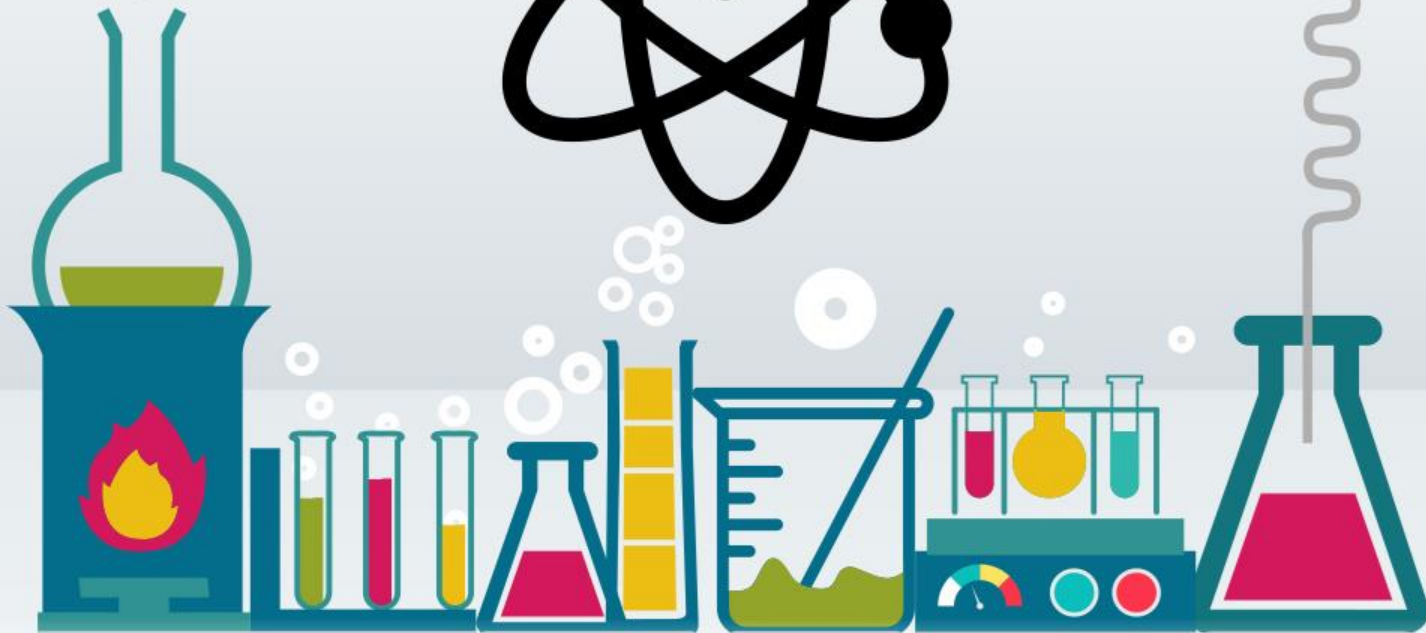
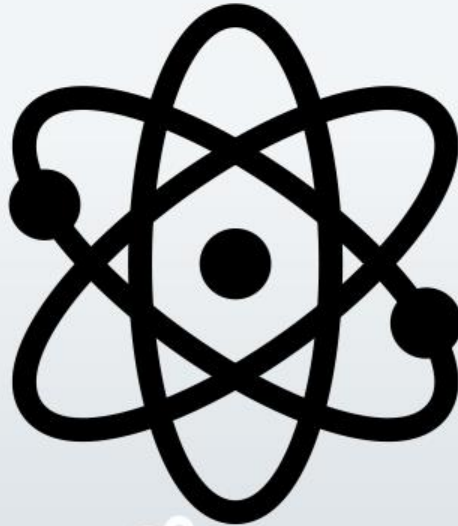


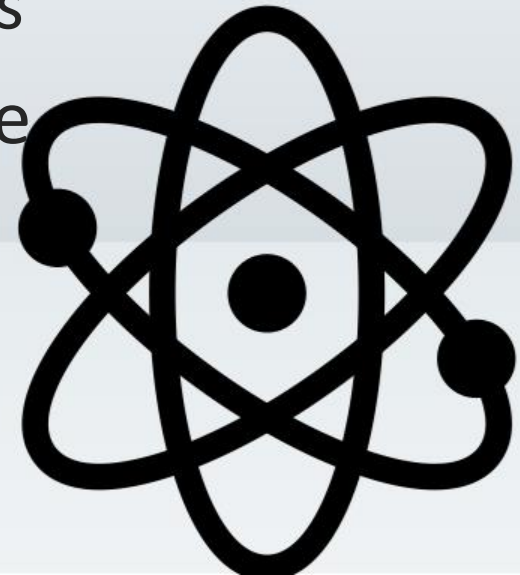
# Telok Kurau Primary School

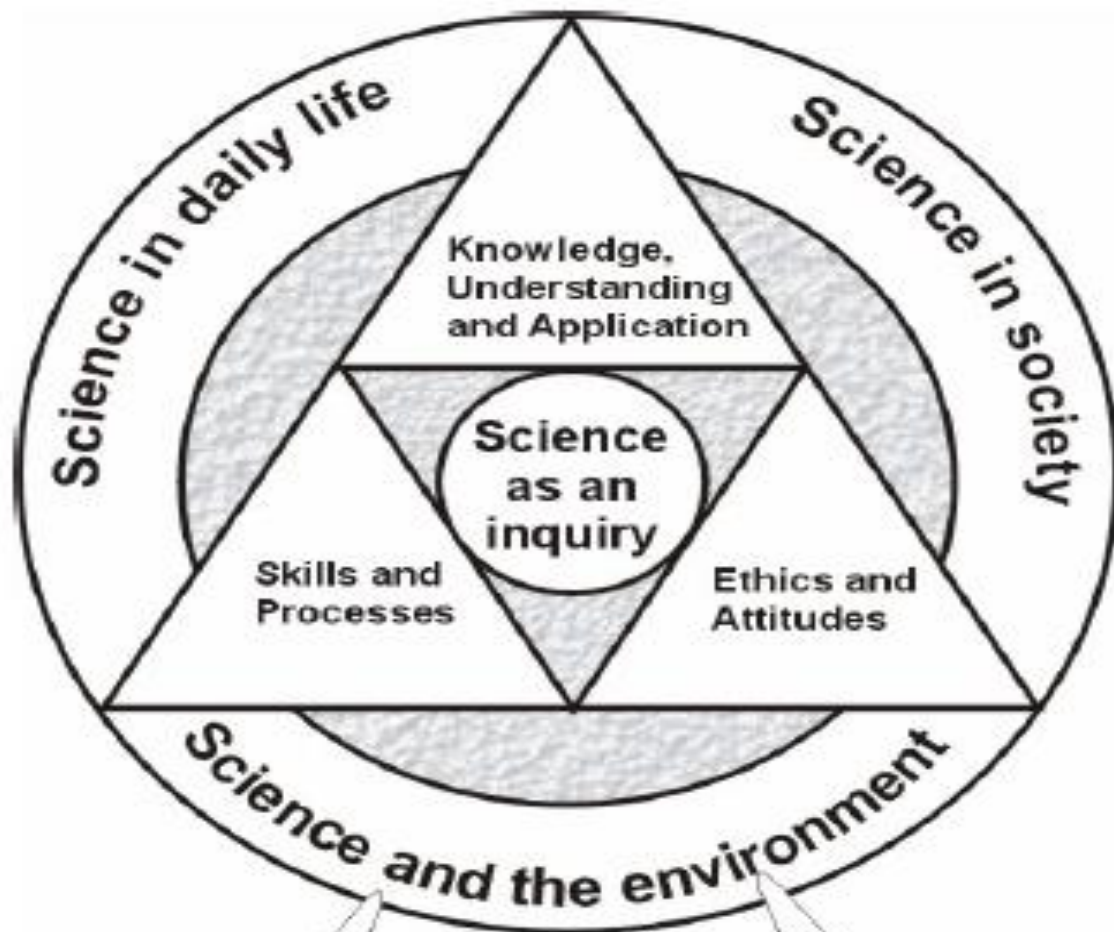
## PTM 2017 – P4 & P5



# Inquiry Based Learning

- Facilitates the learning process through questions
  - Interests
  - Abilities
  - Curiosities
  - Perspectives/experiences of the pupils
- Questions → Desire for answers to the questions → Exploration



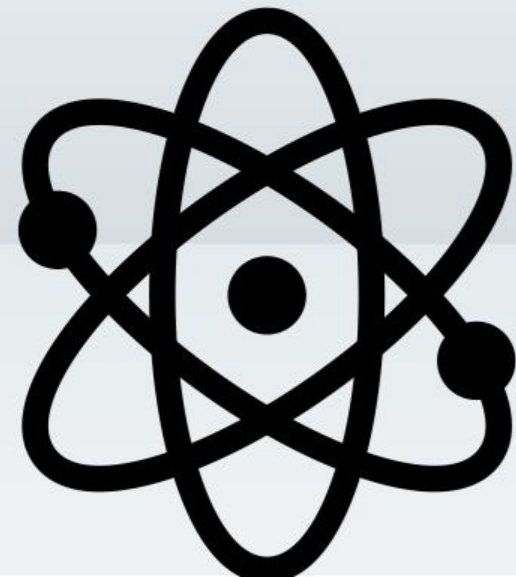


Student as the Inquirer

Teacher as the Leader of Inquiry



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# 2014 Primary Science Syllabus

Themes	* Lower Block	** Upper Block
Diversity	<ul style="list-style-type: none"> <li>Diversity of living and non-living things (General characteristics and classification)</li> <li>Diversity of materials</li> </ul>	
Cycles	<ul style="list-style-type: none"> <li>Cycles in plants and animals (Life cycles)</li> <li>Cycles in matter and water (Matter)</li> </ul>	<ul style="list-style-type: none"> <li>Cycles in plants and animals (Reproduction)</li> <li>Cycles in matter and water (Water)</li> </ul>
Systems	<ul style="list-style-type: none"> <li>Plant System (Plant parts and functions)</li> <li>Human System (Digestive system)</li> </ul>	<ul style="list-style-type: none"> <li>Plant System (Respiratory and circulatory systems)</li> <li>Human System (Respiratory and circulatory systems)</li> <li><u>Cell System</u></li> <li>Electrical System</li> </ul>
Interaction	<ul style="list-style-type: none"> <li>Interaction of forces (Magnets)</li> </ul>	<ul style="list-style-type: none"> <li>Interaction of forces (Frictional force, gravitational force, <u>force in springs</u>)</li> <li>Interaction within the environment</li> </ul>
Energy	<ul style="list-style-type: none"> <li>Energy Forms and Uses (Light and Heat)</li> </ul>	<ul style="list-style-type: none"> <li>Energy Forms and Uses (Photosynthesis)</li> <li><u>Energy Conversion</u></li> </ul>

## Note:

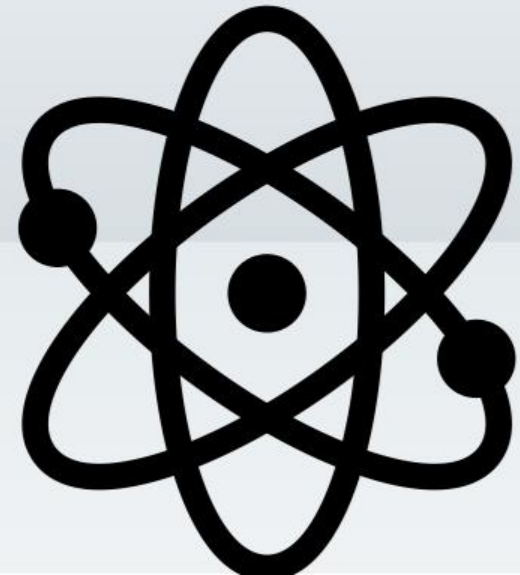
- \*Lower Block (Primary 3 and 4); \*\* Upper Block (Primary 5 and 6).
- Topics which are underlined are not required for the Foundation Science .

# Difference between Standard and Foundation Science

Themes	Syllabus Requirement	
	* Lower Block (Primary 3 and 4)	**Upper Block (Primary 5 and 6)
Diversity	Diversity of living and non-living things (General characteristics and classification) Diversity of materials	
Cycles	Cycles in plants and animals (Life cycles) Cycles in matter and water (Matter)	Cycles in plants and animals (Reproduction) Cycles in matter and water (Water)
Systems	Plant system (Plant parts and functions) Human system (Digestive system)	Plant system (Respiratory and circulatory systems) Human system (Respiratory and circulatory systems) <u>Cell system</u> Electrical system
Interactions	Interaction of forces (Magnets)	Interaction of forces (Frictional force, gravitational force, <u>force in springs</u> ) Interaction within the environment
Energy	Energy forms and uses (Light and heat)	Energy forms and uses (Photosynthesis) Energy conversion

# TKPS Science Curriculum

- Daily work
  - IBL
  - Vitamindz
  - Process skills worksheets
- Semestral assessments (SA1 & SA2)
- Science journal (e.g. concept maps, reflections, mini-experiments)
- Learning journey

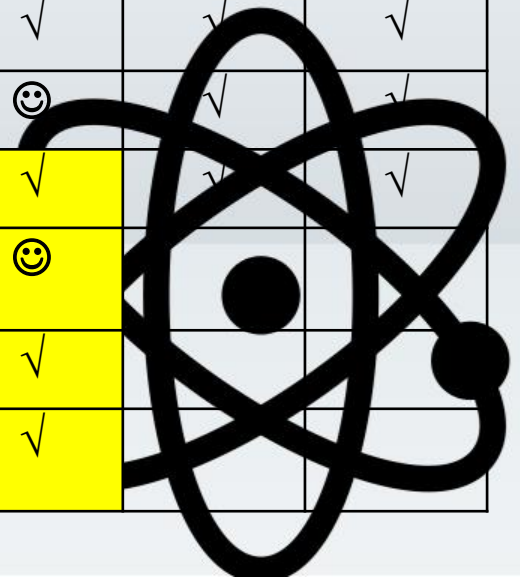


# Process Skills

Logical operations of thinking in investigations of Science

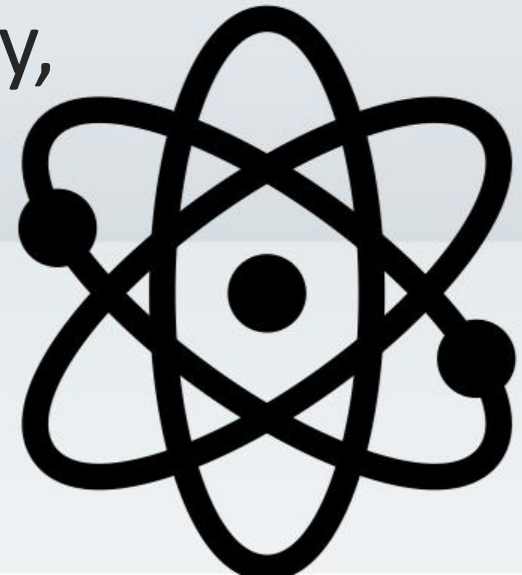
## Science Process Skills (Type of process skill)

Process Skill	P1	P2	P3	P4	P5	P6	P5 (FDN)	P6 (FDN)
Observing	√**	√^	☺	☺	☺	☺	☺	☺
Comparing	√*	√^	√	☺	☺	☺	☺	☺
Classifying	√*	√	√	☺	☺	☺	☺	☺
Using apparatus and equipment				√	☺	☺	☺	☺
Communicating				√	√	√	√	√
Inferring				√	√	√	√	√
Predicting					√	☺	√	√
Analysing					√	√	√	√
Generating possibilities					√	☺	√	√
Evaluating						√	√	√
Formulating hypothesis						√	√	√



# Practical - IBL

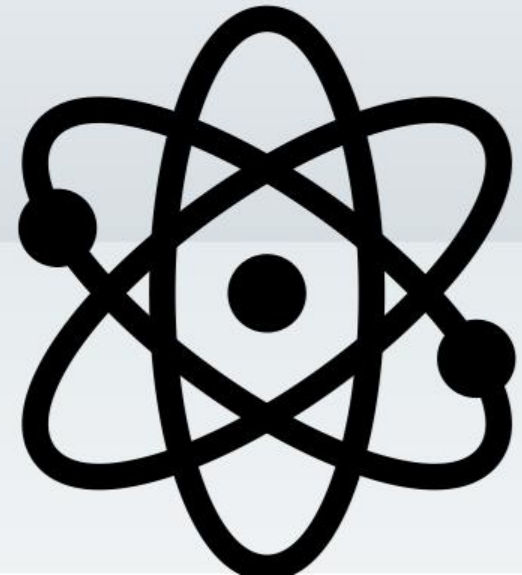
- Using apparatus and equipment
- Creative problem solving, decision-making and investigation
- Assesses pupils' knowledge (scientific concepts, application in context), process skills and attitudes (Responsibility, Resilience) simultaneously





# Highlights of Science Programmes

- **Building of Process Skills**
  - e.g. through experiments, Vitamindz or Process Skills Worksheets, Supplementary materials etc.
- **Talent Management Programme**
  - For high-ability pupils
- **Life Science Carnival**
- **Excite Science activities**
- **Learning Journey**





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