



## Curriculum Night: 6<sup>TH</sup> Grade Science

Willows Preparatory School 2018-2019

Mrs. Sani

### *I.B. Learning Aims & Goals*

Students will participate in learning experiences that are aimed to:

- cultivate analytical, inquiring, flexible minds that pose questions, solve problems, construct explanations and judge arguments
- collaborate and communicate while performing investigations, evaluating evidence and reaching conclusions
- understand and appreciate science and its implications in living and non-living environments

### *I.B. Learning Objectives*

IB Learning Objectives are determined across four objective criterion in Science:

Objective A – Knowing and Understanding

Objective B – Inquiring and Designing

Objective C – Processing and Evaluating

Objective D – Reflecting on the Impact of Science

### *I.B. Grading Criteria*

Students will receive a local grade which is percentage based and letter referenced. This can be found in the student handbook.

Additionally, all IB objective criterion will be assessed at least once each trimester. The success in the objective criterion is measured on a 0-8 scale. Limited competency is graded 1-2, adequate 3-4, substantial 5-6 and excellent 7-8. Further detail regarding the grade descriptors is attached.

A cumulative score is calculated for each trimester using the criterion scores and this is referenced on a scale of 1-7. Further details are also attached.



The following is an outline of the units that will be covered throughout the each trimester. Underlying approaches for each unit involve independently and collaboratively investigating issues through research, observation, and experimentation.

### **Trimester 1 Physical Science (Chemistry)**

#### **Nature of Science**

What processes do scientists use when they perform scientific investigations?

#### **Foundations of Chemistry**

What is matter? What are physical and chemical properties of matter? What physical changes and chemical changes occur as matter goes from one state to another?

#### **Understanding the Atom**

What are atoms and what are they made of?

### **Trimester 2 Physical Science (Physics)**

#### **Motion and Forces**

What are some ways to describe motion?

#### **Newton's Laws of Motion**

How do forces change the motion of objects?

#### **Work and Simple Machines**

How do machines make doing work easier?

### **Trimester 3 Life Science (Physiology and Anatomy)and Earth Science**

#### **Cell Structure and Function**

What are living things, and how can they be classified? What is the makeup of a cell? And what is it's function?

#### **Human Body Systems**

What are systems of the human body and how do they rely on each other?

#### **Earth's Atmosphere**

How does Earth's atmosphere affect life on Earth?