Statement of inquiry: To be a scientist means to gather evidence about similarity and differences in nature to understand how things are related Key and related concepts: Relationships, Evidence, Global Context: Identities and Relationships ATL Skills Assessed: Social, self management and thinking IB Learner Profile: Inquirers, thinkers, reflective Language developed: keywords for topic Reflection: Criterion B - Variables, Criterion A - socrative Summative Assessment; Criteria A,B and C Mid Term: 16th Oct—18th Oct Exploring materials and changes Statement of Inquiry: Science enables us to change the form of matter into useful materials that can make the Key and related concepts: Change, Form & Transformation Global Context: Fairness and development ATL Skills Assessed: Thinking, subject specific IB Learner Profile: Inquirers, knowledgeable Language Development: keywords for unit Reflection: Criterion B and Criterion D Summative Assessment: Criteria A and D

Subject Overview Introduction to Science



Year Group: 7

Subject: Science

6 weeks

(1 week to Assessments)

Exploring cells: structure and organization

10

Internal Assessment

Winter Holidays

11th Dec—2nd Jan

Jan

—19th J

Statement of Inquiry: By understanding the relationship between the necessities of life and the specialized forms and functions of living things, we can make decisions and take actions for healthier and more sustainable lifestyles

Key and related concepts: Relationships, Form and function

Global Context: Globalization and sustainability

ATL Skills: Communication, research

IB Learner Profile: risk taker

Summative Assessment : criteria B and C

Spring Term:2nd Jan—9th Feb

Reflection: criteria B and C

6 weeks

(Ramadan wb 11th Mar)

Exploring energy and efficiency

Statement of Inquiry: Students will understand that through controlling energy we can make changes happen that have an impact on the way people live now and in the future

Key and related concepts: Change and energy

Global Context: Globalisation and sustainability

ATL Skills Assessed: Research, self management

IB Learner Profile: communication, inquirers

Reflection: Criteria A

Summative Assessment: Criteria D

Where do we fit in the world?

Statement of Inquiry: We have learnt about our place in the systems that affect life on Earth through looking beyond into space and making models

Key and related concepts: systems, Environment and

Global Context: Orientation in space and time

ATL Skills Assessed: subject specific, self management

IB Learner Profile: knowledgeable, open minded

Reflection: criteria A

Summative Assessment: criteria A and D

Summer Assessment (Y7–13)TBC

Summer Term: 15th April—1st July

How can we study the living world?

Statement of Inquiry: Scientists have developed methods and tools to understand and maintain the interactions and that keep an ecosystem in balance

Key and related concepts: Systems, Balance and interac-

Global Context: Scientific and technical innovation

ATL Skills Assessed: self management, thinking

IB Learner Profile: open minded, caring, reflective

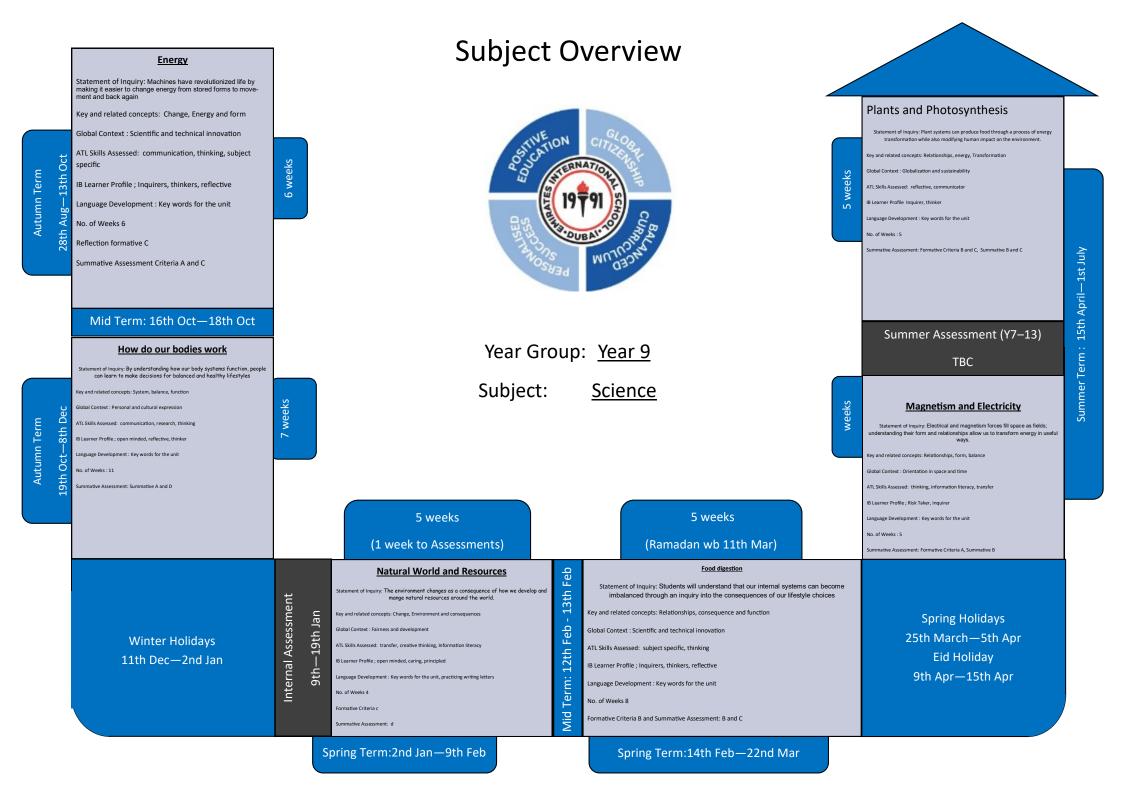
Reflection: criteria c

Summative Assessment · criteria D

Spring Holidays 25th March—5th Apr **Eid Holiday** 9th Apr-15th Apr

13th

Spring Term:14th Feb—22nd Mar



ATL Skills Assessed—Critical thinking; Organisation; Function pollution

Unit 1-Ecology

Statement of Inquiry—As a result of the choices that humans make, the environment has undergone and will continue to undergo change. Humans have the ability to understand the consequences of their actions and to act to restore balance in ecosystems and work towards a sustain-

Key and related concepts - systems, Balance, Function Global Context—Globalisation & Sustainability

Collaboration; Reflective; Creative Thinking & Communica-

IB Learner Profile—caring & balanced

Language Development—Basic & Advanced

No. of Weeks-9 weeks

Reflection (format/timeframe) — at the end of the Unit Summative Assessment (format/timeframe) - 5th to 6th week-Criterion A & B

Ecology will continue for 4 more weeks after the MID-

Mid Term: 16th Oct—18th Oct

Unit 2—Cells & The Nature & Variety of Living

Statement of Inquiry—Identities are determined by the relationships between different levels of organisation in the body that differ in complexity but share patterns and functions with all life on Earth.

Key and related concepts: Relationships ,Patterns,

Global Context—Identities & Relationships

ATL Skills Assessed—Critical thinking; Creative Thinking, Organisation; Transfer & Collaboration

IB Learner Profile—Thinkers

Language Development—Basic & Advanced

Reflection (format/timeframe) - at the end of the Unit Summative Assessment (format/timeframe) - Unit 1-Criterion A Summative; Criteria B and C-task on Air

> Winter Holidays 11th Dec—2nd Jan

Internal Assessment Jan -19th

Unit 2 finishes in Term 2 (4 weeks)

<u>Unit 3 — Membrane Transport & Biological Molecules</u> Statement of Inquiry - Systems in living organisms transfer energy and nutrients from the environment to cells, where they are used to maintain the balance of

5 weeks

(1 week to Assessments)

Key and related concepts: Systems, balance, energy

Global Context—Scientific & Technical Innovation ATL Skills Assessed—Critical thinking; Creative Thinking, Communication, Information Literacy, Transfer & Collaboration

Subject Overview



Year Group: Year 10

Subject: **Biology**

Mid Term:

5 weeks

(Ramadan wb 11th Mar)

<u>Unit 3 — Membrane Transport & Biological Molecules</u>

IB Learner Profile—Thinkers

Language Development—Basic & Advanced

No. of Weeks - 8 weeks

Reflection (format/timeframe) — at the end of the Unit Summative Assessment (format/timeframe) - Criterion D Task on Conservation—Cross-Curricular Link between Unit 1

& 2; Criterion A - Unit 2 Summative;

Unit 5 — Human Physiology respiration and

Systems in living organisms transfer energy from the environment to cells, where they are used to maintain the balance of life.

GC: personal and cultural expression

Key and related: systems, balance, energy

ATL: communication, social, self management

Learner profile: thinker, knowledgeable

Assessment: summative A and D

No of weeks: 4

Summer Assessment (Y7-13)

Summer Term: 15th April—1st July

TBC

Jnit 3 finishes in Term 2 (1st two weeks)

Unit 4 — Human Physiology digestion and enzymes Statement of Inquiry - Students will understand that our internal systems can become imbalanced through an inquiry into the consequences of our lifestyle choices. Key and related concepts: Systems, Balance & Consequences

Global Context—Personal & Cultural Expression

ATL: communication, self management, research

Learner profiles: inquirers, thinkers, reflective and risk

No of weeks: 7

Assessment : summative D

Spring Holidays 25th March—5th Apr **Eid Holiday** 9th Apr-15th Apr

Spring Term:2nd Jan—9th Feb

Spring Term:14th Feb—22nd Mar

Unit 1:What is matter?

Statement of Inquiry: When matter changes we observe similarities and differences that help us build models to explain underlying relationships.

Key and related concepts: Change, Models

ATL Skills:Communicaion,self management, creative thinking

Global context :Identities and relationships

ATL skills: communication, thinking, self manage-

IB Learner profile: Inquirers, open minded

Language development: Word games, keywords

No of weeks:6

Summative A and D

Mid Term: 16th Oct-18th Oct

Unit 2 How do we use matter?

Statement of Inquiry: Changing conditions for matter has allowed us to make attractive products that express who we are and where we are from.

Key and related concepts: change,conditions,model

ATL Skills:communication, subject specific skills

Global context :Personal and cultural expressions

IB Learner profile :Thinkers,communicators

Language development:

Sentence starters, research

Summative B and C

Winter Holidays 11th Dec—2nd Jan

Subject Overview



Year Group: year 10

Subject: Chemistry

5 weeks

(1 week to Assessments)

Unit 3:How do we map matter?

Statement of inquiry: Scientific and technological innovation has allowed us to identify patterns in the properties of chemical elements and so build systems to classify them.

Key and related concepts: Systems ,patterns

ATL skills: Communication, self management, crtitical thinking

Global context: Scientific and technical innovation

Ib learner profile: Reflective

Language development: Research, reading articles, keywords

Summative A and D

5 weeks

(Ramadan wb 11th Mar)

Unit 4:How do atoms bond?

Statement of inquiry: Chemical and physical properties provide evidence of the relationships both between and within atoms.

Key and related concepts: Relationships, evidence

ATL skills: Reasearch, subject specific skills

Global context: Identities and relationships

IB learner profile :Knowledgeable,thinkers

Language development: Word games, keywords, research

Summative A and D

Unit 6:What determines chemical change?

Statement of inquiry: Physical and chemical changes require the transfer of kinetic energy between particles of matter over time, affecting the space they

Key and related concepts:

Change, relationships, energy

ATL skills: Research, self management, communication

Global context: Orientation in space and time

IB learner profile :Inquirers,knowedgeable

Language development: Word games, keywords,research

Summative A and C

Summer Assessment (Y7-13)

Summer Term: 15th April—1st July

Unit 5:What are the impacts of chemical indus-

Statement of inquiry: The chemical industry has brought change that affects global interactions with positive and negative environmental impacts.

Key and related concepts: Change, interaction

ATL skills: Collaboration, reasearch, critical thinking

Global context: Globalization and sustainabilty

IB learner profile :Thinkers

Language development: Word games, keywords.research

Summative B and C

Spring Holidays 25th March—5th Apr **Eid Holiday** 9th Apr—15th Apr

Spring Term:2nd Jan—9th Feb

Spring Term:14th Feb—22nd Mar

Spring Term:14th Feb—22nd Mar

Spring Term:2nd Jan—9th Feb

Summative Assessment- Criterions A,B and C, D summative on assess

Year 11 Mocks

November (TBC)

11th Dec—2nd Jan

Subject Overview



Year

Group: <u>11</u>

Subject: Biology

(1 week to Assessments)

Unit 8- Homeostasis and coordination

Statement of Inquiry- Your body has different approaches to maintain the internal conditions

5 weeks

(Ramadan wb 11th Mar)

Key and related concept- change, balance, movement Global Context— Identity and relationships

ATL Skills Assessed- Critical thinking skills, communication

IB Learner Profile- principled, caring, knowledgeable, thinkers

Summative Assessment - Criterion A. R. C and D. summative on assessnren

No of weeks: 6

Spring Term:14th Feb—22nd March

Pre-DP program for year 11

E-assessment for year 11 commence

Summer Term: 15th April—1st July

Statement of Inquiry- Species change over time through interactions with their environment: the evolution of humans has impacted global

Key and related concept- change, environment, interactions

Global Context- Orientation is space and time

ATL Skills Assessed- Critical thinking skills, communication, research

IB Learner Profile- Reflective, communication, inquirers

Assessment- Formative options Criterion A, B, C and D and summa-

No of weeks: 5

Spring Holidays 25th March—5th Apr **Eid Holiday** 9th Apr—15th Apr

Winter Holidays

Spring Term:2nd Jan—9th Feb

5 weeks

Patterns in Inheritance cause organisms to transform & this is then evident in the offsprings produced.