Name:_____ Date:_____

Unit 2 – Plants for Food and Fibre

UNIT OVERVIEW

By studying plants for food and fibre, you will understand how we use plants and plant materials, what the consequences of doing so are. We will also be looking at how technology and needs are connected to our use of plants and the effect this has on plants and the environment.

Secondly, we will be looking at the life process and structures of plants and how these structures can be specialized to meet the needs of their local environment. You will also look at how the use of herbicides and pesticides can affect the yield of crops and effect the environment.

Finally we will be looking at identifying and interpreting relationships among human needs, technologies, environments, and the culture and use of living things as sources of food and fibre.

As you work this unit, you will need to provide evidence of your understanding of concepts that related to biological diversity. Use this table so keep track of your progress and where you have shown clear understanding.

Unit B: Plants for Food and Fibre

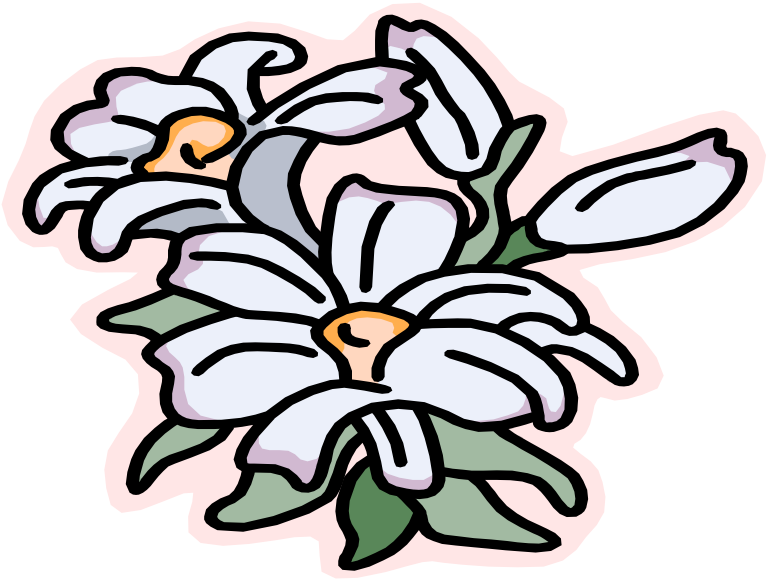
Name:_____ Date:_____

Science 7 Plants for Food and Fibre Knowledge Outcomes	Still Learning	On My Way	With Ease
1. Investigate plant uses; and identify links among needs, technologies, products and impacts.			
The big ideas/Enduring Understandings (Rocks)	**Include evidence.**		
Can I describe human uses of plants as sources of food and raw materials?			
Can I illustrate and explain the essential role of plants within the environment?			
Important to know and be able to do (Sand)	**Include evidence.**		
Can I investigate issues for maintaining productive plants within sustainable environments? *(e.g., investigate the long-term effects of irrigation practices or fertilizer use)*			
Worth being familiar with (Water)	**Include evidence.**		
Can I investigate changes in the distribution of natural and managed plant growth? *(agricultural, horticultural, forest and grassland environments)*			

Unit B: Plants for Food and Fibre

Name:_____ Date:_____

Science 7 Plants for Food and Fibre Knowledge Outcomes	Still Learning	On My Way	With Ease
2. Investigate life processes and structures of plants, and interpret related characteristics and needs of plants in a local environment.			
The big ideas/Enduring Understandings (Rocks)	**Include evidence.**		
Can I describe the structure and function of seed plants? *(e.g. roots, stem, leaves and flower)*			
Can I describe in general terms, the processes of:			
Diffusion			
Osmosis			
Movement of fluids			
Transpiration			
Photosynthesis			
Gas exchange			
Can I describe life cycles of seed plants *(germination, growth and reproduction)?*			
Important to know and be able to do (Sand)	**Include evidence.**		
Can I investigate and interpret plant adaptations? *(e.g. shallow spreading roots vs deep taproots; differences in flower form and in the timing of flower production)*			
Can I investigate and interpret the tolerance of plants for different growing conditions? *(e.g. drought, soil salinization, short growing seasons)*			



Unit B: Plants for Food and Fibre

Name:_____ Date:_____

Science 7 Plants for Food and Fibre Knowledge Outcomes	Still Learning	On My Way	With Ease
3. Analyze plant environments, and identify impacts of specific factors and controls.			
The big ideas/Enduring Understandings (Rocks)	**Include evidence.**		
Can I identify practices that may enhance or degrade soils?			
Can I describe methods used to increase plant yields? *(e.g. greenhouses, hydroponics)*			
Can I describe and interpret the consequences of using herbicides, pesticides and biological controls in agriculture and forestry?			
Important to know and be able to do (Sand)	**Include evidence.**		
Can I investigate and describe components of and characteristics of different soils? *(e.g., distinguish among clay, sand, organic content; particle sizes, compaction and moisture)*			

Science 7 Plants for Food and Fibre Knowledge Outcomes	Still Learning	On My Way	With Ease
4. Identify and interpret relationships among human needs, technologies, environments, and the culture and use of living things as sources of food and fibre.			
The big ideas/Enduring Understandings (Rocks)	**Include evidence.**		
Can I identify the effects of different practices on the sustainability of horticulture resources? *(e.g. chemical fertilizers, pesticides and organic farming)*			
Important to know and be able to do (Sand)	**Include evidence.**		
Can I investigate and identify intended and unintended consequences of environmental management practices? *(e.g. monocultural land use--susceptibility to insect infestation or loss of diversity)*			
Can I investigate and describe the development of plant varieties through selective breeding, and identify related needs and problems? *(e.g. problems of new plant varieties that require extensive fertilization)*			