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| **SCIENCE K** (Planning KDU)  |
| **CORE COMPETENCIES** **COMMUNICATION**  | **CORE COMPETENCIES** **THINKING (CRITICAL/CREATIVE)** | **CORE COMPETENCIES****(PERSONAL/SOCIAL)** |
| **CURRICULAR COMPETENCIES** | **BIG IDEA (Understand…)** | **What do we want students to DO?****(Activities, lessons…)**  | **Content (& Elaborations)****(Know)** |
| **Questioning and predicting** *(\*Patterns are natural configurations, designs, arrangements or sequences. Many patterns indicate an underlying scientific principle or unifying idea. People identify patterns and look for relationships behind the patterns they find. They use this information to extend their understanding.**Key questions about patterns: What patterns do you see in plant life in your local environment? What weather patterns can you observe?** Demonstrate curiosity and a sense of wonder about the world
* Observe objects and events in familiar contexts
* Ask questions about familiar objects and events

**Planning & conducting*** Make exploratory observations using their senses
* Safely manipulate materials
* Make simple measurements using non-standard methods

**Processing and analyzing data and information*** Experience and interpret the local environment
* Recognize First Peoples stories (including oral and written narratives), songs, and art as ways to share knowledge
* Discuss observations
* Represent observations and ideas by drawing charts and simple pictographs

**Applying and innovating*** Take part in caring for self, family, classroom and school through personal approaches
* Transfer and apply learning to new situations
* Generate and introduce new or refined ideas when problem solving

**Communicating*** Share observations orally
* Express and reflect on personal experiences of place *(Place is any environment, locality, or context with which people interact to learn, create memory, reflect on history, connect with culture, and establish identity. The connection between people and place is foundational to First Peoples perspectives of the world. Key questions about place: What is place? What are some ways in which people experience place? How can you gain a sense of place in your local environment? How can you share your observations and ideas about living things in your local environment to help someone else learn about place?)*
 | Plants and animals have observable features. | *Questions to support inquiry with students:* * How do the different features of plants and animals help them meet their basic needs?
* What basic needs do plants and animals have in common?
* What are your basic needs?

*Key questions about patterns:* * What patterns do you see in plant life in your local environment?
 | **Core Focus: Biology*** basic needs *(include habitat — food, water, shelter, and space)* of plants and animals
* adaptations (may include structural features or behaviours that allow organisms to survive) of local plants (features may include roots, stems, leaves, flowers, seeds) and animals (*features may include shape, size, feet, teeth, body covering, eyes, ears)*
* local First Peoples uses *(First Peoples practice and knowledge of plant and animal use (e.g., local berries or food, plants and animals, conservation of resources))*  of plants and animals
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| **Evidence of Experience (Show)** |
| **BIG IDEA (Understand…)** | **What do we want students to DO?****(Activities, lessons…)**  | **Content (& Elaborations)****(Know)** |
| Humans interact with matter every day through familiar materials. | *Questions to support inquiry with students:* * What is matter?
* How do you interact with matter?
* What qualities do different forms of matter have?

  | **Core Focus: Chemistry*** Properties *(colour, texture (smooth or rough), flexibility (bendable or stretchable), hardness, lustre (shiny or dull), absorbency, etc.)* of familiar materials *(fabric, wood, plastic, glass, metal/foil, sand, etc.)*
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| **Evidence of Experience (Show)** |
| **BIG IDEA (Understand…)** | **What do we want students to DO?****(Activities, lessons…)**  | **Content (& Elaborations)****(Know)** |
| The motion of objects depends on their properties. | *Questions to support inquiry with students:* * How can you make objects move?
* How does the shape or size of an object affect the object’s movement?
* How does the material the object is made of affect the object’s movement?
 | **Core Focus: Physics*** effects of pushes/pulls *(how things move (e.g., bounce, roll, slide)* on movement
* effects of size, shape, and materials on movement
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| **Evidence of Experience (Show)** |
| **BIG IDEA (Understand…)** | **What do we want students to DO?****(Activities, lessons…)**  | **Content (& Elaborations)****(Know)** |
| Daily and seasonal changes affect all living things. | *Questions to support inquiry with students:* * What daily and seasonal changes can you see or feel?
* How are plants and animals affected by daily and seasonal changes?

*Key questions about patterns:** What weather patterns can you observe?
 | **Core Focus: Earth & Space** * weather changes *(temperature: cold, hot, cool, warm; cloud cover: clear, cloudy, partly cloudy, foggy; precipitation: rain, snow, hail, freezing rain; wind: calm, breezy, windy)*
* seasonal changes *(seasons: spring, summer, fall, winter; plant life cycle)*
* Living things make changes *(*l*iving things may make physical and behavioural changes to survive in different conditions (e.g., migration, hibernation, etc.))*  to accommodate daily and seasonal cycles
* First Peoples knowledge of seasonal changes
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| **Evidence of Experience (Show)** |