:** completed
    - **Total Time:** 00:00:09
  - ✓ Using the periodic table
    - **Status:** completed
    - **Total Time:** 00:00:09

Diploma-in-General-Science: Using symbols

First access: Sunday, 10 July 2011, 10:41 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:41 AM (76 days 6 h)

Report:

- Using symbols
  - ✓ Using symbols - the language of chemistry
    - **Status:** completed
    - **Total Time:** 00:00:05

Diploma-in-General-Science: Atoms

First access: Sunday, 10 July 2011, 10:41 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:42 AM (76 days 6 h)

Report:

- Activity 1 Atoms
  - ✓ Activity 1 - Atoms
    - **Status:** completed
    - **Total Time:** 00:00:02
  - ✓ Activity 1 – Molecules
    - **Status:** completed
    - **Total Time:** 00:00:06
  - ✓ Activity 1 – Compounds and elements
    - **Status:** completed
    - **Total Time:** 00:00:05

Diploma-in-General-Science: Molecules

First access: Sunday, 10 July 2011, 10:43 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:43 AM (76 days 6 h)

Report:

- Molecules
  - ✓ What is a molecule?
    - **Status:** completed
    - **Total Time:** 00:00:04
  - ✓ How molecules are made
    - **Status:** completed
    - **Total Time:** 00:00:04
  - ✓ The pop test - joining hydrogen and oxygen
    - **Status:** completed
    - **Total Time:** 00:00:06
  - ✓ A roaring good fire - joining carbon and oxygen
    - **Status:** completed
    - **Total Time:** 00:00:05

Diploma-in-General-Science: Elements and compounds

First access: Sunday, 10 July 2011, 10:43 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:43 AM (76 days 6 h)

Report:

- Elements and compounds
  - ✓ Classifying elements and compounds
    - **Status:** completed
    - **Total Time:** 00:00:04
  - ✓ Chemical formulae
    - **Status:** completed
    - **Total Time:** 00:00:04
  - ✓ Using chemical formulae to describe more complex molecules

- **Status:** completed
- **Total Time:** 00:00:05

Diploma-in-General-Science: Chemical bonds

First access: Sunday, 10 July 2011, 10:43 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:43 AM (76 days 6 h)

Report:

- Chemical bonds
  - ✓ Types of chemical bonds - covalent and ionic bonding
    - **Status:** completed
    - **Total Time:** 00:00:05
  - ✓ Covalent compounds
    - **Status:** completed
    - **Total Time:** 00:00:03
  - ✓ Covalent bonding
    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: Chemical reactions

First access: Sunday, 10 July 2011, 10:44 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:44 AM (76 days 6 h)

Report:

- Chemical reactions involving acids
  - ✓ Chemical reactions involving acids
    - **Status:** completed
    - **Total Time:** 00:00:03
  - ✓ Reactions between acids and metal carbonates
    - **Status:** completed
    - **Total Time:** 00:00:02

Diploma-in-General-Science: Reactions

First access: Sunday, 10 July 2011, 10:44 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:44 AM (76 days 6 h)

Report:

- Reaction
  - ✓ What is a reaction?
    - **Status:** completed
    - **Total Time:** 00:00:09
  - ✓ Looking at reactions
    - **Status:** completed
    - **Total Time:** 00:00:06
  - ✓ The pop test
    - **Status:** completed
    - **Total Time:** 00:00:08

Diploma-in-General-Science: Atoms and molecules - summary

First access: Sunday, 10 July 2011, 10:44 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:46 AM (76 days 6 h)

Report:

- Atoms and molecules summaries
  - ✓ Atoms and molecules summaries

- **Status:** completed
- **Total Time:** 00:00:02

- Atoms and molecules revision activity

- **Status:** completed
- **Total Time:** 00:00:09

Diploma-in-General-Science: Atoms and molecules glossary

First access: Sunday, 10 July 2011, 10:48 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:48 AM (76 days 6 h)

Report:

- Atoms and molecules glossary
- - Atoms and molecules glossary

  - **Status:** completed
  - **Total Time:** 00:00:05

Diploma-in-General-Science: Ions

First access: Sunday, 10 July 2011, 10:49 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:49 AM (76 days 6 h)

Report:

- Ions
- - What are ions?

  - **Status:** completed
  - **Total Time:** 00:00:10
- The valence of atoms

  - **Status:** completed
  - **Total Time:** 00:00:10
- Writing chemical formulae

  - **Status:** completed
  - **Total Time:** 00:00:06

Diploma-in-General-Science: Particles

First access: Sunday, 10 July 2011, 10:49 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:49 AM (76 days 6 h)

Report:

- Matter
- - Matter

  - **Status:** completed
  - **Total Time:** 00:00:03
- History of particles

  - **Status:** completed
  - **Total Time:** 00:00:06
- Motion of particles

  - **Status:** completed
  - **Total Time:** 00:00:06

Diploma-in-General-Science: Gases, liquids and solids

First access: Sunday, 10 July 2011, 10:50 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:51 AM (76 days 6 h)

Report:

- Gases
- - Gas motion

- **Status:** completed
- **Total Time:** 00:00:13

- States of matter
  - **Status:** completed
  - **Total Time:** 00:00:23
- Solids, liquids and gases
  - **Status:** completed
  - **Total Time:** 00:00:23
- Solids
  - **Status:** completed
  - **Total Time:** 00:00:22
- Liquids
  - **Status:** completed
  - **Total Time:** 00:00:22
- Gases
  - **Status:** completed
  - **Total Time:** 00:00:22
- Influence of temperature on liquid and gas particles
  - **Status:** completed
  - **Total Time:** 00:01:13
- Influence of temperature on liquid particles
  - **Status:** completed
  - **Total Time:** 00:00:32
- Kinetic theory summary
  - **Status:** completed
  - **Total Time:** 00:00:31
- Gas motion
  - **Status:** completed
  - **Total Time:** 00:00:31
- Solids
  - **Status:** completed
  - **Total Time:** 00:00:31
- Liquids
  - **Status:** completed
  - **Total Time:** 00:00:32

Diploma-in-General-Science: **Mixtures**

First access: Sunday, 10 July 2011, 10:51 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:51 AM (76 days 6 h)

Report:

- Mixtures
  - Mixtures
    - **Status:** completed
    - **Total Time:** 00:00:15
  - Soluble mixtures
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Insoluble mixtures
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Solutions
    - **Status:** completed
    - **Total Time:** 00:00:10
  - Mixing liquids
    - **Status:** completed
    - **Total Time:** 00:00:03

Diploma-in-General-Science: **Acids**

First access: Sunday, 10 July 2011, 10:52 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:52 AM (76 days 6 h)

Report:

- Acids
  - ✓ Introduction
    - **Status:** completed
    - **Total Time:** 00:00:03
  - ✓ Acids in industry
    - **Status:** completed
    - **Total Time:** 00:00:09
  - ✓ Acids around us
    - **Status:** completed
    - **Total Time:** 00:00:08
  - ✓ Acid strength
    - **Status:** completed
    - **Total Time:** 00:00:11

Diploma-in-General-Science: Bases

First access: Sunday, 10 July 2011, 10:52 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:52 AM (76 days 6 h)

Report:

- Bases
  - ✓ Introduction
    - **Status:** completed
    - **Total Time:** 00:00:04
  - ✓ Corrosiveness of bases
    - **Status:** completed
    - **Total Time:** 00:00:03
  - ✓ Alkalis
    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: pH scale

First access: Sunday, 10 July 2011, 10:53 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:53 AM (76 days 6 h)

Report:

- pH
  - ✓ pH scale
    - **Status:** completed
    - **Total Time:** 00:00:04
  - ✓ pH change
    - **Status:** completed
    - **Total Time:** 00:00:07
  - ✓ pH scale
    - **Status:** completed
    - **Total Time:** 00:00:07

Diploma-in-General-Science: pH meters

First access: Sunday, 10 July 2011, 10:53 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:53 AM (76 days 6 h)

Report:

- pH meters
  - ✓ pH meters
    - **Status:** completed

- **Total Time:** 00:00:02
- Using a pH meter
  - **Status:** completed
  - **Total Time:** 00:00:05
- Soil pH
  - **Status:** completed
  - **Total Time:** 00:00:06
- Soil pH
  - **Status:** completed
  - **Total Time:** 00:00:06

Diploma-in-General-Science: **Acid-base indicators**

First access: Sunday, 10 July 2011, 10:53 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:54 AM (76 days 6 h)

Report:

- Acid base indicators
  - Acid-base indicators
    - **Status:** completed
    - **Total Time:** 00:00:05
  - Litmus paper
    - **Status:** completed
    - **Total Time:** 00:00:15
  - Litmus paper
    - **Status:** completed
    - **Total Time:** 00:00:10
  - Universal indicator
    - **Status:** completed
    - **Total Time:** 00:00:11
  - Universal indicator
    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: **Acids and bases - summary**

First access: Sunday, 10 July 2011, 10:54 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:54 AM (76 days 6 h)

Report:

- Acids and bases summary
  - Acids and bases – Summary and revision
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Acid rain assignment
    - **Status:** completed
    - **Total Time:** 00:00:10
  - Acid-base moments
    - **Status:** completed
    - **Total Time:** 00:00:10

Diploma-in-General-Science: **Chromatography**

First access: Sunday, 10 July 2011, 10:55 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:55 AM (76 days 6 h)

Report:

- Chromatography
  - Chromatography
    - **Status:** completed
    - **Total Time:** 00:00:34

Diploma-in-General-Science: **Solidification**

First access: Sunday, 10 July 2011, 10:55 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:55 AM (76 days 6 h)

Report:

- Condensation and solidification
  - ✓ Solidification
    - **Status:** completed
    - **Total Time:** 00:00:22

Diploma-in-General-Science: **Decanting to separate liquids**

First access: Sunday, 10 July 2011, 10:57 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:57 AM (76 days 6 h)

Report:

- Decanting
  - ✓ Decanting to separate liquids
    - **Status:** completed
    - **Total Time:** 00:01:19
  - ✓ Decanting and centrifuging to separate solids from liquids
    - **Status:** completed
    - **Total Time:** 00:01:20

Diploma-in-General-Science: **Dissolving and precipitation**

First access: Sunday, 10 July 2011, 10:57 AM (76 days 6 h)

Last access: Sunday, 10 July 2011, 10:57 AM (76 days 6 h)

Report:

- nonsence title
  - ✓ Dissolving and precipitation
    - **Status:** completed

Diploma-in-General-Science: **Evaporation and distillation**

First access: Sunday, 10 July 2011, 01:37 PM (76 days 3 h)

Last access: Sunday, 10 July 2011, 01:37 PM (76 days 3 h)

Report:

- Evaporation and distillation
  - ✓ Evaporation and distillation
    - **Status:** completed
    - **Total Time:** 00:00:15

Diploma-in-General-Science: **Evaporation**

First access: Sunday, 10 July 2011, 01:38 PM (76 days 3 h)

Last access: Sunday, 10 July 2011, 01:38 PM (76 days 3 h)

Report:

- Evaporation
  - ✓ Evaporation
    - **Status:** completed
    - **Total Time:** 00:00:07
  - ✓ Evaporation

- **Status:** completed
- **Total Time:** 00:00:09

Diploma-in-General-Science: Filtration

First access: Sunday, 10 July 2011, 01:38 PM (76 days 3 h)

Last access: Sunday, 10 July 2011, 01:38 PM (76 days 3 h)

Report:

- Filtration
  - Filtration
    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: Detecting gases

First access: Sunday, 10 July 2011, 01:38 PM (76 days 3 h)

Last access: Sunday, 10 July 2011, 01:38 PM (76 days 3 h)

Report:

- Oxygen
  - Testing for oxygen
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Testing for hydrogen
    - **Status:** completed
    - **Total Time:** 00:00:11
  - Detecting gases
    - **Status:** completed
    - **Total Time:** 00:00:09

Diploma-in-General-Science: Separation techniques

First access: Sunday, 10 July 2011, 01:39 PM (76 days 3 h)

Last access: Sunday, 10 July 2011, 01:39 PM (76 days 3 h)

Report:

- Separating techniques
  - Separating techniques
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Which separation technique?
    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: Sublimation

First access: Sunday, 10 July 2011, 01:39 PM (76 days 3 h)

Last access: Sunday, 10 July 2011, 01:39 PM (76 days 3 h)

Report:

- Sublimation
  - Sublimation
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Sublimation
    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: The MOLE concept

First access: Sunday, 10 July 2011, 01:40 PM (76 days 3 h)

Last access: Sunday, 10 July 2011, 01:42 PM (76 days 3 h)

Report:

- The MOLE concept
- - ✓ Calculations associated with chemical analysis by chemical reactions; the MOLE concept
    - **Status:** completed
    - **Total Time:** 00:00:31
  - ✓ The mole concept
    - **Status:** completed
    - **Total Time:** 00:00:41
  - ✓ Molar mass
    - **Status:** completed
    - **Total Time:** 00:00:39
  - ✓ Mass - mole relationship
    - **Status:** completed
    - **Total Time:** 00:00:37
  - ✓ Significant figures
    - **Status:** completed
    - **Total Time:** 00:00:35
  - ✓ The mole concept and aqueous solutions
    - **Status:** completed
    - **Total Time:** 00:00:28
  - ✓ Volume - mole - concentration relationship
    - **Status:** completed
    - **Total Time:** 00:00:27
  - ✓ The volume-mole-concentration - activity 3
    - **Status:** completed
    - **Total Time:** 00:00:25
  - ✓ The mole - number of particles relationship
    - **Status:** completed
    - **Total Time:** 00:00:18
  - ✓ The mole-number of particles relationship - activity 4
    - **Status:** completed
    - **Total Time:** 00:00:37
  - ✓ The mole concept and gases - the general gas equation
    - **Status:** completed
    - **Total Time:** 00:00:40
  - ✓ Molar volume
    - **Status:** completed
    - **Total Time:** 00:00:41
  - ✓ Molar volume - activity 7
    - **Status:** completed
    - **Total Time:** 00:00:40
  - ✓ Molar volume - activity 8
    - **Status:** completed
    - **Total Time:** 00:00:37
  - ✓ A summary of mole relationships
    - **Status:** completed
    - **Total Time:** 00:00:30
  - ✓ Mole relationships - activity 9
    - **Status:** completed
    - **Total Time:** 00:00:26
  - ✓ Significant figures
    - **Status:** completed
    - **Total Time:** 00:00:22
  - ✓ Significant figures - activity 10
    - **Status:** completed
    - **Total Time:** 00:00:16

Diploma-in-General-Science: Volumetric analysis

First access: Sunday, 10 July 2011, 01:42 PM (76 days 3 h)

Last access: Friday, 15 July 2011, 01:58 PM (71 days 3 h)

Report:

- Volumetric analysis
- - Volumetric analysis
    - **Status:** completed
    - **Total Time:** 00:00:06
  - Titration
    - **Status:** completed
    - **Total Time:** 00:00:11
  - Standard solutions
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Volumetric analysis, standard solutions - activity 2
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Volumetric analysis, standard solutions - activity 3
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Volumetric analysis, standard solutions - activity 4
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Volumetric analysis, standard solutions - activity 5
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Dilution
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Volumetric analysis, dilution - activity 6
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Titration and indicators
    - **Status:** completed
    - **Total Time:** 00:00:05
  - Common laboratory titrations
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Worked example
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Volumetric analysis, common laboratory titrations - activity 7
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Dilution in volumetric analysis
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Dilution in volumetric analysis - worked example
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Errors and correct technique in volumetric analysis
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Errors and correct technique in volumetric analysis - activity 8
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Redox titrations
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Volumetric analysis, redox titrations - activity 9
    - **Status:** completed

- **Total Time:** 00:00:03
- Back titrations
  - **Status:** completed
  - **Total Time:** 00:00:02
- Back titrations - worked example
  - **Status:** completed
  - **Total Time:** 00:00:04
- The four calculations
  - **Status:** completed
  - **Total Time:** 00:00:07
- Volumetric analysis, back titration - activity 10
  - **Status:** completed
  - **Total Time:** 00:00:04
- Volumetric analysis - activity 11
  - **Status:** completed
  - **Total Time:** 00:00:03
- Volumetric analysis - activity 12
  - **Status:** completed
  - **Total Time:** 00:00:02
- Volumetric analysis - activity 13
  - **Status:** completed
  - **Total Time:** 00:00:02
- Volumetric analysis - activity 15
  - **Status:** completed
  - **Total Time:** 00:00:02
- Volumetric analysis - activity 16
  - **Status:** completed
  - **Total Time:** 00:00:02
- Volumetric analysis - activity 14
  - **Status:** completed
  - **Total Time:** 00:00:01
- Dilution solution (a) and (b)
  - **Status:** completed
  - **Total Time:** 00:00:05
- Dilution solution (c)
  - **Status:** completed
  - **Total Time:** 00:00:03
- Dilution solution (d) and (e)
  - **Status:** completed
  - **Total Time:** 00:00:04
- Titration solution
  - **Status:** completed
  - **Total Time:** 00:00:02
- Titration solution
  - **Status:** completed
  - **Total Time:** 00:00:02
- Titration solution
  - **Status:** completed
  - **Total Time:** 00:00:04
- Diluting concentrated acids
  - **Status:** completed
  - **Total Time:** 00:00:07

Diploma-in-General-Science: **Analysis by chemical reaction**

First access: Friday, 15 July 2011, 01:58 PM (71 days 3 h)

Last access: Friday, 15 July 2011, 01:59 PM (71 days 3 h)

Report:

- Analysis by chemical reaction
  - Analysis by chemical reaction
    - **Status:** completed
    - **Total Time:** 00:00:02

- Acid-base reactions
  - **Status:** completed
  - **Total Time:** 00:00:02
- Bronsted - Lowry theory
  - **Status:** completed
  - **Total Time:** 00:00:00
- The Bronsted-Lowry theory question
  - **Status:** completed
  - **Total Time:** 00:00:01
- Structural characteristics of acids and bases
  - **Status:** completed
  - **Total Time:** 00:00:02
- Bases
  - **Status:** completed
  - **Total Time:** 00:00:01
- The structural characteristics of acids and bases - question 1
  - **Status:** completed
  - **Total Time:** 00:00:06
- Amphiprotic
  - **Status:** completed
  - **Total Time:** 00:00:10
- Structural characteristics of acids and bases - question 2
  - **Status:** completed
  - **Total Time:** 00:00:10
- Acid-base characteristics of oxides
  - **Status:** completed
  - **Total Time:** 00:00:10
- Other common reactions of acids
  - **Status:** completed
  - **Total Time:** 00:00:09
- Common reactions of acids - question 1
  - **Status:** completed
  - **Total Time:** 00:00:09
- Common reactions of acids - question 3
  - **Status:** completed
  - **Total Time:** 00:00:09

Diploma-in-General-Science: **Analytical chemistry**

First access: Friday, 15 July 2011, 01:59 PM (71 days 3 h)

Last access: Friday, 15 July 2011, 02:01 PM (71 days 3 h)

Report:

- Analytical chemistry
  - Analytical chemistry
    - **Status:** completed
    - **Total Time:** 00:00:04
  - What is chemical analysis?
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Quantitative analysis
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Qualitative analysis
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Methods of chemical analysis
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Analysis by chemical reaction
    - **Status:** completed
    - **Total Time:** 00:00:01
  - Analysis by chemical reaction - question 1

- **Status:** completed
- **Total Time:** 00:00:02

- Gravimetric analysis

- **Status:** completed
- **Total Time:** 00:00:02

- Analysis by chemical reaction - question 2

- **Status:** completed
- **Total Time:** 00:00:02

- Spectroscopic techniques

- **Status:** completed
- **Total Time:** 00:00:03

- Chromatographic techniques

- **Status:** completed
- **Total Time:** 00:00:03

- Which method?

- **Status:** completed
- **Total Time:** 00:00:07

Diploma-in-General-Science: **Equilibrium**

First access: Friday, 15 July 2011, 02:01 PM (71 days 3 h)

Last access: Friday, 15 July 2011, 02:04 PM (71 days 3 h)

Report:

- Equilibrium

- Equilibrium

- **Status:** completed
- **Total Time:** 00:00:10

- Equilibrium - key knowledge

- **Status:** completed
- **Total Time:** 00:00:03

- Yield of chemical reactions

- **Status:** completed
- **Total Time:** 00:00:04

- Factors in a chemical reaction

- **Status:** completed
- **Total Time:** 00:00:03

- Equilibrium, yield of chemical reactions - question 1

- **Status:** completed
- **Total Time:** 00:00:02

- Conversion of reactants

- **Status:** completed
- **Total Time:** 00:00:04

- The nature of a chemical reaction

- **Status:** completed
- **Total Time:** 00:00:00

- Chemical reactions are about bond-breaking and bond-making

- **Status:** completed
- **Total Time:** 00:00:02

- Collision theory. What are fruitful colisions?

- **Status:** completed
- **Total Time:** 00:00:03

- Equilibrium, collision theory - question 2

- **Status:** completed
- **Total Time:** 00:00:03

- Example of collisions

- **Status:** completed
- **Total Time:** 00:00:02

- Heat of reaction

- **Status:** completed
- **Total Time:** 00:00:03

- Equilibrium, heat of reaction - question 3

- **Status:** completed
- **Total Time:** 00:00:02

- Exothermic and endothermic reactions

- **Status:** completed
- **Total Time:** 00:00:03

- Energy profiles

- **Status:** completed
- **Total Time:** 00:00:02

- Endothermic reactions

- **Status:** completed
- **Total Time:** 00:00:02

- Exothermic reactions

- **Status:** completed
- **Total Time:** 00:00:02

- Equilibrium, exothermic and endothermic reactions - question 4

- **Status:** completed
- **Total Time:** 00:00:01

- Equilibrium, exothermic and endothermic reactions - question 5

- **Status:** completed
- **Total Time:** 00:00:04

- Energy profiles and the effect of catalysts

- **Status:** completed
- **Total Time:** 00:00:08

- Equilibrium, energy profiles and the effect of catalysts - question 6

- **Status:** completed
- **Total Time:** 00:00:03

- A vital endothermic/exothermic combination

- **Status:** completed
- **Total Time:** 00:00:08

- Equilibrium, the combustion of natural gas - question 7

- **Status:** completed
- **Total Time:** 00:00:02

- Energy changes

- **Status:** completed
- **Total Time:** 00:00:03

- Equilibrium, the combustion of hydrogen - question 8

- **Status:** completed
- **Total Time:** 00:00:02

- Equilibrium, rate of reaction - question 9

- **Status:** completed
- **Total Time:** 00:00:04

Diploma-in-General-Science: **Chemical equilibrium**

First access: Friday, 15 July 2011, 02:42 PM (71 days 2 h)

Last access: Friday, 15 July 2011, 03:25 PM (71 days 1 h)

Report:

- Chemical equilibrium

- - Chemical equilibrium - reversible reactions

- **Status:** completed
- **Total Time:** 00:00:03

- Chemical equilibrium, reversible reactions - question 1

- **Status:** completed
- **Total Time:** 00:00:02

- What is chemical equilibrium?

- **Status:** completed
- **Total Time:** 00:00:03

- Chemical reaction

- **Status:** completed
- **Total Time:** 00:00:04

- Dynamic equilibrium

- **Status:** completed
- **Total Time:** 00:00:03

- ✓ Chemical equilibrium, reversible reactions - activity 2

- **Status:** completed
- **Total Time:** 00:00:03

- ✓ Chemical equilibrium, reversible reactions - activity 3

- **Status:** completed
- **Total Time:** 00:00:03

- ✓ Chemical equilibrium, reversible reactions - activity 4

- **Status:** completed
- **Total Time:** 00:01:20

- ✓ Chemical equilibrium, reversible reactions - activity 5

- **Status:** completed
- **Total Time:** 00:19:53

- ✓ Some common equilibrium systems

- **Status:** completed
- **Total Time:** 00:00:06

- ✓ Chemical equilibrium - reversible reactions activity 6

- **Status:** completed
- **Total Time:** 00:18:33

- ✓ Position of equilibrium and the equilibrium law

- **Status:** completed
- **Total Time:** 00:00:03

- ✓ Chemical equilibrium, reversible reactions - activity 7

- **Status:** completed
- **Total Time:** 00:00:07

- ✓ Chemical equilibrium, reversible reactions - activity 8

- **Status:** completed
- **Total Time:** 00:00:02

- ✓ Chemical equilibrium, reversible reactions - activity 9

- **Status:** completed
- **Total Time:** 00:00:01

- ✓ Concentration fraction

- **Status:** completed
- **Total Time:** 00:00:01

- ✓ Chemical equilibrium, reversible reactions - activity 11

- **Status:** completed
- **Total Time:** 00:00:01

- ✓ Chemical equilibrium, reversible reactions - activity 12

- **Status:** completed
- **Total Time:** 00:00:04

- ✓ Chemical equilibrium, reversible reactions - activity 13

- **Status:** completed
- **Total Time:** 00:00:02

- ✓ Chemical equilibrium, reversible reactions - activity 14

- **Status:** completed
- **Total Time:** 00:00:01

- ✓ Chemical equilibrium, reversible reactions - activity 15

- **Status:** completed
- **Total Time:** 00:00:01

- ✓ Chemical equilibrium, reversible reactions - activity 16

- **Status:** completed
- **Total Time:** 00:00:02

- ✓ Chemical equilibrium, reversible reactions - activity 17

- **Status:** completed
- **Total Time:** 00:00:02

- ✓ Chemical equilibrium, reversible reactions - activity 18

- **Status:** completed
- **Total Time:** 00:00:02

- ✓ Chemical equilibrium, reversible reactions - activity 19

- **Status:** completed
- **Total Time:** 00:00:02

- ✓ Equilibrium constants

- **Status:** completed
- **Total Time:** 00:00:04

- Chemical equilibrium, reversible reactions - activity 20

- **Status:** completed
- **Total Time:** 00:00:02

- Equilibrium position

- **Status:** completed
- **Total Time:** 00:00:02

- Calculations involving the equilibrium law

- **Status:** completed
- **Total Time:** 00:00:02

- What do equilibrium constants tell us?

- **Status:** completed
- **Total Time:** 00:00:01

- Concentration fraction at equilibrium

- **Status:** completed
- **Total Time:** 00:00:05

Diploma-in-General-Science: **Equilibrium in living systems**

First access: Friday, 15 July 2011, 04:00 PM (71 days 1 h)

Last access: Friday, 15 July 2011, 04:02 PM (71 days 1 h)

Report:

- Equilibrium in living systems

- Equilibrium in living systems

- **Status:** completed
- **Total Time:** 00:00:04

- Equilibrium in living systems - maintaining blood pH

- **Status:** completed
- **Total Time:** 00:00:04

- Maintaining blood pH - activity 1

- **Status:** completed
- **Total Time:** 00:00:01

- Maintaining blood pH - activity 2

- **Status:** completed
- **Total Time:** 00:00:02

- Equilibrium in living systems - oxygen transport

- **Status:** completed
- **Total Time:** 00:00:02

- Equilibrium in living systems, oxygen transport - activity 3

- **Status:** completed
- **Total Time:** 00:00:03

- Equilibrium in living systems, carbon monoxide poisoning - activity 4

- **Status:** completed
- **Total Time:** 00:00:01

- Equilibrium in living systems - carbon monoxide poisoning

- **Status:** completed
- **Total Time:** 00:00:03

- Extra equilibrium questions - activity 5

- **Status:** completed
- **Total Time:** 00:00:03

- Extra equilibrium questions - activity 6

- **Status:** completed
- **Total Time:** 00:00:02

- Extra equilibrium questions - activity 7

- **Status:** completed
- **Total Time:** 00:00:02

- Extra equilibrium questions - activity 8

- **Status:** completed
- **Total Time:** 00:00:02

- Extra equilibrium questions - activity 9

- **Status:** completed
- **Total Time:** 00:00:02

- Extra equilibrium questions - activity 10

- **Status:** completed
- **Total Time:** 00:00:05

Diploma-in-General-Science: **Dissociation constants of weak acids**

First access: Friday, 15 July 2011, 04:02 PM (71 days 1 h)

Last access: Friday, 15 July 2011, 04:04 PM (71 days 1 h)

Report:

- Dissociation constants of weak acids

- Dissociation constants of weak acids, K_a

- **Status:** completed
- **Total Time:** 00:00:01

- Equilibrium law for acids

- **Status:** completed
- **Total Time:** 00:00:04

- Dissociation constants of weak acids, K_a - activity 1

- **Status:** completed
- **Total Time:** 00:00:02

- Calculations involving pH and K_a

- **Status:** completed
- **Total Time:** 00:00:03

- Valid assumptions and approximations

- **Status:** completed
- **Total Time:** 00:00:03

- Dissociation constants of weak acids, K_a - worked example

- **Status:** completed
- **Total Time:** 00:00:02

- Calculations involving pH and K_a - activity 2

- **Status:** completed
- **Total Time:** 00:00:02

- Calculations involving pH and K_a - activity 3

- **Status:** completed
- **Total Time:** 00:00:01

- Calculations involving pH and K_a - activity 4

- **Status:** completed
- **Total Time:** 00:00:01

- Calculations involving pH and K_a - activity 6

- **Status:** completed
- **Total Time:** 00:00:02

- Calculations involving pH and K_a - activity 5

- **Status:** completed
- **Total Time:** 00:00:02

- Calculations involving pH and K_a - activity 7

- **Status:** completed
- **Total Time:** 00:00:01

- Weak or strong? Concentrated or dilute?

- **Status:** completed
- **Total Time:** 00:00:03

- Indicators - weak acids

- **Status:** completed
- **Total Time:** 00:00:04

- Indicators, weak acids - activity 8

- **Status:** completed
- **Total Time:** 00:00:03

- Indicators - activity 9

- **Status:** completed
- **Total Time:** 00:00:01

- Indicators - activity 10

- **Status:** completed
- **Total Time:** 00:00:02

- Buffer solutions

- **Status:** completed
- **Total Time:** 00:00:03

- Buffer solutions - activity 11

- **Status:** completed
- **Total Time:** 00:00:02

- Selection of indicators

- **Status:** completed
- **Total Time:** 00:00:06

Diploma-in-General-Science: **Functional groups and homologous series 1**

First access: Friday, 15 July 2011, 04:04 PM (71 days 1 h)

Last access: Friday, 15 July 2011, 04:06 PM (71 days 1 h)

Report:

- Functional groups and homologous series

- Functional groups and homologous series

- **Status:** completed
- **Total Time:** 00:00:00

- The alkanes - the simplest homologous series

- **Status:** completed
- **Total Time:** 00:00:02

- Functional groups and homologous series - question 1

- **Status:** completed
- **Total Time:** 00:00:02

- Consider structures of first five members of the series

- **Status:** completed
- **Total Time:** 00:00:03

- Functional groups and homologous series - question 2

- **Status:** completed
- **Total Time:** 00:00:02

- Final three straight-chain alkanes

- **Status:** completed
- **Total Time:** 00:00:02

- Functional groups and homologous series - question 3

- **Status:** completed
- **Total Time:** 00:00:02

- Functional groups

- **Status:** completed
- **Total Time:** 00:00:02

- R-Cl - chloroalkanes

- **Status:** completed
- **Total Time:** 00:00:03

- Systematic naming and chloroalkanes

- **Status:** completed
- **Total Time:** 00:00:03

- Functional groups and homologous series, chloroalkanes - question 4

- **Status:** completed
- **Total Time:** 00:00:02

- Alcohols, R-OH

- **Status:** completed
- **Total Time:** 00:00:02

- Hexane

- **Status:** completed
- **Total Time:** 00:00:02

- Functional groups and homologous series, alcohols - question 5

- **Status:** completed
- **Total Time:** 00:00:02

- Functional groups and homologous series - carboxylic acids, R-COOH

- **Status:** completed
- **Total Time:** 00:00:03

- Functional groups and homologous series, carboxylic acids - question 6

- **Status:** completed
- **Total Time:** 00:00:02

- Functional groups and homologous series - functional groups and solubility

- **Status:** completed
- **Total Time:** 00:00:02

- Functional groups and homologous series - question 7

- **Status:** completed
- **Total Time:** 00:00:03

Diploma-in-General-Science: **Functional groups and homologous series 2**

First access: Friday, 15 July 2011, 04:37 PM (71 days)

Last access: Friday, 15 July 2011, 04:38 PM (71 days)

Report:

- Functional groups and homologous series
  - Functional groups and homologous series - revision question 1
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Functional groups and homologous series - revision question 4
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Functional groups and homologous series - revision question 5
    - **Status:** completed
    - **Total Time:** 00:00:07
  - Functional groups and homologous series - revision question 6
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Functional groups and homologous series - revision question 7
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Functional groups and homologous series - revision question 8
    - **Status:** completed
    - **Total Time:** 00:00:01
  - Functional groups and homologous series - revision question 9
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Functional groups and homologous series - revision question 10
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Functional groups and homologous series - revision question 11
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Functional groups and homologous series - revision question 12
    - **Status:** completed
    - **Total Time:** 00:00:11

Diploma-in-General-Science: **Le Chatelier's principle**

First access: Friday, 15 July 2011, 04:39 PM (71 days)

Last access: Friday, 15 July 2011, 04:40 PM (71 days)

Report:

- Le Chatelier's principle
  - Le Chatelier's principle – Introduction
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Effect of changes in temperature on an equilibrium system

- **Status:** completed
- **Total Time:** 00:00:03

- Factors that affect the position of equilibrium

- **Status:** completed
- **Total Time:** 00:00:04

- Le Chatelier's principle, factors that affect the position of equilibrium - activity 2

- **Status:** completed
- **Total Time:** 00:00:02

- Le Chatelier's principle, factors that affect the position of equilibrium - activity 3

- **Status:** completed
- **Total Time:** 00:00:02

- Change consideration

- **Status:** completed
- **Total Time:** 00:00:02

- Catalysts and position of equilibrium

- **Status:** completed
- **Total Time:** 00:00:03

- Concentration - time graphs

- **Status:** completed
- **Total Time:** 00:00:01

- Le Chatelier's principle - activity 4

- **Status:** completed
- **Total Time:** 00:00:01

- Concentration time graphs

- **Status:** completed
- **Total Time:** 00:00:03

- Le Chatelier's principle, concentration-time graphs - activity 5

- **Status:** completed
- **Total Time:** 00:00:02

- Interesting aspects of the pressure/volume link

- **Status:** completed
- **Total Time:** 00:00:03

- Le Chatelier's principle, concentration-time graphs - activity 6

- **Status:** completed
- **Total Time:** 00:00:03

- An unusual situation

- **Status:** completed
- **Total Time:** 00:00:03

- Le Chatelier's principle - activity 7

- **Status:** completed
- **Total Time:** 00:00:02

- Le Chatelier's principle - activity 8

- **Status:** completed
- **Total Time:** 00:00:02

- Le Chatelier's principle - activity 9

- **Status:** completed
- **Total Time:** 00:00:05

Diploma-in-General-Science: **Precipitation reactions**

First access: Friday, 15 July 2011, 04:41 PM (71 days)

Last access: Friday, 15 July 2011, 04:42 PM (71 days)

Report:

- Precipitation reactions
- - Precipitation reactions

  - **Status:** completed
  - **Total Time:** 00:00:01

  - Chemical reactions solubility rules

  - **Status:** completed
  - **Total Time:** 00:00:02

- Chemical reactions ionic equations
  - **Status:** completed
  - **Total Time:** 00:00:03
- Ionic equations - question 1
  - **Status:** completed
  - **Total Time:** 00:00:02
- Ionic equations - question 2
  - **Status:** completed
  - **Total Time:** 00:00:30

Diploma-in-General-Science: **Preparation of ethanoic acid from ethane**

First access: Friday, 15 July 2011, 04:42 PM (71 days)

Last access: Friday, 15 July 2011, 04:43 PM (71 days)

Report:

- Preparation of ethanoic acid from ethane
  - Preparation of ethanoic acid from ethane
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Preparation of ethanoic acid from ethane: activity 1
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Step 2. Chloroethane to ethanol
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Step 3. Ethanol to ethanoic acid
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Preparation of ethanoic acid from ethane: activity 2
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Summary
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Preparation of ethanoic acid from ethane: activity 3
    - **Status:** completed
    - **Total Time:** 00:00:05

Diploma-in-General-Science: **Rate of reaction**

First access: Friday, 15 July 2011, 04:43 PM (71 days)

Last access: Friday, 15 July 2011, 04:44 PM (71 days)

Report:

- Rate of reaction
  - Rate of reaction: introduction
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Factors influencing rate of reaction
    - **Status:** completed
    - **Total Time:** 00:00:03
  - The chemical nature
    - **Status:** completed
    - **Total Time:** 00:00:03
  - The physical state of the reactants
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Initial concentration
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Temperature

- **Status:** completed
- **Total Time:** 00:00:03

- Catalysts

- **Status:** completed
- **Total Time:** 00:00:09

Diploma-in-General-Science: **Rate of reaction revision questions**

First access: Friday, 15 July 2011, 04:44 PM (71 days)

Last access: Friday, 15 July 2011, 04:45 PM (71 days)

Report:

- Rate of reaction revision questions
- - Rate of reaction revision questions

  - **Status:** completed
  - **Total Time:** 00:00:02
- Rate of reaction - activity 2

  - **Status:** completed
  - **Total Time:** 00:00:03
- Equilibrium

  - **Status:** completed
  - **Total Time:** 00:00:01
- Rate of reaction - activity 4

  - **Status:** completed
  - **Total Time:** 00:00:02
- Rate of reaction - activity 5

  - **Status:** completed
  - **Total Time:** 00:00:03
- Rate of reaction - activity 6

  - **Status:** completed
  - **Total Time:** 00:00:02
- Rate of reaction - activity 7

  - **Status:** completed
  - **Total Time:** 00:00:05

Diploma-in-General-Science: **Reaction between ethanol and ethanoic acid to form the ester**

First access: Friday, 15 July 2011, 04:45 PM (71 days)

Last access: Friday, 15 July 2011, 04:46 PM (71 days)

Report:

- Reaction between ethanol and ethanoic acid to form the ester
- - Reaction between ethanol and ethanoic acid to form the ester, ethyl ethanoate

  - **Status:** completed
  - **Total Time:** 00:00:03
- Esters in general

  - **Status:** completed
  - **Total Time:** 00:00:02
- Names, formulas and odours of some esters

  - **Status:** completed
  - **Total Time:** 00:00:03
- Esters - activity 1

  - **Status:** completed
  - **Total Time:** 00:00:02
- Esters - activity 2

  - **Status:** completed
  - **Total Time:** 00:00:03
- Esters, fats and vegetable oils

  - **Status:** completed
  - **Total Time:** 00:00:04
- Polyesters - condensation polymers

- **Status:** completed
- **Total Time:** 00:00:02

Polymer chain

- **Status:** completed
- **Total Time:** 00:00:03

Industrial polyester

- **Status:** completed
- **Total Time:** 00:00:03

Polyethylene terephthalate

- **Status:** completed
- **Total Time:** 00:00:03

Polyesters - activity 3

- **Status:** completed
- **Total Time:** 00:00:02

Esters - activity 4

- **Status:** completed
- **Total Time:** 00:00:02

Another equation for ethanol and ethanoic acid

- **Status:** completed
- **Total Time:** 00:00:09

Diploma-in-General-Science: Redox reactions

First access: Friday, 15 July 2011, 04:46 PM (71 days)

Last access: Friday, 15 July 2011, 04:48 PM (71 days)

Report:

- Redox reactions
- Redox reactions
  - **Status:** completed
  - **Total Time:** 00:00:01

  Oxygen transfer
  - **Status:** completed
  - **Total Time:** 00:00:01

  Hydrogen transfer
  - **Status:** completed
  - **Total Time:** 00:00:01

  Electron transfer
  - **Status:** completed
  - **Total Time:** 00:00:01

  Redox reactions - question 1
  - **Status:** completed
  - **Total Time:** 00:00:02

  Oxidation numbers
  - **Status:** completed
  - **Total Time:** 00:00:08

  Oxidation numbers in redox reactions
  - **Status:** completed
  - **Total Time:** 00:00:10

  Redox reactions; oxidation numbers - question 2
  - **Status:** completed
  - **Total Time:** 00:00:02

  Developing half-equations (partial ionic equations)
  - **Status:** completed
  - **Total Time:** 00:00:02

  Redox reactions - question 3
  - **Status:** completed
  - **Total Time:** 00:00:02

  Alternative approach
  - **Status:** completed
  - **Total Time:** 00:00:03

  Dichromate to chromium III

- **Status:** completed
- **Total Time:** 00:00:03

- Oxidation consideration

- **Status:** completed
- **Total Time:** 00:00:03

- Oxidation of ethanol

- **Status:** completed
- **Total Time:** 00:00:03

- Redox reactions; developing half-equations - question 4

- **Status:** completed
- **Total Time:** 00:00:02

- Combining oxidation and reduction half-equations

- **Status:** completed
- **Total Time:** 00:00:03

- Redox reactions; combining oxidation and reduction half-equations - question 5

- **Status:** completed
- **Total Time:** 00:00:02

- Redox reactions; combining oxidation and reduction half-equations - question 6

- **Status:** completed
- **Total Time:** 00:00:04

Diploma-in-General-Science: Structural isomers

First access: Saturday, 6 August 2011, 06:07 PM (48 days 23 h)

Last access: Saturday, 6 August 2011, 06:07 PM (48 days 23 h)

Report:

- Structural isomers
- - Structural isomers

  - **Status:** completed
  - **Total Time:** 00:00:07

  - Stuctural isomers - question 1

  - **Status:** completed
  - **Total Time:** 00:00:11

  - Structural isomers of chloroalkanes and alcohols

  - **Status:** completed
  - **Total Time:** 00:00:12

  - Chloroalkanes and alcohols containing three carbon atoms

  - **Status:** completed
  - **Total Time:** 00:00:13

  - Chloroalkanes containing four carbon atoms

  - **Status:** completed
  - **Total Time:** 00:00:15

  - Alcohols containing four carbon atoms

  - **Status:** completed
  - **Total Time:** 00:00:16

  - Structural isomers of chloroalkanes and alcohols - question 1

  - **Status:** completed
  - **Total Time:** 00:00:17

  - Structural isomers of chloroalkanes and alcohols - question 2

  - **Status:** completed
  - **Total Time:** 00:00:12

  - Structural isomers of chloroalkanes and alcohols - question 3

  - **Status:** completed
  - **Total Time:** 00:00:10

  - Structural isomers of chloroalkanes and alcohols - question 4

  - **Status:** completed
  - **Total Time:** 00:00:06

Diploma-in-General-Science: Substitution reactions

First access: Saturday, 6 August 2011, 06:07 PM (48 days 23 h)

Last access: Saturday, 6 August 2011, 06:07 PM (48 days 23 h)

Report:

- Substitution reactions
- - Substitution reactions
  - **Status:** completed
    Total Time: 00:00:00
  - Substitution reactions - question 1
  - **Status:** completed
    Total Time: 00:00:02

Diploma-in-General-Science: Water Kw and the use of the pH scale

First access: Saturday, 6 August 2011, 06:08 PM (48 days 23 h)

Last access: Saturday, 6 August 2011, 06:09 PM (48 days 23 h)

Report:

- Water Kw and the use of the pH scale
- - Water Kw and the use of the pH scale: introduction
  - **Status:** completed
    Total Time: 00:00:05
  - The self-ionisation of water and Kw
  - **Status:** completed
    Total Time: 00:00:07
  - Calculations using Kw
  - **Status:** completed
    Total Time: 00:00:13
  - Water Kw and the use of pH scale - activity 1
  - **Status:** completed
    Total Time: 00:00:15
  - Water Kw and the use of pH scale - activity 2
  - **Status:** completed
    Total Time: 00:00:16
  - Water Kw and the use of pH scale - activity 3
  - **Status:** completed
    Total Time: 00:00:12
  - pH
  - **Status:** completed
    Total Time: 00:00:07
  - Water Kw and the use of pH scale - activity 4
  - **Status:** completed
    Total Time: 00:00:04
  - Water Kw and the use of pH scale - activity 5
  - **Status:** completed
    Total Time: 00:00:06
  - Water Kw and the use of pH scale - activity 6
  - **Status:** completed
    Total Time: 00:00:09
  - Water Kw and the use of pH scale - activity 7
  - **Status:** completed
    Total Time: 00:00:11
  - Water Kw and the use of pH scale - activity 8
  - **Status:** completed
    Total Time: 00:00:10
  - The significance of a one unit change in pH
  - **Status:** completed
    Total Time: 00:00:09
  - Water Kw and the use of pH scale - activity 9
  - **Status:** completed
    Total Time: 00:00:04
  - Water Kw and the use of pH scale - activity 11

- **Status:** completed
- **Total Time:** 00:00:07

- Water Kw and the use of pH scale - activity 10

- **Status:** completed
- **Total Time:** 00:00:10

- Water Kw and the use of pH scale - activity 12

- **Status:** completed
- **Total Time:** 00:00:07

- Water Kw and the use of pH scale - activity 13

- **Status:** completed
- **Total Time:** 00:00:08

- pH and temperature

- **Status:** completed
- **Total Time:** 00:00:08

- Concentrations of hydroxide and hydronium ions

- **Status:** completed
- **Total Time:** 00:00:09

Diploma-in-General-Science: **Sulfuric acid**

First access: Saturday, 6 August 2011, 06:10 PM (48 days 23 h)

Last access: Saturday, 6 August 2011, 06:12 PM (48 days 23 h)

Report:

- Sulfuric acid

- - Industrial chemistry - Sulfuric acid

- **Status:** completed
- **Total Time:** 00:00:12

- Sulfuric acid - reaction yield/reaction rate

- **Status:** completed
- **Total Time:** 00:00:16

- Reaction yield/reaction rate - question 1

- **Status:** completed
- **Total Time:** 00:00:26

- Sulfuric acid, reaction yield/reaction rate - question 2

- **Status:** completed
- **Total Time:** 00:00:27

- Sulfuric acid - raw materials used in the production of sulfuric acid

- **Status:** completed
- **Total Time:** 00:00:25

- Sulfuric acid - key reactions in the production of sulfuric acid

- **Status:** completed
- **Total Time:** 00:00:24

- Sulfuric acid - the catalytic conversion

- **Status:** completed
- **Total Time:** 00:00:18

- Sulfuric acid - the absorption

- **Status:** completed
- **Total Time:** 00:00:12

- Sulfuric acid - question 3

- **Status:** completed
- **Total Time:** 00:00:14

- Sulfuric acid - optimum conditions and the rate/yield conflict in the contact process

- **Status:** completed
- **Total Time:** 00:00:13

- Sulfuric acid - temperature, and a catalyst

- **Status:** completed
- **Total Time:** 00:00:09

- Sulfuric acid - pressure, near atmospheric

- **Status:** completed
- **Total Time:** 00:00:18

- Sulfuric acid - excess oxygen (air)

- **Status:** completed
- **Total Time:** 00:00:19

- Sulfuric acid - environmental factors

- **Status:** completed
- **Total Time:** 00:00:19

- Properties and uses of sulfuric acid

- **Status:** completed
- **Total Time:** 00:00:17

- Sulfuric acid - question 4

- **Status:** completed
- **Total Time:** 00:00:17

- Concentrated sulfuric acid

- **Status:** completed
- **Total Time:** 00:00:13

- Sulfuric acid - question 5

- **Status:** completed
- **Total Time:** 00:00:12

- Oxidising capabilities of concentrated sulfuric acid

- **Status:** completed
- **Total Time:** 00:00:11

- Sulfuric acid - question 6

- **Status:** completed
- **Total Time:** 00:00:21

- Main use of sulfuric acid in Australia

- **Status:** completed
- **Total Time:** 00:00:22

- Sulfuric acid - question 7

- **Status:** completed
- **Total Time:** 00:00:21

- Sulfuric acid - question 8

- **Status:** completed
- **Total Time:** 00:00:22

- Sulfuric acid - question 9

- **Status:** completed
- **Total Time:** 00:00:18

- Sulfuric acid - question 10

- **Status:** completed
- **Total Time:** 00:00:13

- Sulfuric acid - question 11

- **Status:** completed
- **Total Time:** 00:00:14

Diploma-in-General-Science: **Gravimetric analysis**

First access: Saturday, 6 August 2011, 06:12 PM (48 days 23 h)

Last access: Saturday, 6 August 2011, 06:13 PM (48 days 23 h)

Report:

- Gravimetric analysis
  - Percentage by mass and the mole concept
    - **Status:** completed
    - **Total Time:** 00:00:10
  - Gravimetric analysis
    - **Status:** completed
    - **Total Time:** 00:00:24
  - Gravimetric analysis - worked example
    - **Status:** completed
    - **Total Time:** 00:00:22
  - Gravimetric analysis - activity 2
    - **Status:** completed
    - **Total Time:** 00:00:22
  - Gravimetric analysis - activity 3

- **Status:** completed
- **Total Time:** 00:00:23

- Empirical and molecular formulas

- **Status:** completed
- **Total Time:** 00:00:12

- Gravimetric analysis - activity 4

- **Status:** completed
- **Total Time:** 00:00:11

- Gravimetric analysis - activity 5

- **Status:** completed
- **Total Time:** 00:00:14

- Gravimetric analysis - activity 6

- **Status:** completed
- **Total Time:** 00:00:11

Diploma-in-General-Science: **Spectroscopic techniques**

First access: Saturday, 6 August 2011, 06:19 PM (48 days 23 h)

Last access: Saturday, 6 August 2011, 06:19 PM (48 days 23 h)

Report:

- Spectroscopic techniques

- Spectroscopic techniques, absorption and emission of energy - activity 1

- **Status:** completed
- **Total Time:** 00:06:12

- Spectroscopic techniques - activity 2

- **Status:** completed
- **Total Time:** 00:06:08

- Spectroscopic techniques, colorimetry - activity 3

- **Status:** completed
- **Total Time:** 00:06:04

- Spectroscopic techniques, colorimetry - activity 4

- **Status:** completed
- **Total Time:** 00:05:58

- Spectroscopic techniques - activity 5

- **Status:** completed
- **Total Time:** 00:05:44

Diploma-in-General-Science: **Spectroscopic techniques in chemical analysis**

First access: Saturday, 6 August 2011, 06:46 PM (48 days 22 h)

Last access: Saturday, 6 August 2011, 06:46 PM (48 days 22 h)

Report:

- Spectroscopic techniques in chemical analysis

- Spectroscopic techniques in chemical analysis

- **Status:** completed
- **Total Time:** 00:00:10

- Absorption and emission of energy

- **Status:** completed
- **Total Time:** 00:00:20

- Absorption spectra

- **Status:** completed
- **Total Time:** 00:00:22

- Emission spectra

- **Status:** completed
- **Total Time:** 00:00:22

- Complementary nature of emisssion and absorption spectra

- **Status:** completed
- **Total Time:** 00:00:21

- Colorimetry

- **Status:** completed
- **Total Time:** 00:00:20

- Atomic absorption spectroscopy - AAS

- **Status:** completed
- **Total Time:** 00:00:19

- UV - visible spectroscopy

- **Status:** completed
- **Total Time:** 00:00:18

Diploma-in-General-Science: **Chromatography**

First access: Saturday, 6 August 2011, 06:46 PM (48 days 22 h)

Last access: Saturday, 6 August 2011, 06:47 PM (48 days 22 h)

Report:

- Chromatography
  - Chromatography

    - **Status:** completed
    - **Total Time:** 00:00:03

    - Paper and thin-layer chromatography

    - **Status:** completed
    - **Total Time:** 00:00:09

    - High performance liquid chromatography (HPLC)

    - **Status:** completed
    - **Total Time:** 00:00:15

    - Gas chromatography (GC)

    - **Status:** completed
    - **Total Time:** 00:00:09

Diploma-in-General-Science: **Chromatography - activity**

First access: Saturday, 6 August 2011, 06:47 PM (48 days 22 h)

Last access: Saturday, 6 August 2011, 06:47 PM (48 days 22 h)

Report:

- Chromatography - activity
  - Chromatography - activity 1

    - **Status:** completed
    - **Total Time:** 00:00:07

    - Chromatography - activity 2

    - **Status:** completed
    - **Total Time:** 00:00:13

    - Chromatography - activity 3

    - **Status:** completed
    - **Total Time:** 00:00:09

    - Chromatography - activity 4

    - **Status:** completed
    - **Total Time:** 00:00:11

    - Chromatography - activity 5

    - **Status:** completed
    - **Total Time:** 00:00:13

Diploma-in-General-Science: **Industrial chemistry**

First access: Saturday, 6 August 2011, 06:48 PM (48 days 22 h)

Last access: Saturday, 6 August 2011, 06:48 PM (48 days 22 h)

Report:

- Industrial chemistry
  - Industrial chemistry

- **Status:** completed
- **Total Time:** 00:00:07

- Importance of yield

- **Status:** completed
- **Total Time:** 00:00:10

- Industrial chemistry key knowledge areas

- **Status:** completed
- **Total Time:** 00:00:12

Diploma-in-General-Science: **The petrochemical industry**

First access: Saturday, 6 August 2011, 06:49 PM (48 days 22 h)

Last access: Saturday, 6 August 2011, 06:49 PM (48 days 22 h)

Report:

- The petrochemical industry
  - The petrochemical industry

    - **Status:** completed
    - **Total Time:** 00:00:10

    - The petrochemical industry - activity 1

    - **Status:** completed
    - **Total Time:** 00:00:28

    - Refining crude oil

    - **Status:** completed
    - **Total Time:** 00:00:27

    - Fractional distillation of crude oil

    - **Status:** completed
    - **Total Time:** 00:00:30

    - The petrochemical industry - activity 2

    - **Status:** completed
    - **Total Time:** 00:00:25

    - More of what we want

    - **Status:** completed
    - **Total Time:** 00:00:20

    - Three main uses of crude oil

    - **Status:** completed
    - **Total Time:** 00:00:20

Diploma-in-General-Science: **The petrochemical industry - activity**

First access: Saturday, 6 August 2011, 06:50 PM (48 days 22 h)

Last access: Saturday, 13 August 2011, 12:37 PM (42 days 4 h)

Report:

- The petrochemical industry - activity
  - The petrochemical industry - activity 10

    - **Status:** completed
    - **Total Time:** 00:00:07

    - The petrochemical industry - activity 9

    - **Status:** completed
    - **Total Time:** 00:00:07

    - The petrochemical industry - activity 8

    - **Status:** completed
    - **Total Time:** 00:00:31

    - The petrochemical industry - activity 7

    - **Status:** completed
    - **Total Time:** 00:00:28

    - The petrochemical industry - activity 6

    - **Status:** completed
    - **Total Time:** 00:00:25

    - Other important addition polymers derived from ethene

- **Status:** completed
- **Total Time:** 00:00:08

- Addition polymerisation and polyethylene

- **Status:** completed
- **Total Time:** 00:00:15

- The petrochemical industry, reactions of ethene - activity 5

- **Status:** completed
- **Total Time:** 00:00:18

- The petrochemical industry, reactions of ethene - activity 4

- **Status:** completed
- **Total Time:** 00:00:11

- Reactions of ethene

- **Status:** completed
- **Total Time:** 00:00:07

- Environmental aspects of ethene production

- **Status:** completed
- **Total Time:** 00:00:02

- Ethene - the simplest alkene

- **Status:** completed
- **Total Time:** 00:00:03

- The industrial production of ethene

- **Status:** completed
- **Total Time:** 00:00:13

- The petrochemical industry, alkanes and alkenes - activity 1

- **Status:** completed
- **Total Time:** 00:00:10

- Cracking of ethane and propane to produce ethylene

- **Status:** completed
- **Total Time:** 00:00:11

- The petrochemical industry, the industrial production of ethene - activity 2

- **Status:** completed
- **Total Time:** 00:00:12

- Pressure and steam - an interesting aspect of ethene production!

- **Status:** completed
- **Total Time:** 00:00:23

- The petrochemical industry, pressure and steam in ethene production - activity 3

- **Status:** completed
- **Total Time:** 00:00:14

- Cracking of hydrocarbons

- **Status:** completed
- **Total Time:** 00:00:17

- Examples of addition reactions of ethylene

- **Status:** completed
- **Total Time:** 00:00:18

Diploma-in-General-Science: **The origins of the elements**

First access: Saturday, 13 August 2011, 12:37 PM (42 days 4 h)

Last access: Saturday, 13 August 2011, 12:38 PM (42 days 4 h)

Report:

- The origins of the elements
  - The big picture - the origins of the elements
    - **Status:** completed
    - **Total Time:** 00:00:02
  - The naturally-occurring elements
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Glen Seaborg and the transuranium elements
    - **Status:** completed
    - **Total Time:** 00:00:10

Diploma-in-General-Science: **The periodic table: an overview of chemistry**

First access: Saturday, 13 August 2011, 12:38 PM (42 days 4 h)

Last access: Saturday, 13 August 2011, 12:38 PM (42 days 4 h)

Report:

- The periodic table: an overview of chemistry
- - The periodic table: an overview of chemistry
  - **Status:** completed
  - **Total Time:** 00:00:11
  - The periodic table - a little history
  - **Status:** completed
  - **Total Time:** 00:00:17
  - The elements
  - **Status:** completed
  - **Total Time:** 00:00:19
  - Mendeleev
  - **Status:** completed
  - **Total Time:** 00:00:08

Diploma-in-General-Science: **Trends in the periodic table**

First access: Saturday, 13 August 2011, 12:39 PM (42 days 4 h)

Last access: Saturday, 13 August 2011, 12:39 PM (42 days 4 h)

Report:

- Trends in the periodic table
- - Trends in the periodic table
  - **Status:** completed
  - **Total Time:** 00:00:12
  - Atomic radius and ionisation energy
  - **Status:** completed
  - **Total Time:** 00:00:17
  - Trends in atomic radius
  - **Status:** completed
  - **Total Time:** 00:00:21
  - Ionisation energy
  - **Status:** completed
  - **Total Time:** 00:00:12
  - Electronegativity
  - **Status:** completed
  - **Total Time:** 00:00:09
  - Redox properties and metallic/non-metallic character
  - **Status:** completed
  - **Total Time:** 00:00:17
  - Summary of trends in the periodic table
  - **Status:** completed
  - **Total Time:** 00:00:13
  - Acid/base properties of oxides across a period
  - **Status:** completed
  - **Total Time:** 00:00:13

Diploma-in-General-Science: **Elements of the first transition series**

First access: Saturday, 13 August 2011, 12:40 PM (42 days 4 h)

Last access: Saturday, 13 August 2011, 12:41 PM (42 days 4 h)

Report:

- Elements of the first transition series
- - Elements (metals) of the first transition series
  - **Status:** completed

- **Total Time:** 00:00:10
- Electron arrangements of the first transition series
  - **Status:** completed
  - **Total Time:** 00:00:16
- Some properties of the first row transition elements
  - **Status:** completed
  - **Total Time:** 00:00:29
- The significance of the 4s subshell
  - **Status:** completed
  - **Total Time:** 00:00:30
- Oxidation numbers (states) of transition metals
  - **Status:** completed
  - **Total Time:** 00:00:25
- Colour and transition metal compounds
  - **Status:** completed
  - **Total Time:** 00:00:29
- Transition metals and complex ion formation
  - **Status:** completed
  - **Total Time:** 00:00:15
- Transition metals and group I and II metals - a comparison
  - **Status:** completed
  - **Total Time:** 00:00:17
- The f-block
  - **Status:** completed
  - **Total Time:** 00:00:18

Diploma-in-General-Science: **History and development of atomic theory**

First access: Saturday, 13 August 2011, 12:41 PM (42 days 4 h)

Last access: Saturday, 13 August 2011, 12:42 PM (42 days 4 h)

Report:

- History and development of atomic theory
- - History and development of atomic theory
    - **Status:** completed
    - **Total Time:** 00:00:10
  - Democritus
    - **Status:** completed
    - **Total Time:** 00:00:14
  - Dalton
    - **Status:** completed
    - **Total Time:** 00:00:15
  - Ramsay
    - **Status:** completed
    - **Total Time:** 00:00:15
  - John Joseph Thomson
    - **Status:** completed
    - **Total Time:** 00:00:16
  - Marie Curie
    - **Status:** completed
    - **Total Time:** 00:00:18
  - Ernest Rutherford
    - **Status:** completed
    - **Total Time:** 00:00:18

Diploma-in-General-Science: **Electrons**

First access: Saturday, 13 August 2011, 12:46 PM (42 days 4 h)

Last access: Saturday, 13 August 2011, 12:48 PM (42 days 4 h)

Report:

- Electrons

- Electrons
  - **Status:** completed
  - **Total Time:** 00:03:34
- Niels Bohr and emission/absorption of energy
  - **Status:** completed
  - **Total Time:** 00:03:32
- Electron arrangements
  - **Status:** completed
  - **Total Time:** 00:03:38
- Ionisation energy
  - **Status:** completed
  - **Total Time:** 00:03:42
- The orbital motion of the atom – Building on Bohr's energy levels
  - **Status:** completed
  - **Total Time:** 00:03:43
- Electron configuration and periodic classification
  - **Status:** completed
  - **Total Time:** 00:00:12
- Electron configuration and periodic classification: the group relationship
  - **Status:** completed
  - **Total Time:** 00:00:09
- The modern periodic law
  - **Status:** completed
  - **Total Time:** 00:00:16
- Electron configuration and periodic classification: a highly informative isotopic symbol
  - **Status:** completed
  - **Total Time:** 00:00:12
- Electron configuration and periodic classification: hydrogen and helium
  - **Status:** completed
  - **Total Time:** 00:00:18
- Further aspects of the periodic table
  - **Status:** completed
  - **Total Time:** 00:00:17

Diploma-in-General-Science: **Isotopes and relative atomic mass**

First access: Saturday, 13 August 2011, 12:49 PM (42 days 4 h)

Last access: Saturday, 13 August 2011, 12:49 PM (42 days 4 h)

Report:

- Isotopes and relative atomic mass
- Isotopes and relative atomic mass
  - **Status:** completed
  - **Total Time:** 00:00:29
- Frederick Soddy
  - **Status:** completed
  - **Total Time:** 00:00:04
- Mass spectroscopy
  - **Status:** completed
  - **Total Time:** 00:00:17
- Relative atomic mass
  - **Status:** completed
  - **Total Time:** 00:00:33
- James Chadwick and the neutron
  - **Status:** completed
  - **Total Time:** 00:00:37

Diploma-in-General-Science: **Nuclear fission and fusion**

First access: Saturday, 13 August 2011, 12:50 PM (42 days 4 h)

Last access: Saturday, 13 August 2011, 12:50 PM (42 days 4 h)

Report:

- Nuclear fission and fusion
  - ✓ Nuclear fission and fusion
    - **Status:** completed
    - **Total Time:** 00:00:06
  - ✓ Lise Meitner and nuclear fission
    - **Status:** completed
    - **Total Time:** 00:00:20
  - ✓ Nuclear fusion
    - **Status:** completed
    - **Total Time:** 00:00:07
  - ✓ The appeal of fusion
    - **Status:** completed
    - **Total Time:** 00:00:08

Diploma-in-General-Science: Thermochemical equations

First access: Saturday, 13 August 2011, 12:51 PM (42 days 4 h)

Last access: Saturday, 13 August 2011, 12:51 PM (42 days 4 h)

Report:

- Thermochemical equations
  - ✓ Heats of combustion
    - **Status:** completed
    - **Total Time:** 00:00:11
  - ✓ Thermochemical equations
    - **Status:** completed
    - **Total Time:** 00:00:13
  - ✓ Thermochemical equations: an explosive reaction
    - **Status:** completed
    - **Total Time:** 00:00:17

Diploma-in-General-Science: Electrochemistry

First access: Saturday, 13 August 2011, 01:57 PM (42 days 3 h)

Last access: Monday, 15 August 2011, 09:26 AM (40 days 7 h)

Report:

- Electrochemistry
  - ✓ Electrochemistry
    - **Status:** completed
    - **Total Time:** 00:00:03
  - ✓ Galvanic cells
    - **Status:** completed
    - **Total Time:** 00:00:02
  - ✓ Half-cell combinations
    - **Status:** completed
    - **Total Time:** 00:00:02
  - ✓ The electrochemical series
    - **Status:** completed
    - **Total Time:** 00:00:07
  - ✓ The Daniell cell
    - **Status:** completed
    - **Total Time:** 00:00:12
  - ✓ Leclanche dry cell
    - **Status:** completed
    - **Total Time:** 00:00:11
  - ✓ Secondary cells: the lead-acid battery
    - **Status:** completed
    - **Total Time:** 00:00:09

- Using the electrochemical series
  - **Status:** completed
  - **Total Time:** 00:00:20
- Limitations of the electrochemical series
  - **Status:** completed
  - **Total Time:** 00:00:05
- Applications of galvanic cells
  - **Status:** completed
  - **Total Time:** 00:00:11
- Secondary cells
  - **Status:** completed
  - **Total Time:** 00:00:14
- Alkaline cells
  - **Status:** completed
  - **Total Time:** 00:00:13
- Other alkaline cells
  - **Status:** completed
  - **Total Time:** 00:00:12
- Batteries - the future
  - **Status:** completed
  - **Total Time:** 00:00:15
- Recharging of the lead-acid battery
  - **Status:** completed
  - **Total Time:** 00:00:13

Diploma-in-General-Science: Electrolysis

First access: Monday, 15 August 2011, 09:27 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:28 AM (40 days 7 h)

Report:

- Electrolysis
  - Electrolysis
    - **Status:** completed
    - **Total Time:** 00:00:18
  - Electroplating
    - **Status:** completed
    - **Total Time:** 00:00:18
  - Electrolysis of molten NaCl
    - **Status:** completed
    - **Total Time:** 00:00:18
  - The Downs cell - industrial production of sodium
    - **Status:** completed
    - **Total Time:** 00:00:16
  - Electrolysis of aqueous solutions
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Electrolysis of dilute sodium chloride
    - **Status:** completed
    - **Total Time:** 00:00:16
  - Electrolysis of dilute hydrochloric acid
    - **Status:** completed
    - **Total Time:** 00:00:15
  - Electrolysis of dilute copper chloride
    - **Status:** completed
    - **Total Time:** 00:00:14
  - Electrolysis: copper plating
    - **Status:** completed
    - **Total Time:** 00:00:12
  - Quantitative aspects of electrolysis – Faraday's laws
    - **Status:** completed
    - **Total Time:** 00:00:07

Diploma-in-General-Science: Fuel cells

First access: Monday, 15 August 2011, 09:28 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:28 AM (40 days 7 h)

Report:

- Fuel cells
  - Hydrogen - oxygen fuel cells
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Current developments
    - **Status:** completed
    - **Total Time:** 00:00:05
  - Fuel cells
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Other fuels
    - **Status:** completed
    - **Total Time:** 00:00:05

Diploma-in-General-Science: Aqueous solution or molten salt - the production of aluminium

First access: Monday, 15 August 2011, 09:29 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:29 AM (40 days 7 h)

Report:

- aqueous solution or molten salt - the production of aluminium
  - Aqueous solution or molten salt - the production of aluminium
    - **Status:** completed
    - **Total Time:** 00:00:07
  - Aqueous solution or molten salt - the production of aluminium: the production of aluminium by electrolysis
    - **Status:** completed
    - **Total Time:** 00:00:01
  - Aqueous solution or molten salt - the production of aluminium: factors that determine the products of electrolysis
    - **Status:** completed
    - **Total Time:** 00:00:01

Diploma-in-General-Science: Production of chlorine and sodium hydroxide: The chloralkali industry

First access: Monday, 15 August 2011, 09:31 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:32 AM (40 days 7 h)

Report:

- Production of chlorine and sodium hydroxide: The chloralkali industry
  - Production of chlorine and sodium hydroxide - the chloralkali industry
    - **Status:** completed
    - **Total Time:** 00:00:03
  - The diaphragm cell
    - **Status:** completed
    - **Total Time:** 00:00:06
  - Membrane cell
    - **Status:** completed
    - **Total Time:** 00:00:07

Diploma-in-General-Science: Energy conversions

First access: Monday, 15 August 2011, 09:33 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:33 AM (40 days 7 h)

Report:

- Energy conversions
  - ✓ Energy conversions
    - **Status:** completed
    - **Total Time:** 00:00:11
  - ✓ Energy conversions in a coal-fired power station
    - **Status:** completed
    - **Total Time:** 00:00:18
  - ✓ Efficiency of energy conversions
    - **Status:** completed
    - **Total Time:** 00:00:19

Diploma-in-General-Science: Supplying and using energy

First access: Monday, 15 August 2011, 09:34 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:34 AM (40 days 7 h)

Report:

- Supplying and using energy
  - ✓ Supplying and using energy
    - **Status:** completed
    - **Total Time:** 00:00:22
  - ✓ The range of energy sources available to society
    - **Status:** completed
    - **Total Time:** 00:00:24
  - ✓ Non-renewable energy sources: fossil fuels
    - **Status:** completed
    - **Total Time:** 00:00:21
  - ✓ Non-renewable energy sources: nuclear energy - fission and fusion
    - **Status:** completed
    - **Total Time:** 00:00:19
  - ✓ Renewable energy sources
    - **Status:** completed
    - **Total Time:** 00:00:14
  - ✓ Renewable energy sources: solar energy
    - **Status:** completed
    - **Total Time:** 00:00:16
  - ✓ Renewable energy sources: water and wind
    - **Status:** completed
    - **Total Time:** 00:00:03
  - ✓ Renewable energy sources: biomass
    - **Status:** completed
    - **Total Time:** 00:00:03

Diploma-in-General-Science: The nitrogen cycle

First access: Monday, 15 August 2011, 09:38 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:38 AM (40 days 7 h)

Report:

- The nitrogen cycle
  - ✓ The nitrogen cycle
    - **Status:** completed
    - **Total Time:** 00:03:43
  - ✓ Nitrogenous fertilisers
    - **Status:** completed
    - **Total Time:** 00:03:47
  - ✓ Matter cycles
    - **Status:** completed
    - **Total Time:** 00:03:46

- The carbon cycle
  - **Status:** completed
  - **Total Time:** 00:03:47

Diploma-in-General-Science: Digestion

First access: Monday, 15 August 2011, 09:39 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:39 AM (40 days 7 h)

Report:

- Digestion
  - Digestion - the enzyme-catalysed hydrolysis of proteins, carbohydrates and fats
    - **Status:** completed
    - **Total Time:** 00:00:06
  - Protein - digestion
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Carbohydrates - digestion
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Lipid - digestion
    - **Status:** completed
    - **Total Time:** 00:00:10

Diploma-in-General-Science: Carbohydrates

First access: Monday, 15 August 2011, 09:40 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:40 AM (40 days 7 h)

Report:

- Carbohydrates
  - carbohydrates
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Photosynthesis
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Monosaccharides
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Disaccharides
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Polysaccharides (complex carbohydrates)
    - **Status:** completed
    - **Total Time:** 00:00:06
  - Hydrolysis of disaccharides
    - **Status:** completed
    - **Total Time:** 00:00:11
  - Hydrolysis of starch to glucose
    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: Proteins

First access: Monday, 15 August 2011, 09:41 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:43 AM (40 days 7 h)

Report:

- Proteins

- Proteins
  - **Status:** completed
  - **Total Time:** 00:00:05
- Amino acids
  - **Status:** completed
  - **Total Time:** 00:00:12
- Amino acids continued
  - **Status:** completed
  - **Total Time:** 00:00:10
- Acid based properties of amino acids
  - **Status:** completed
  - **Total Time:** 00:00:09
- Formation of proteins from amino acids
  - **Status:** completed
  - **Total Time:** 00:00:43
- Protein structure
  - **Status:** completed
  - **Total Time:** 00:00:44
- Denaturation
  - **Status:** completed
  - **Total Time:** 00:00:39
- Enzymes
  - **Status:** completed
  - **Total Time:** 00:00:36
- Enzymes continued
  - **Status:** completed
  - **Total Time:** 00:00:26

Diploma-in-General-Science: **Fats and vegetable oils**

First access: Monday, 15 August 2011, 09:44 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:44 AM (40 days 7 h)

Report:

- Fats and vegetable oils
- Fats and vegetable oils - triglycerides
  - **Status:** completed
  - **Total Time:** 00:00:10
- Fats and oils
  - **Status:** completed
  - **Total Time:** 00:00:14
- Hydroxy groups
  - **Status:** completed
  - **Total Time:** 00:00:16
- Glycerol
  - **Status:** completed
  - **Total Time:** 00:00:15
- Saturated and unsaturated fats
  - **Status:** completed
  - **Total Time:** 00:00:14

Diploma-in-General-Science: **The role of water**

First access: Monday, 15 August 2011, 09:45 AM (40 days 7 h)

Last access: Monday, 15 August 2011, 09:45 AM (40 days 7 h)

Report:

- The role of water
- The role of water
  - **Status:** completed
  - **Total Time:** 00:00:06

- Water continued
  - **Status:** completed
  - **Total Time:** 00:00:07
- Carbon dioxide, water and urea
  - **Status:** completed
  - **Total Time:** 00:00:07

Diploma-in-General-Science: **Food chemistry**

First access: Monday, 15 August 2011, 09:51 AM (40 days 7 h)

Last access: Saturday, 20 August 2011, 03:58 PM (35 days 1 h)

Report:

- Food chemistry
  - Food chemistry
    - **Status:** completed
    - **Total Time:** 00:00:01
  - Food energy
    - **Status:** completed
    - **Total Time:** 00:00:14
  - The purpose and key components of food
    - **Status:** completed
    - **Total Time:** 00:00:14
  - Components of food
    - **Status:** completed
    - **Total Time:** 00:00:14
  - Nutrients and nutrition
    - **Status:** completed
    - **Total Time:** 00:00:14
  - Nutrients and nutrition continued
    - **Status:** completed
    - **Total Time:** 00:00:10
  - The carbon compunds that comprise the major food groups
    - **Status:** completed
    - **Total Time:** 00:00:33
  - Respiration
    - **Status:** completed
    - **Total Time:** 00:00:31
  - The source of the energy in food
    - **Status:** completed
    - **Total Time:** 00:00:13

Diploma-in-General-Science: **Energy content of foods**

First access: Saturday, 20 August 2011, 03:59 PM (35 days 1 h)

Last access: Saturday, 20 August 2011, 04:00 PM (35 days 1 h)

Report:

- Energy content of foods
  - The relative energy content of foods
    - **Status:** completed
    - **Total Time:** 00:00:17
  - Glycogen and fat as energy reserves in the body
    - **Status:** completed
    - **Total Time:** 00:00:18
  - Glycogen continued
    - **Status:** completed
    - **Total Time:** 00:00:16

Diploma-in-General-Science: **The relative energy content of foods**

First access: Saturday, 20 August 2011, 04:01 PM (35 days 1 h)

Last access: Saturday, 20 August 2011, 04:01 PM (35 days 1 h)

Report:

- The relative energy content of foods
  - ✓ The relative energy content of foods video
    - **Status:** completed
    - **Total Time:** 00:00:40

Diploma-in-General-Science: **Calorimetry**

First access: Saturday, 20 August 2011, 04:03 PM (35 days 1 h)

Last access: Saturday, 20 August 2011, 04:05 PM (35 days 1 h)

Report:

- Calorimetry
  - ✓ Calorimetry - measuring heats of reaction
    - **Status:** completed
    - **Total Time:** 00:00:43
  - ✓ Components of a calorimeter
    - **Status:** completed
    - **Total Time:** 00:00:27
  - ✓ Calibrating a calorimeter
    - **Status:** completed
    - **Total Time:** 00:00:27
  - ✓ Calorimetry: determining the heat of reaction
    - **Status:** completed
    - **Total Time:** 00:00:15
  - ✓ Calorimetry - measuring heats of reaction: specific heat capacity
    - **Status:** completed
    - **Total Time:** 00:00:16

Diploma-in-General-Science: **Food additives**

First access: Saturday, 20 August 2011, 04:05 PM (35 days 1 h)

Last access: Saturday, 20 August 2011, 04:07 PM (35 days 1 h)

Report:

- Food additives
  - ✓ Food additives
    - **Status:** completed
    - **Total Time:** 00:00:04
  - ✓ Antioxidants
    - **Status:** completed
    - **Total Time:** 00:00:08
  - ✓ Emulsifiers
    - **Status:** completed
    - **Total Time:** 00:00:30

Diploma-in-General-Science: **The energy consumed in food production**

First access: Saturday, 20 August 2011, 04:07 PM (35 days 1 h)

Last access: Saturday, 20 August 2011, 04:07 PM (35 days 1 h)

Report:

- The energy consumed in food production
  - ✓ The energy consumed in food production video
    - **Status:** completed
    - **Total Time:** 00:00:24

Diploma-in-General-Science: **The denaturation of proteins**

First access: Saturday, 20 August 2011, 04:08 PM (35 days 1 h)

Last access: Saturday, 20 August 2011, 04:08 PM (35 days 1 h)

Report:

- The denaturation of proteins
- ✓ The denaturation of proteins video
  - **Status:** completed
  - **Total Time:** 00:00:17

Diploma-in-General-Science: **Introduction to electric systems**

First access: Saturday, 10 September 2011, 03:24 PM (14 days 1 h)

Last access: Saturday, 10 September 2011, 03:25 PM (14 days 1 h)

Report:

- Physics: Introduction to electric systems
- ✓ Current, charge, voltage
  - **Status:** completed
- ✓ Charge in coulombs
  - **Status:** completed
- ✓ Voltage
  - **Status:** completed
- ✓ Resistance
  - **Status:** completed
- ✓ Work done
  - **Status:** completed
- ✓ Power
  - **Status:** completed

Diploma-in-General-Science: **Circuits**

First access: Saturday, 10 September 2011, 03:27 PM (14 days 1 h)

Last access: Wednesday, 21 September 2011, 10:16 PM (2 days 19 h)

Report:

- Physics: Circuits
- ✓ The series circuit
  - **Status:** completed
- ✓ Parallel circuits
  - **Status:** completed
- ✓ Parallel circuits: worked example 1
  - **Status:** completed
- ✓ Parallel circuits: worked example 2
  - **Status:** completed
- ✓ AC circuits
  - **Status:** completed

Diploma-in-General-Science: **Electric systems, circuits**

First access: Wednesday, 21 September 2011, 10:17 PM (2 days 19 h)

Last access: Wednesday, 21 September 2011, 10:17 PM (2 days 19 h)

Report:

- Physics: Electric systems, circuits
- ✓ Calculations with series circuits

- **Status:** completed
- Series circuit: worked example
- **Status:** completed
- Calculations with parallel circuits
- **Status:** completed
- Parallel circuit: worked example
- **Status:** completed

Diploma-in-General-Science: Capacitors

First access: Wednesday, 21 September 2011, 10:18 PM (2 days 19 h)

Last access: Wednesday, 21 September 2011, 10:18 PM (2 days 19 h)

Report:

- Physics: Capacitors
  - Capacitors
    - **Status:** completed
    - Capacitance
    - **Status:** completed
    - The time constant
    - **Status:** completed
    - Discharging capacitors
    - **Status:** completed

Diploma-in-General-Science: Converting AC to DC

First access: Wednesday, 21 September 2011, 10:18 PM (2 days 19 h)

Last access: Wednesday, 21 September 2011, 10:19 PM (2 days 19 h)

Report:

- Physics: Converting AC to DC
  - Converting AC to DC: half-wave rectification
    - **Status:** completed
    - Converting AC electricity into DC electricity: smoothing
    - **Status:** completed

Diploma-in-General-Science: Transducers

First access: Wednesday, 21 September 2011, 10:19 PM (2 days 19 h)

Last access: Wednesday, 21 September 2011, 10:19 PM (2 days 19 h)

Report:

- Physics: Transducers
  - Transducers: light-dependent resistors, LDRs
    - **Status:** completed
    - Transducers: worked examples
    - **Status:** completed
    - Transducers: thermistors
    - **Status:** completed
    - Tranducers: light-emitting diodes, LEDs
    - **Status:** completed
    - Worked example: LEDs
    - **Status:** completed

Diploma-in-General-Science: Exploring sound

First access: Wednesday, 21 September 2011, 10:20 PM (2 days 19 h)

Last access: Wednesday, 21 September 2011, 10:29 PM (2 days 18 h)

Report:

- Physics: Exploring sound
  - Introduction to Sound
    - **Status:** completed
  - Wave nature of sound
    - **Status:** completed
  - Categories of waves
    - **Status:** completed
  - Transverse verses Longitudinal waves
    - **Status:** completed
  - Sound is a longitudinal wave
    - **Status:** completed
  - Creating sound waves
    - **Status:** completed
  - Representing sound waves
    - **Status:** completed
  - Period, frequency and pitch
    - **Status:** completed
  - Representing sound waves with displacement graphs
    - **Status:** completed

Diploma-in-General-Science: **Sound - Standing waves**

First access: Wednesday, 21 September 2011, 10:30 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:30 PM (2 days 18 h)

Report:

- Physics: Sound, standing waves
  - Standing waves
    - **Status:** completed
  - Standing waves in strings
    - **Status:** completed
  - Standing waves in air columns
    - **Status:** completed
  - Open-end air columns
    - **Status:** completed
  - Closed-end pipes
    - **Status:** completed

Diploma-in-General-Science: **The wave equation**

First access: Wednesday, 21 September 2011, 10:30 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:31 PM (2 days 18 h)

Report:

- Physics: The wave equation
  - Worked examples: the wave equation
    - **Status:** completed
  - The reflection, transmission and absorption of sound
    - **Status:** completed

Diploma-in-General-Science: **Sound diffraction**

First access: Wednesday, 21 September 2011, 10:31 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:31 PM (2 days 18 h)

Report:

- Physics: Sound diffraction
  - Diffraction
    - **Status:** completed
  - The superposition of waves
    - **Status:** completed
  - Diffraction and interference of sound waves from two sources
    - **Status:** completed

Diploma-in-General-Science: **Intensity of sound**

First access: Wednesday, 21 September 2011, 10:32 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:33 PM (2 days 18 h)

Report:

- Physics: The intensity of sound
  - Amplitude, loudness and intensity
    - **Status:** completed
  - Intensity versus distance from a source
    - **Status:** completed
  - Intensity and the decibel scale
    - **Status:** completed
  - The response of the ear to different frequencies
    - **Status:** completed
  - Acoustic power
    - **Status:** completed
  - Diffraction
    - **Status:** completed

Diploma-in-General-Science: **Speed of sound**

First access: Wednesday, 21 September 2011, 10:33 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:33 PM (2 days 18 h)

Report:

- Physics: The speed of sound
  - The speed of sound
    - **Status:** completed
  - Worked examples: the speed of sound
    - **Status:** completed
  - Example of the speed of sound
    - **Status:** completed
  - Activity - solid sound-carriers
    - **Status:** completed

Diploma-in-General-Science: **Motion: Normal reaction**

First access: Wednesday, 21 September 2011, 10:34 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:35 PM (2 days 18 h)

Report:

- Motion, normal reaction
  - Normal reaction
    - **Status:** completed
    - **Total Time:** 00:00:01

- Example showing normal reaction
  - **Status:** completed
  - **Total Time:** 00:00:02
- Normal reaction with two points of contact
  - **Status:** completed
  - **Total Time:** 00:00:01
- Normal reaction during rebound
  - **Status:** completed
  - **Total Time:** 00:00:02
- Deformation forces
  - **Status:** completed
  - **Total Time:** 00:00:05

Diploma-in-General-Science: **Motion: Force and acceleration**

First access: Wednesday, 21 September 2011, 10:35 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:37 PM (2 days 18 h)

Report:

- Force and acceleration
  - Net force
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Newton's Laws
    - **Status:** completed
    - **Total Time:** 00:00:05
  - Summary - forces and motion
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Friction
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Air resistance
    - **Status:** completed
    - **Total Time:** 00:00:14
  - Weight
    - **Status:** completed
    - **Total Time:** 00:00:14
  - Applying Newton's Laws
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Horizontal forces
    - **Status:** completed
    - **Total Time:** 00:00:08

Diploma-in-General-Science: **Motion: Collisions**

First access: Wednesday, 21 September 2011, 10:37 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:37 PM (2 days 18 h)

Report:

- Motion: collisions
  - Collisions - conservation of momentum and energy
    - **Status:** completed
    - **Total Time:** 00:00:03
  - The duration of a collision
    - **Status:** completed
    - **Total Time:** 00:00:04

Diploma-in-General-Science: **Motion: Constant and vertical circular motion**

First access: Wednesday, 21 September 2011, 10:38 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:39 PM (2 days 18 h)

Report:

- Constant and vertical circular motion
  - Constant and vertical circular motion
    - **Status:** completed
    - **Total Time:** 00:00:08
  - The centripetal force can be friction
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Vertical circular motion
    - **Status:** completed
    - **Total Time:** 00:00:16
  - Roller coaster example
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Car on a hump example
    - **Status:** completed
    - **Total Time:** 00:00:01
  - Calculations when only part of the motion is circular
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Roller coaster example
    - **Status:** completed
    - **Total Time:** 00:00:09

Diploma-in-General-Science: **Motion: Projectile motion**

First access: Wednesday, 21 September 2011, 10:40 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:40 PM (2 days 18 h)

Report:

- Projectile motion
  - Projectile motion without air resistance
    - **Status:** completed
    - **Total Time:** 00:00:06
  - Calculations with projectile motion
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Calculations with projectile motion
    - **Status:** completed
    - **Total Time:** 00:00:07
  - Projectile motion with and without air resistance
    - **Status:** completed
    - **Total Time:** 00:00:07
  - Projectile motion with air resistance
    - **Status:** completed
    - **Total Time:** 00:00:09
  - Terminal velocity
    - **Status:** completed
    - **Total Time:** 00:00:14

Diploma-in-General-Science: **Motion: Momentum and impulse**

First access: Wednesday, 21 September 2011, 10:41 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:41 PM (2 days 18 h)

Report:

- motion: momentum and impulse
  - Momentum

- **Status:** completed
- **Total Time:** 00:00:02

- Impulse

- **Status:** completed
- **Total Time:** 00:00:02

- Impulse, force and time

- **Status:** completed
- **Total Time:** 00:00:03

- Conservation of momentum

- **Status:** completed
- **Total Time:** 00:00:08

Diploma-in-General-Science: Motion: Work energy and power

First access: Wednesday, 21 September 2011, 10:41 PM (2 days 18 h)

Last access: Wednesday, 21 September 2011, 10:42 PM (2 days 18 h)

Report:

- Motion: work energy and power

- - Kinetic energy

- **Status:** completed
- **Total Time:** 00:00:02

- Gravitational potential energy

- **Status:** completed
- **Total Time:** 00:00:03

- Example calculation using gravitional potential energy

- **Status:** completed
- **Total Time:** 00:00:03

- Elastic potential energy

- **Status:** completed
- **Total Time:** 00:00:03

- Calculating elastic potential energy from graphs

- **Status:** completed
- **Total Time:** 00:00:02

- Work, energy and power

- **Status:** completed
- **Total Time:** 00:00:02

- Conservation of energy

- **Status:** completed
- **Total Time:** 00:00:02

- Conservation of energy in springs

- **Status:** completed
- **Total Time:** 00:00:03

- Work

- **Status:** completed
- **Total Time:** 00:00:03

- Power

- **Status:** completed
- **Total Time:** 00:00:06

Diploma-in-General-Science: Motion: Orbits

First access: Thursday, 22 September 2011, 07:38 PM (1 day 21 h)

Last access: Saturday, 24 September 2011, 04:51 PM (30 m 47 secs)

Report:

- Orbits

- - Orbits

- **Status:** completed
- **Total Time:** 00:00:03

- Circular and elliptical orbits

- **Status:** completed
- **Total Time:** 00:00:02

- Velocity of satellites

- **Status:** completed
- **Total Time:** 00:00:02

- Sample calculation: satellite speed

- **Status:** completed
- **Total Time:** 00:09:38

- Introducing Kepler's laws

- **Status:** completed
- **Total Time:** 00:00:27

- Challenge question: Kepler's law

- **Status:** completed
- **Total Time:** 00:00:02

- Acceleration of satellites

- **Status:** completed
- **Total Time:** 00:00:12

Diploma-in-General-Science: **Motion: Formulae for calculating motion in one and two dimensions**

First access: Saturday, 24 September 2011, 04:51 PM (30 m 25 secs)

Last access: Saturday, 24 September 2011, 04:52 PM (29 m 34 secs)

Report:

- Motion, formulae for calculating motion in one and two dimensions

  - Displacement and distance

    - **Status:** completed
    - **Total Time:** 00:00:07

  - Velocity and speed

    - **Status:** completed
    - **Total Time:** 00:00:01

  - Acceleration

    - **Status:** completed
    - **Total Time:** 00:00:03

  - Equations of motion for constant acceleration in one dimension

    - **Status:** completed
    - **Total Time:** 00:00:01

  - The gradient of a position-time graph

    - **Status:** completed
    - **Total Time:** 00:00:03

  - The gradient of a velocity-time graph

    - **Status:** completed
    - **Total Time:** 00:00:01

  - The area under an acceleration - time graph

    - **Status:** completed
    - **Total Time:** 00:00:02

  - Calculating motion in two dimensions

    - **Status:** completed
    - **Total Time:** 00:00:03

  - Calculation using acceleration

    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: **Introduction to gravity**

First access: Saturday, 24 September 2011, 04:52 PM (29 m 13 secs)

Last access: Saturday, 24 September 2011, 04:52 PM (29 m 13 secs)

Report:

- Introduction to gravity

  - Gravity

- **Status:** completed
- **Total Time:** 00:00:04

Diploma-in-General-Science: **Gravity: Weightlessness**

First access: Saturday, 24 September 2011, 04:53 PM (29 m)

Last access: Saturday, 24 September 2011, 04:53 PM (28 m 31 secs)

Report:

- Gravity: weightlessness
  - ✓ Weightlessness
    - **Status:** completed
    - **Total Time:** 00:00:01
  - ✓ Apparent weight
    - **Status:** completed
    - **Total Time:** 00:00:00
  - ✓ Calculating apparent weight
    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: **Newton's Law of Universal Gravitation**

First access: Saturday, 24 September 2011, 04:53 PM (28 m 14 secs)

Last access: Saturday, 24 September 2011, 04:54 PM (27 m 17 secs)

Report:

- Newton's Law of Universal Gratification
  - ✓ Gravitational force
    - **Status:** completed
    - **Total Time:** 00:00:00
  - ✓ The gravitational field
    - **Status:** completed
    - **Total Time:** 00:00:08
  - ✓ Gravity and weight
    - **Status:** completed
    - **Total Time:** 00:00:03
  - ✓ Challenge question on gravitational field strength
    - **Status:** completed
    - **Total Time:** 00:00:00
  - ✓ Acceleration due to gravity
    - **Status:** completed
    - **Total Time:** 00:00:29

Diploma-in-General-Science: **Energy transfers in space**

First access: Saturday, 24 September 2011, 04:55 PM (26 m 39 secs)

Last access: Saturday, 24 September 2011, 04:55 PM (26 m 15 secs)

Report:

- Energy transfers in space
  - ✓ Energy transfers in space
    - **Status:** completed
    - **Total Time:** 00:00:01
  - ✓ Graphical representation of energy transfers
    - **Status:** completed
    - **Total Time:** 00:00:16

Diploma-in-General-Science: **Magnets and magnetism**

First access: Saturday, 24 September 2011, 04:56 PM (26 m 2 secs)

Last access: Saturday, 24 September 2011, 04:57 PM (24 m 26 secs)

Report:

- Physics: Magnets and magnetism
  - Magnets and magnetic fields
    - **Status:** completed
  - Magnetic fields
    - **Status:** completed
  - Magnetic field of the earth
    - **Status:** completed
  - Currents and magnetism
    - **Status:** completed
  - Moving charges in magnetic fields
    - **Status:** completed
  - Forces on current-carrying wires
    - **Status:** completed
  - Electric motors
    - **Status:** completed
  - The DC motor and the split-ring commutator
    - **Status:** completed
  - AC motors
    - **Status:** completed
  - Electromagnetic induction
    - **Status:** completed
  - Generators
    - **Status:** completed

Diploma-in-General-Science: Structures

First access: Saturday, 24 September 2011, 04:58 PM (24 m 2 secs)

Last access: Saturday, 24 September 2011, 04:58 PM (23 m 12 secs)

Report:

- Structures
  - Compression and tension
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Torque
    - **Status:** completed
    - **Total Time:** 00:00:08
  - Torque when forces act at an angle
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Static equilibrium
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Rules for analysing structures
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Structures and Materials
    - **Status:** completed
    - **Total Time:** 00:00:06

Diploma-in-General-Science: Materials

First access: Saturday, 24 September 2011, 04:59 PM (22 m 56 secs)

Last access: Saturday, 24 September 2011, 05:00 PM (21 m 49 secs)

Report:

- Materials
  - Structures and materials
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Stress
    - **Status:** completed
    - **Total Time:** 00:00:06
  - Strength
    - **Status:** completed
    - **Total Time:** 00:00:04
  - Strain
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Young's modulus relates stress and strain
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Stress versus strain graphs
    - **Status:** completed
    - **Total Time:** 00:00:00
  - Strain energy per unit volume
    - **Status:** completed
    - **Total Time:** 00:00:02
  - Toughness
    - **Status:** completed
    - **Total Time:** 00:00:03

Diploma-in-General-Science: **Hooke's Law**

First access: Saturday, 24 September 2011, 05:00 PM (21 m 14 secs)

Last access: Saturday, 24 September 2011, 05:01 PM (21 m)

Report:

- Hooke's Law
  - Hooke's Law
    - **Status:** completed
    - **Total Time:** 00:00:23
  - Limitations of Hooke's Law
    - **Status:** completed
    - **Total Time:** 00:00:07

Diploma-in-General-Science: **The wave like nature of light**

First access: Saturday, 24 September 2011, 05:01 PM (20 m 40 secs)

Last access: Saturday, 24 September 2011, 05:03 PM (18 m 57 secs)

Report:

- The wave like nature of light
  - Ideas about light and matter
    - **Status:** completed
    - **Total Time:** 00:00:02
  - The wave equation for light
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Example calculation using the wave equation for light
    - **Status:** completed
    - **Total Time:** 00:00:03
  - Double slit interference
    - **Status:** completed
    - **Total Time:** 00:00:02
  - The diffraction of light

- **Status:** completed
- **Total Time:** 00:00:03

- Amount of diffraction

- **Status:** completed
- **Total Time:** 00:00:02

- Diffraction patterns

- **Status:** completed
- **Total Time:** 00:00:04

- Explanation of diffraction patterns

- **Status:** completed
- **Total Time:** 00:00:07

- Momentum of photons

- **Status:** completed
- **Total Time:** 00:00:09

- Wave/particle theory of light

- **Status:** completed
- **Total Time:** 00:00:14

- Matter waves

- **Status:** completed
- **Total Time:** 00:00:25

Diploma-in-General-Science: **The photoelectric effect**

First access: Saturday, 24 September 2011, 05:03 PM (18 m 45 secs)

Last access: Saturday, 24 September 2011, 05:05 PM (16 m 21 secs)

Report:

- The photoelectric effect

- The photoelectric effect experiment

- **Status:** completed
- **Total Time:** 00:00:01

- Results of the photoelectric effect experiment

- **Status:** completed
- **Total Time:** 00:00:03

- The photoelectric effect: stopping voltage

- **Status:** completed
- **Total Time:** 00:00:02

- The photoelectric effect: varying the frequency of the light

- **Status:** completed
- **Total Time:** 00:00:02

- The photoelectric effect: varying the frequency of the light

- **Status:** completed
- **Total Time:** 00:00:05

- Varying the intensity of the light

- **Status:** completed
- **Total Time:** 00:00:30

- Can the wave model explain the photoelectric effect

- **Status:** completed
- **Total Time:** 00:00:03

- Particle explanation of the photoelectric effect

- **Status:** completed
- **Total Time:** 00:00:03

- How photons explain the photoelectric effect

- **Status:** completed
- **Total Time:** 00:00:02

- How photons explain the photoelectric effect

- **Status:** completed
- **Total Time:** 00:00:03

- Different metals

- **Status:** completed
- **Total Time:** 00:00:42

Diploma-in-General-Science: **Emission and absorption spectra**

First access: Saturday, 24 September 2011, 05:06 PM (16 m 6 secs)

Last access: Saturday, 24 September 2011, 05:06 PM (15 m 40 secs)

Report:

- Emission and absorption spectra
- - Emission and absorption spectra
  - **Status:** completed
  - **Total Time:** 00:00:03
  - Electron energy levels
  - **Status:** completed
  - **Total Time:** 00:00:04
  - Absorption spectra
  - **Status:** completed
  - **Total Time:** 00:00:02
  - Emission spectra
  - **Status:** completed
  - **Total Time:** 00:00:06

Diploma-in-General-Science: **Electric fields and the electron**

First access: Saturday, 24 September 2011, 05:06 PM (15 m 15 secs)

Last access: Saturday, 24 September 2011, 05:07 PM (14 m 33 secs)

Report:

- Electric fields and the electron
- - Light and matter: electric fields and the electron
  - **Status:** completed
  - **Total Time:** 00:00:12
  - Electric fields and the electron
  - **Status:** completed
  - **Total Time:** 00:00:01
  - Electric fields and the electron
  - **Status:** completed
  - **Total Time:** 00:00:02
  - Electric fields and the electron: fields between charged plates
  - **Status:** completed
  - **Total Time:** 00:00:00
  - Electric force
  - **Status:** completed
  - **Total Time:** 00:00:02
  - Energy changes for electron moving between plates
  - **Status:** completed
  - **Total Time:** 00:00:03
  - Deflection of an electron beam
  - **Status:** completed
  - **Total Time:** 00:00:05

Diploma-in-General-Science: **Assessment**

First access: Sunday, 15 May 2011, 02:06 PM (132 days 3 h)

Last access: Sunday, 15 May 2011, 02:06 PM (132 days 3 h)

Report:

- Diploma in General Science Assessment
- - Diploma in General Science Assessment
  - **Status:** passed
  - **Score:** 90% (PASSED)
  - **Total Time:** 01:06:25

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