Science
Grade 2
Session 2: Living Systems

May 2 2023

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Acknowledgment of Land and People

In the spirit of reconciliation, we want to acknowledge that this gathering is taking place on traditional lands across the province of Alberta, home to many diverse First Nations, Métis and Inuit peoples. We acknowledge that this land is a traditional meeting ground giving voice to its original peoples and the story of creation of this country in a way that history has forgotten.

AGENDA

01	**Backgrounder** • Phases of Learning
02	**Conceptual Overview** • Concept Progressions in Living Systems • Key Concepts (Surface Level Instructional Strategies and Activities)
03	**Skills and Procedures** • Key Skills and Procedures (Surface Level Activities)
04	**Understandings** • Relating Concepts & Deepening Understanding (Deep Level)
05	**Integrating Scientific Methods** • Skills and Concepts
06	**Integrating Computer Science** • Skills and Concepts
07	**Assessment** • Formative & Summative
08	**Resources**

Backgrounder

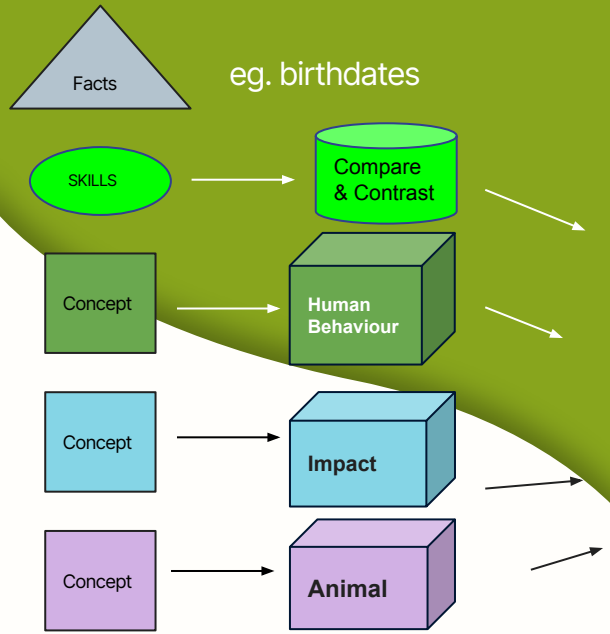
Photo by Geoffrey Baumbach on Unsplash

Phases of Learning

Hattie, Fisher & Frey: *Visible Learning for Literacy* (2016)

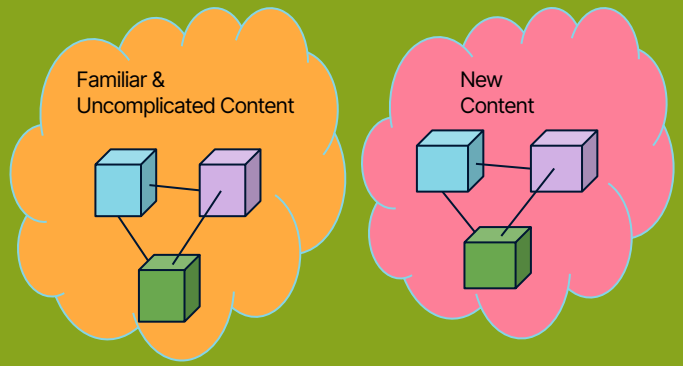
Surface

Students are first exposed to individual skills, concepts and their related knowledge.



Deep

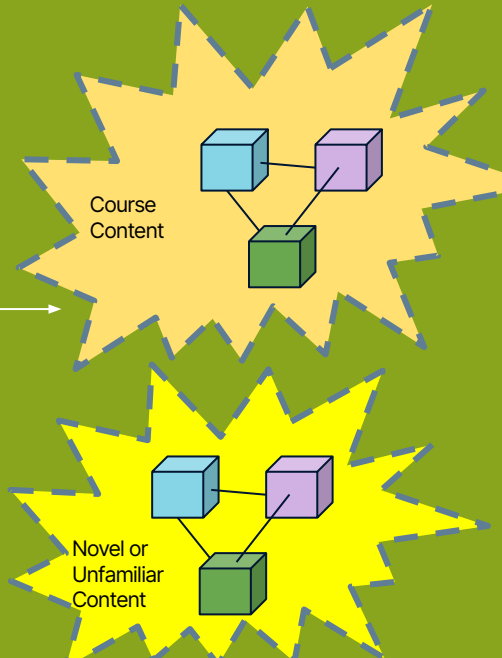
Making connections between concepts to create deeper understanding and applying skills/ procedures to new situations



Human behaviour can have an impact plants and animals.

Transfer

Applying understandings and skills to a variety of novel and unrelated contexts.



Conceptual Overview

Photo by Maros Misove on Unsplash

Concepts

What is a concept?

A concept is ...

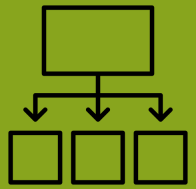
- an organizing idea of 1 -2 words;
- with distinct attributes;
- that are shared across multiple examples.

Photo by Fernando Andrade on Unsplash

Photo by charlesdeluvio on Unsplash

Orange: Photo by Dessy Dimcheva on Unsplash

Photo by Sami Ahmed on Unsplash



Created by Made by Made from the Noun Project

Concepts are the way we organize our world - they are like categories which we make to group things that have similar qualities.

Created by S fahrudin from the Noun Project

Concepts are like file folders. We name the file and store information in that file that have certain attributes (eg. “Science Activities,” “Assessments.” “Bills,” etc.)

Created by B. Agustín Amenábar Larraí from the Noun Project

When we play “I Spy,” we are essentially identifying **concepts** (eg. “something that is red,” “something that is heavy,” etc.)

What concepts do you “see” in this image?

Concepts

Guiding Question	How do plants and animals live and grow?	
Learning Outcome	**2LS1.1 Students investigate the growth and development of plants and animals and consider their relationship to humans.**	
Knowledge	Understanding	Skills & Procedures
A life cycle shows the different stages of life that a plant or an animal goes through. Life cycles can be represented in many ways, such as • illustrations • diagrams • models • stories	Plants and animals have observable patterns or stages in their development.	Represent the life cycles of various plants and animals. Discuss and compare life cycles of various plants and animals

A story is the telling of events in written, spoken, graphic, or other form to inform, entertain or convey a message.

Examples of stories can be autobiography, myth, legend, etc.

Concepts

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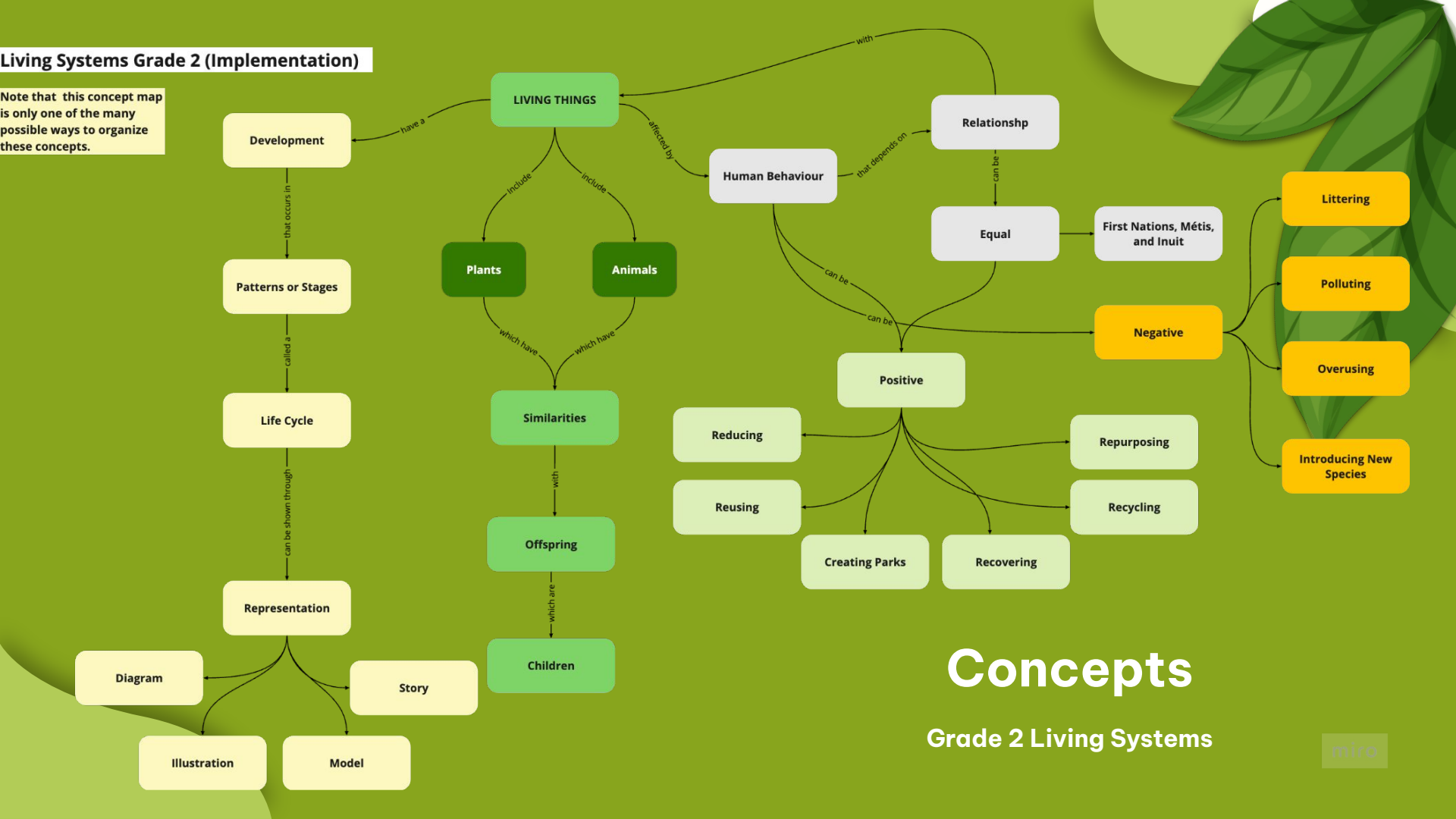
Living Systems Grade 2 (Implementation)
Note that this concept map is only one of the many possible ways to organize these concepts.
LIVING THINGS
have a
Development
that occurs in
Patterns or Stages
called a
Life Cycle
can be shown through
Representation
Diagram
Story
Illustration
Model
include
include
Plants
Animals
which have
which have
Similarities
with
Offspring
which are
Children
with
affected by
Human Behaviour
that depends on
Relationshp
can be
Equal
First Nations, Métis, and Inuit
can be
can be
Negative
Littering
Polluting
Overusing
Introducing New Species
Positive
Reducing
Repurposing
Reusing
Recycling
Creating Parks
Recovering
Concepts
Grade 2 Living Systems
miro

Living Systems Concept Progressions

Concept Progressions
Science Curriculum (March 2023)
Kindergarten to Grade 6

LIVING SYSTEMS

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
	Guiding Question: *How do plants and animals survive?*	**Guiding Question:** *How do plants and animals grow?*	**Guiding Question:** *How do plants and animals interact?*	**Guiding Question:** *In what ways do the structures of organisms support their survival?*	**Guiding Question:** *How are organisms supported by biological processes and systems?*	**Guiding Question:** *In what ways are ecosystems complex?*
	Learning Outcome: *Students investigate and examine needs of plants and animals.*	**Learning Outcome:** *Students investigate the growth and development of plants and animals and consider their relationship to humans.*	**Learning Outcome:** *Students analyze and describe how plants and animals interact with each other and with the environment.*	**Learning Outcome:** *Students analyze organisms and relate their external structures to functions.*	**Learning Outcome:** *Students investigate the internal systems of organisms and explain how they support biological processes.*	**Learning Outcome:** *Students investigate the characteristics and components of ecosystems.*

LIVING SYSTEMS

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
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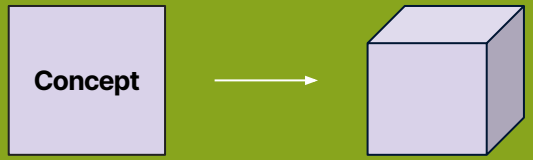
		KEY CONCEPTS			KEY CONCEPTS	
	Animals	**Animal**	**Carnivore | Herbivore | Omnivore**	**External Structure**	**Biological Systems**	**Components: Abiotic & Biotic**
	Dependence	**Behaviour: Human**	**Classification**	**Function**	**Organism: Complex**	**Diversity**
	Environment	**Development**	**Environmental Protection**	**Microorganism**	**Biological Processes**	**Ecosystem Types**
	Living Things	**Development: Stage**	**FNMI Knowledge of Plants and Animals**	**Organism**	**Biological Systems: Animals: Internal**	**Ecosystem & Diversity**
	Needs	**Effect: Positive, Negative**	**Food Chain**	**Sensory Structure**	**Digestive | Respiratory | Circulatory | Musculoskeletal**	**Ecosystem: Characteristics**
	Plants	**FNMI Relationship to Land**	**Interaction**	**Structure**	**Biological Systems: Animals: Transport Systems**	**Ecosystem: Components**
	Similarity	**Life Cycle**	**Stimuli**		**Xylem**	**Ecosystem: Greenhouse Gas Storage**
	Difference	**Offspring**	**Stimuli Response**		**Phloem**	**Ecosystem: Role: Plants**
	Humans	**Pattern**	**Survival**			**FNMI: Sacred Plants**
	Diversity	**Plant**	**FNMI: Respectful interaction with natural materials.**			**Interdependence - Relationships**
		Relationship	**FNMI: Plant and animal behaviours and patterns**			**Interdependence: Plants and Animals**
		Relationship to Land				**Organisms**
		Stages of Development				**Photosynthesis**
						Photosynthesis: Chlorophyll

Anchoring Concepts

- Human Behaviour
- Animal
- Plant
- Similarity
- Offspring
- Pattern/Cycle
- Stage of Development
- Relationship
- Cultural Practice
- Impact
- Cause-Effect

Surface Level

Instructional Approaches & Activities



Definition

Creating/Identifying examples and non-examples in new contexts

Surface Strategy

Card Sort

In a card sort, students are given a series of labelled cards with information on them (words, images, etc.)

Students and asked to organise and sort them into groups or categories that they think are appropriate.

EXAMPLES

CONCEPTS

Living and Non-Living Things

Plants

Animals

Review of Key Concepts from Grade 1

Lens:
Observation/Discussion

What is the **relationship** between the ‘things’ you placed in the “**Living**” column?

What is the **relationship** between the pictures of things you placed in the “**non-living**” column?

Review Card Sort - Living/NonLiving

Same Cards for Animal / Plant
Header Cards for Card Sort

Plants and **Animals** have **similarities** and **differences.** How can you describe or model this?

Why did you group them this way?

Which animals can you name in each group by name.


4
no legs
no movement
2
No Legs
move

Surface Strategy

Case Study

Case studies provide students with real-world situations that students can relate to and understand.

Depending on the questions or activity following the case study, this approach can be used at

- surface level
- deep level
- transfer level

Concept

Plants and Animals

Case Study approach

Also provides pre-assessment opportunities to determine the level of student understanding.

Consider reading the short story first and then have students proceed to sort what they believe Living vs Nonliving to be.

Author: Sheila Rivera
Lerner Publications

Surface Strategy

Frayer Model

The Frayer Model is a graphic organizer used to help students develop a understanding of new concepts.

The model includes four main components:

- Definition
- Characteristics
- Examples
- Non-examples

Concept

Human Behaviour

Human relationship with the land.

Photo by Gozha Net on Unsplash

IStock photo ID:1402640858

IStock photo ID:1466536524

Photo by Scott Goodwill on Unsplash

Photo by Teuku Boyhaqie on iStock

Human relationship with land can be both positive and negative.

Look at the pictures. Which are positive (respectful) uses of the land? Is there evidence that there are negative uses of the land (environmental destruction)?

Walk around your school yard or surrounding area. Do you see any positive (respectful) uses of the land? Any negative effects on the land?

Use a Frayer Model to draw a positive and negative example.

Frayer Model Template

Surface Strategy

Concept Attainment

A concept attainment strategy is similar to a card sort in that students are looking for patterns or similarities in the information that is presented

The difference is that the teacher pre-arranges the examples into groups of examples of the concept, and non-examples.

Examples and non-examples are presented one at a time as the attributes of the concept becomes apparent. Using a **Frayer Model** after a concept attainment activity helps reinforce the concepts.

Concept

Relationship

Cause & Effect & Impact

Dependence

Similarity & Difference

Conclusion

Analysis

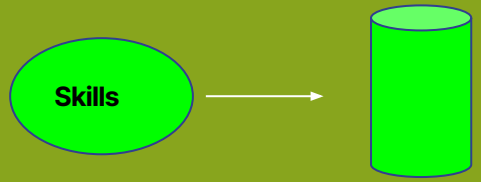
Criteria

Skills & Procedures

Photo by Lukasz Szmigiel on Unsplash

Surface Level

Instructional Approaches & Activities



Knowing the steps/procedures.

Performing the steps/procedures.

Skills and Procedures

2LS1.1: **Discuss** ways to respect plants and animals while interacting in various environments.
2LS1.1: **Explain** positive and negative impacts of human behaviour on plants and animals.
2LS1.2: **Identify similarities** between offspring and their parents.
2LS1.3: **Represent** the life cycles of various plants and animals.
2LS1.3: **Discuss** and **compare** (**similarities and differences)** life cycles of various plants and animals.
2LS1.4: **Discuss** how humans might interact with land, plants, and animals if they see land, plants, and animals as equals.
2LS1.4: **Identify ways (provide examples)** in which people show care for land, plants, and animals through cultural practices.

Living Systems

Compare & Contrast

Represent

Explain

Discuss

Consider other contexts these skills can be introduced and practiced.

- Art?
- English Language Arts and Literature?
- Math
- Physical Education and Wellness?
- Social Studies
- Resolving Conflicts?

Skill-Related Concepts

Skill	Concept
Compare & Contrast	Similarity & Difference
Represent	Representation
Explain	Explanation
Discuss	Discussion

Surface Strategy

Direct Teaching of Skills Strategy

In the direct teaching of skills strategy, the skill or procedure is explicitly taught using. The strategy involves the following:

- breaking a skill or procedure into its steps
- explaining the steps to the students
- demonstrating the steps to the students
- providing guided practice

Skill & Procedure

[Compare and Contrast]

What do living things need to stay alive?

Surface level - facts about living things

Story
What's Alive / Living vs Non-Living
https://www.youtube.com/watch?v=OkmR6tURgQA

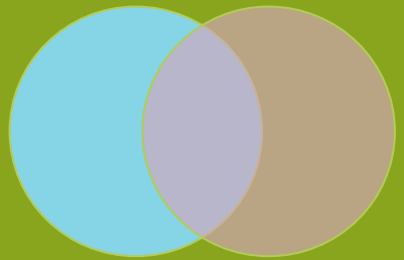
Living or Non-Living Read Aloud
https://www.youtube.com/watch?v=TjwkFSFa0AI

Surface Strategy

Venn Diagram Compare & Contrast:

A Venn diagram consists of overlapping circles, each circle representing a different set or different item

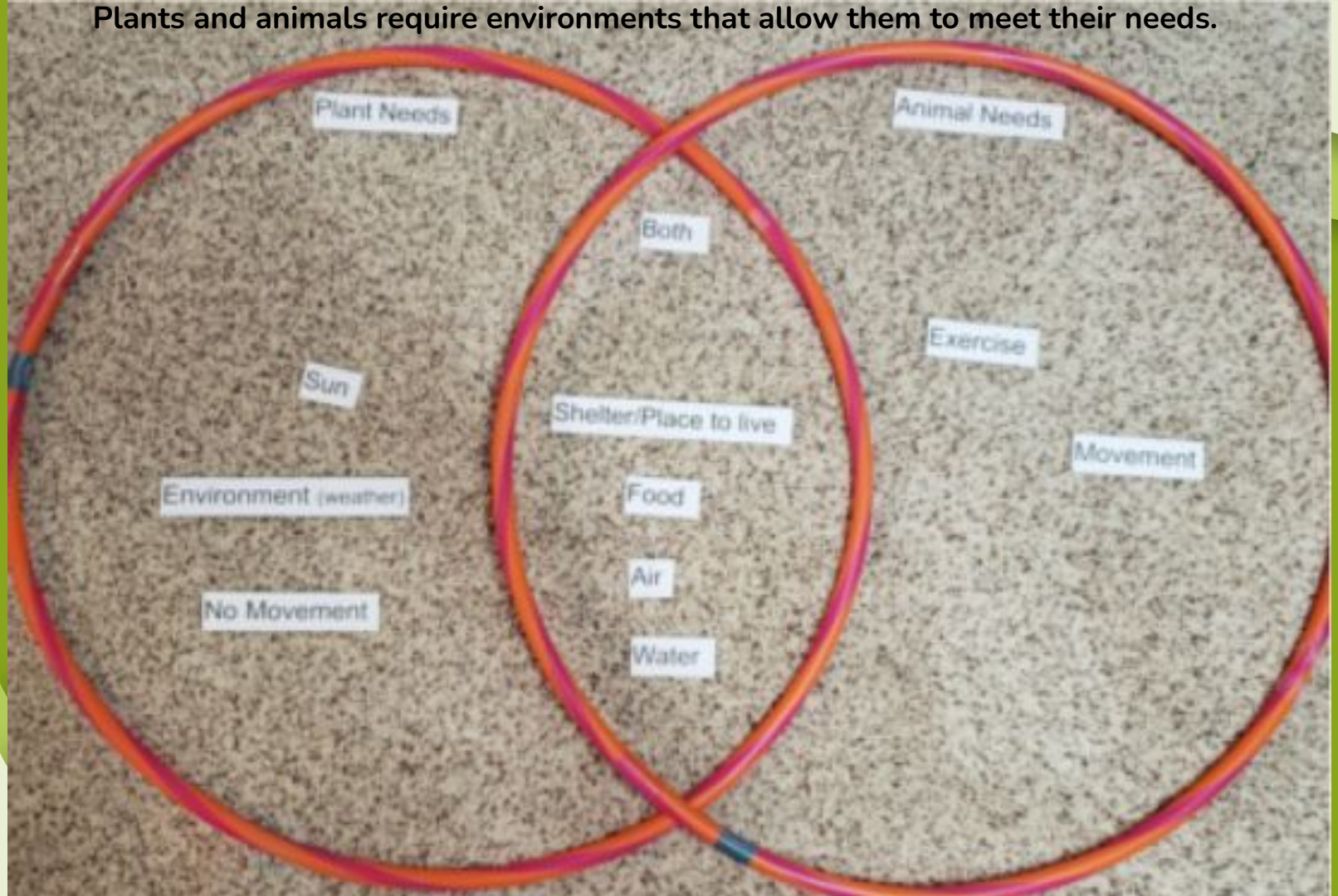
The shared area (overlapping section) are the elements that belong to both sets or items (similarities) The area not overlapping are difference.



Skill & Procedure

Compare & Contrast

Plants and animals require environments that allow them to meet their needs.



Compare and Contrast

Similarities/ Differences

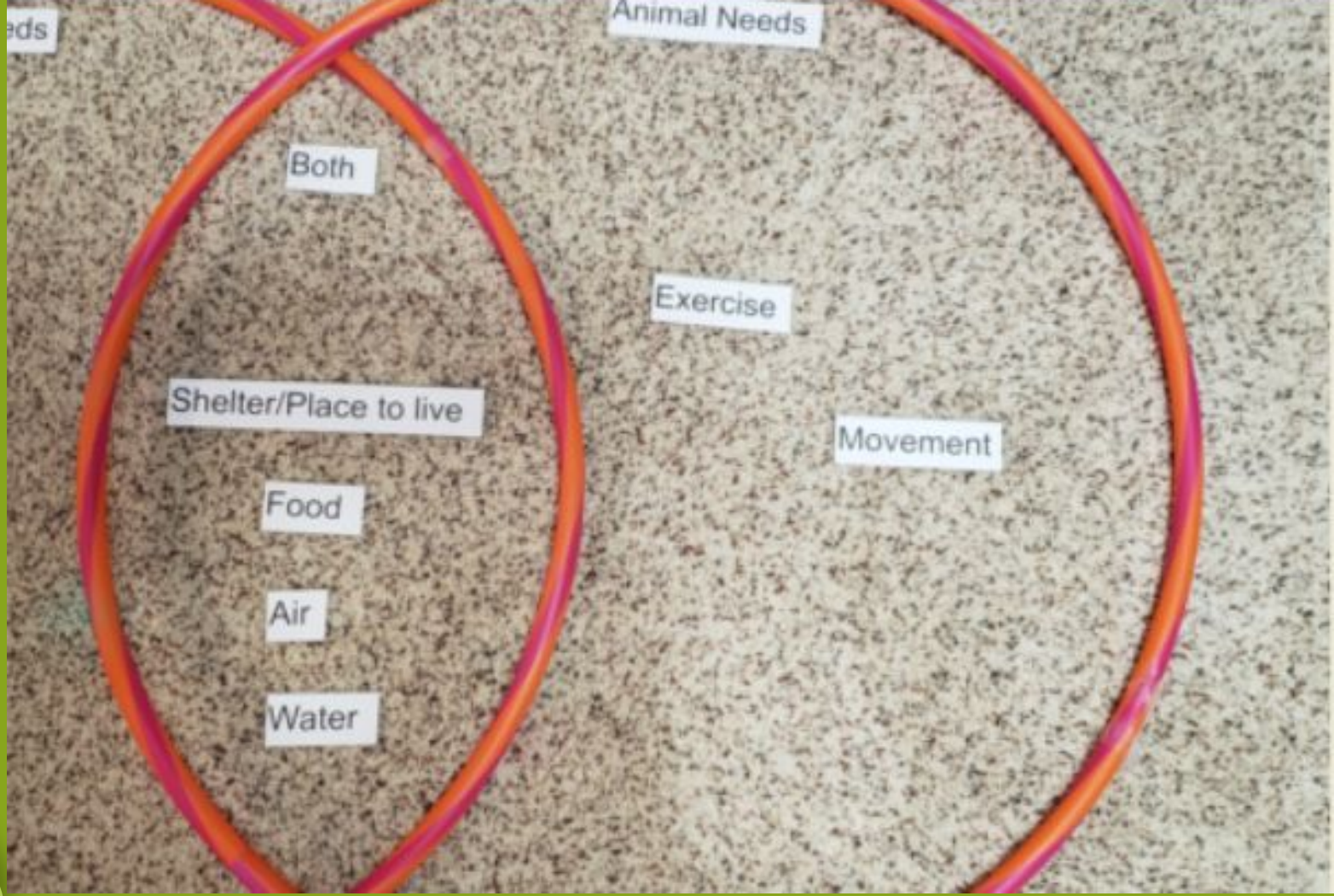
What is a '**need**'?

What are **basic needs** for ALL **living things**?

Header Cards

How do animals get food?

Movement is likely to come up in the discussion.
Have students take the plant and animal cards and sort them on how each moves.

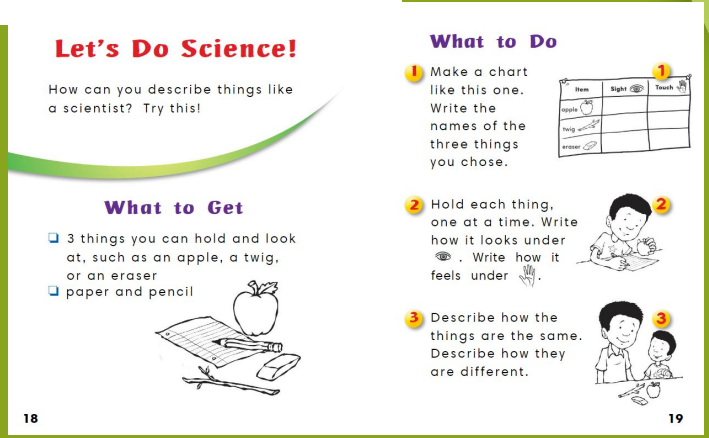


Can human interaction with the environment be both positive and negative? Can you think of an example?

Text

Descriptive and Comparative Language

Suggested activity - tied to sample senses

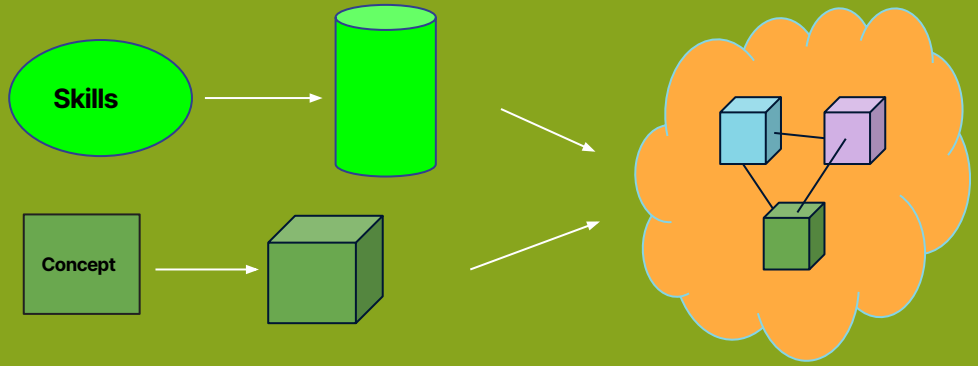


Understandings

Photo by Jonah Brown on Unsplash

Deep Level

Instructional Approaches & Activities



Create relationships between **concepts** (**build understandings**) and test them in different **contexts** using different **skills.**

Surface

Deep

Understandings

2LS1.1: **Plants** and **animals** can be affected by **human behaviour.**

2LS1.2: **Plants** and **animals** share **similarities** with their **offspring.**

2LS1.3: **Plants** and **animals** have **observable patterns** or **stages** in their **development.**

2LS1.4: The ways in which **individuals or groups** relate to **land**, **plants**, and **animals** can influence **cultural practices.** **(**The **relationship** that individuals or groups have with **land**, **plants**, and **animals can influence their cultural practices.)**

Deep Strategy

Making Concept Maps

Concept maps are graphic organizers that connect concepts together with lines.

The concept map demonstrate a logical and meaningful relationship between those concepts.

What is the relationship between plants, animals and human behaviour?

Littering

Plant

Positive

Impact

Human Behaviour

Animal

Recycling

Negative


Human Behaviour
can be
can be
Positve
can have
Negative
example
example
Recycling
Impact
Littering
on
on
Plants
Animals

Deep Strategy

Discussing

Discuss means to explore and examine a topic or issue by

- ***talking*** *about a topic or issue with others, exchanging ideas and opinions in a collaborative and respectful manner*
- providing a detailed and thorough analysis or examination of a particular topic or issue.

Discussion Checklist

(Some) Discussion Formats

Gallery Walk (Chat Stations)	Snowball Discussion	Conver-Stations	Concentric Circles
Pinwheel Discussion	Think-Pair-Share	Circle of Viewpoints	Fishbowl
4 Corners	Spectrum Sort	Silent Discussions (eg. Mentimeter, Padlet)	See-Think-Wonder

Deep Strategy

Representing

Representing means to effectively communicate one’s understanding of a particular subject, concept, topic to understanding to others, whether through writing, speaking, or some other form of expression.

(Some) Representation Ideas

Concept Map	Infographic	Mind Map	Skit
Comic Strip	Podcast	Poem/Song	Dance
Diagram	Charts & Tables	Gif Animation	Model
Infomercial	Mash-Up	News Report	Puppet Show
Role Play	Board Game	Kahoot!	Diorama

At the surface level, provide students with exemplars, a checklist, and guided practice with a representation format.

2LS1.1: Understanding

Plants and **animals** can be affected by **human behaviour.**

How does human behaviour affect plants and animals on earth?

Surface level - facts about living things

How is human interaction positively represented in the video? Negatively? How can humans address the negative influences?

Have you seen this symbol?

Discussion linking the books and videos to moving into 4 R's

The 4 - R's

Reducing

Reusing

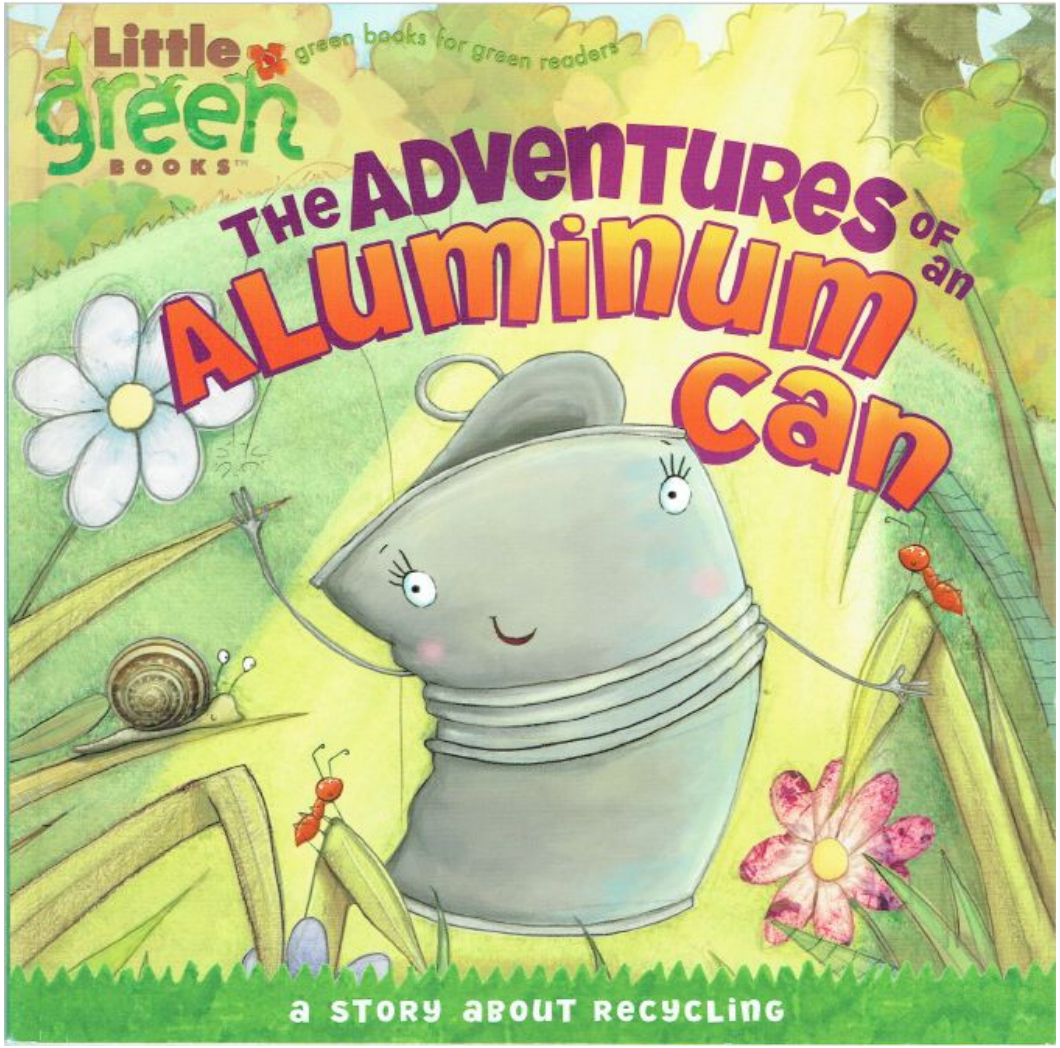
How to Take Care of the Environment?

How to Recycle and Take Care of the Environment

Recycling

Repurposing

Sources of images



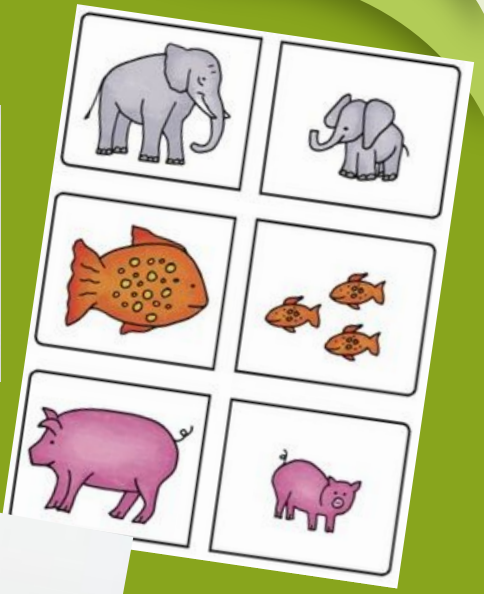
Could lead to a culminating project - pick two ways you will help keep the earth safe?

Author: Alison Inches
Simon and Schuster Publishing

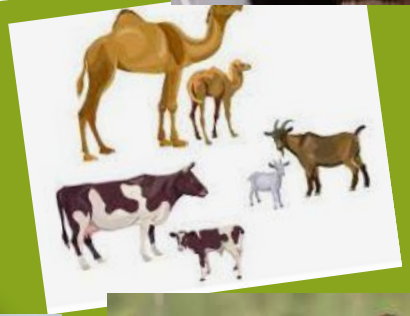
1LS1.2: Understanding

Plants and **animals** share **similarities** with their **offspring.**

What do you think “offspring” means?



- 1 minute think
- Shoulder partner discuss
- Agree on meaning
- Any other words that you think help us remember “***offspring***”



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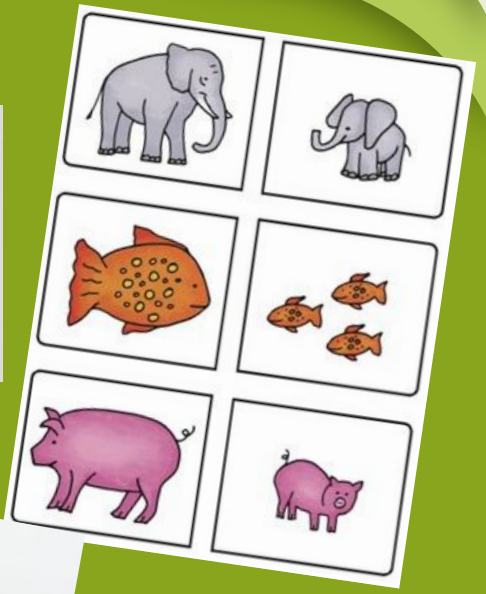
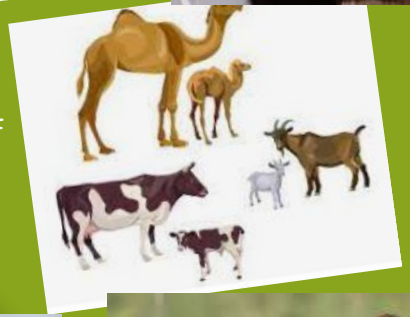
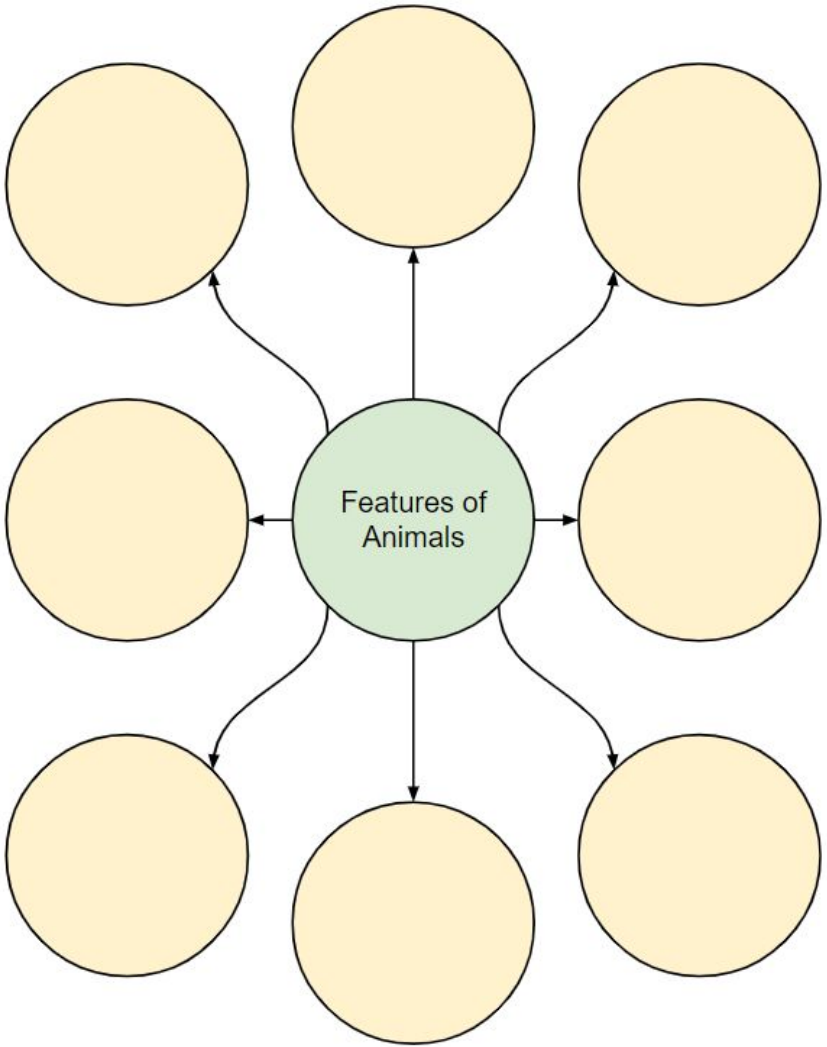
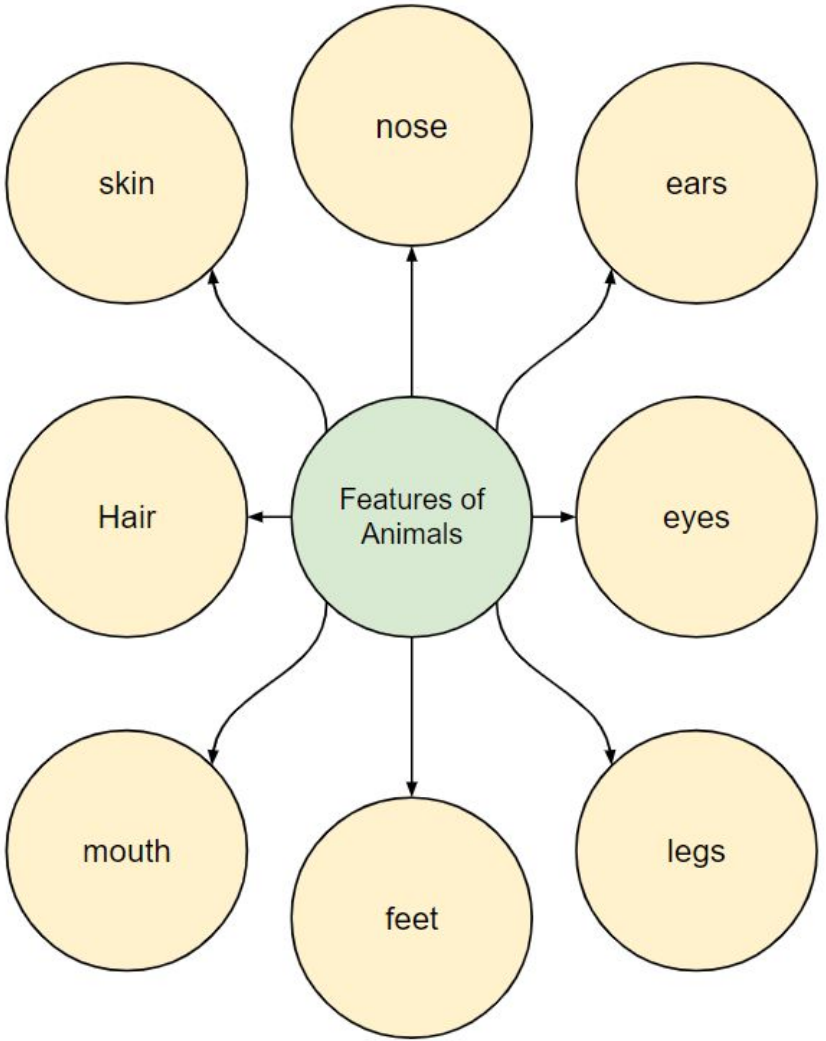


What do you notice about the ***features*** of the parents and their *offspring*?



What features do you have that are similar to your parents? *** Could be sensitive


Features of Animals


skin
nose
ears
Hair
Features of Animals
eyes
mouth
feet
legs

Animal Features

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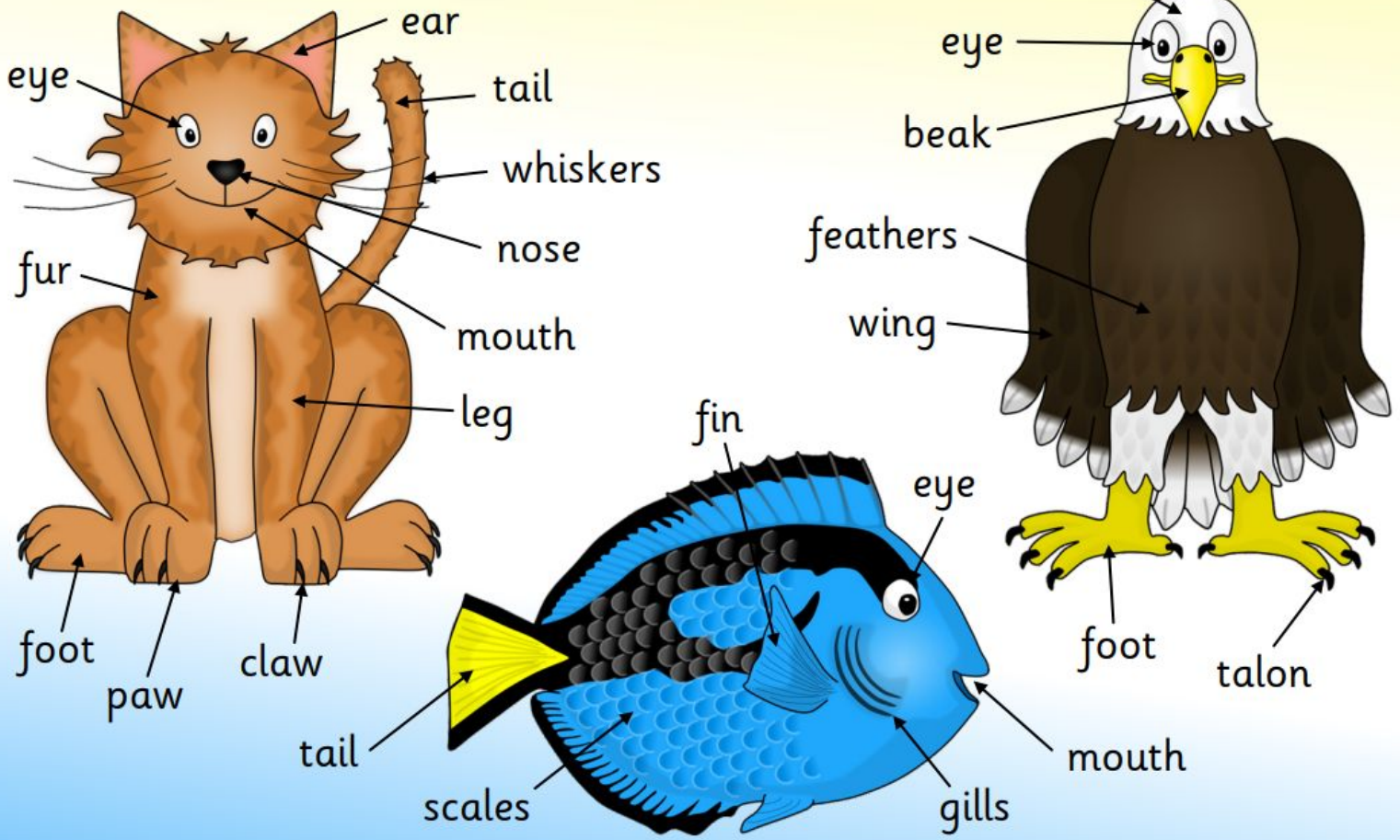
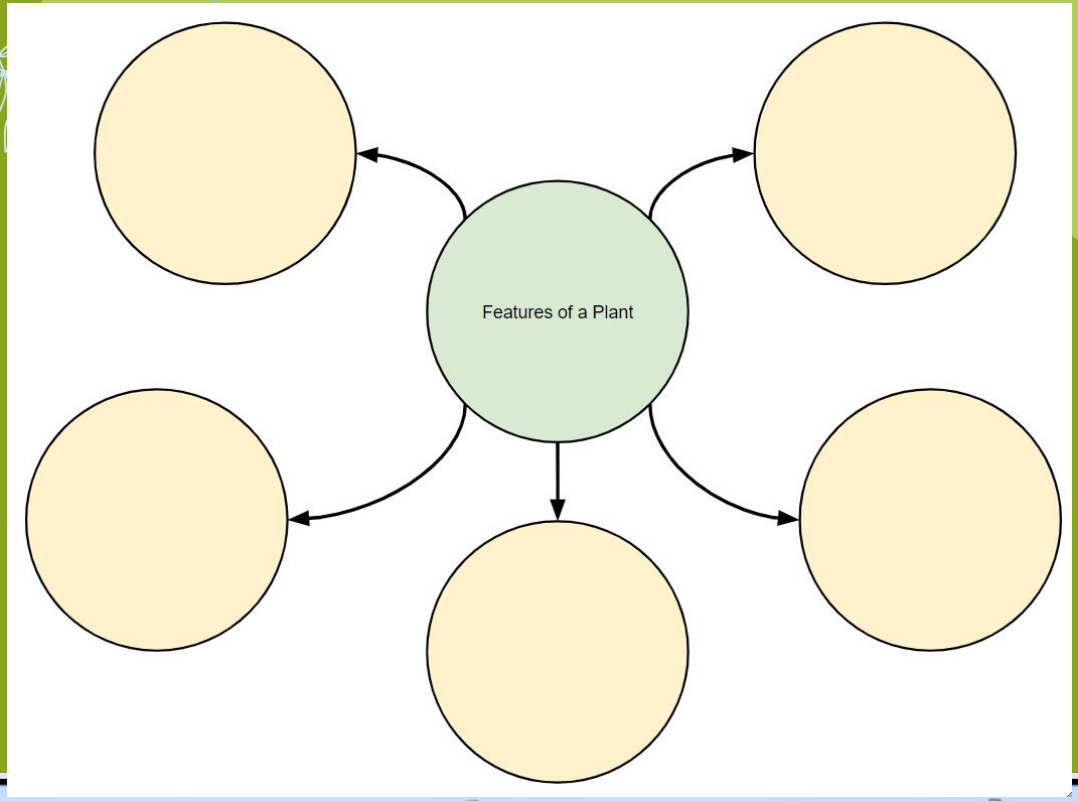
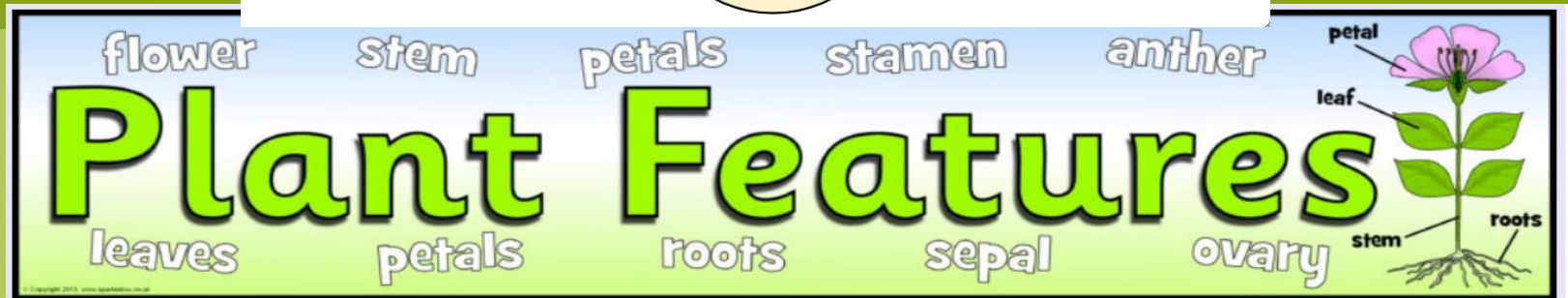


Where might some of these features belong on our chart?

Source:


Features of a Plant


flower
stem
petals
stamen
anther
Plant Features
leaves
petals
roots
sepal
ovary
petal
leaf
stem
roots

What features do you have in common with your parents? A relative?

Identify and explain the common features through a representation of your choice.

Note: Know your students!

How do we obtain features like our parents?
What are Life Cycles?

Lens: Representation & Comparison

Circle of life

Walt Disney Records: The Legacy Collection

1LS1.3: Understanding

Plants and **animals** have **observable patterns** or **stages** in their **development.**

Grow and change

bean plant

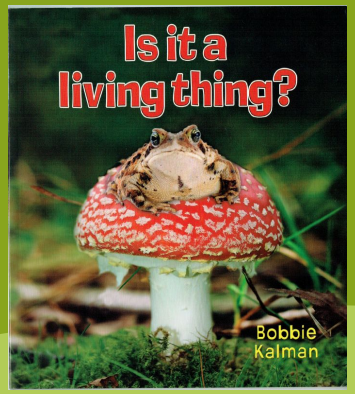
Living things grow and change. Plants grow and make new plants. This bean plant is making seeds that will grow into new bean plants. Animals grow and become **adults**. Adult animals can make babies. People also have babies. Human babies are **born**. Many animal babies are born, too. Some animals **hatch** from eggs.

Baby birds hatch from eggs.
This baby bird has just hatched.

Cycles (tie in with math Cycles - seasonal changes)

Plant - seed > seedling > adult > death

Animal - egg > baby > adulthood > death



Is it a living thing?
Author: Bobbie Kalman
Crabtree Publishing
Pgs. 22-23

How does a Bee come to Be?

A Case Study (a suggestion!)

Honeybee Case Study

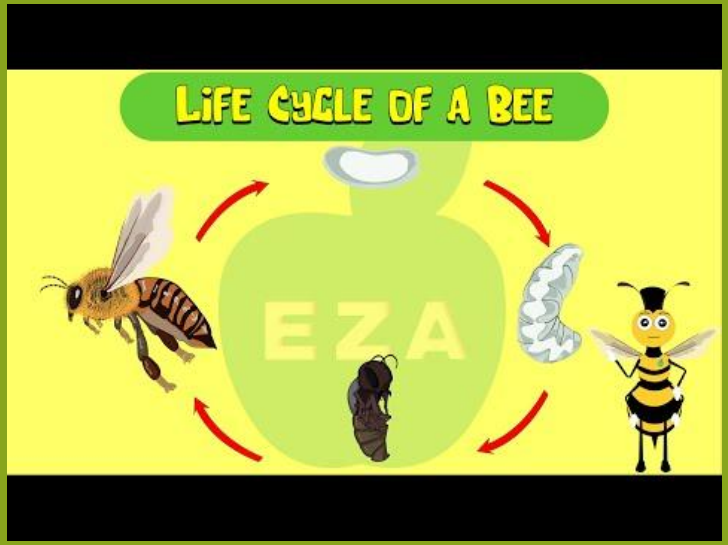
Members of the Hive

- Their roles
- How do they help keep a healthy environment
- Keeping life going in the hive
- Making Honey - food for bees and us
- How do bees help mankind - pollination

Life Cycle of the Honeybee

- Understanding a Life Cycle
- Using this understanding to explore other life cycles
- Small groups assigned to different animals, plants
- Report back on their Investigation/Exploration
- Group consolidation of similarities and differences

Life Cycle of a Honeybee



Life & Humans

ID 166634422 © Aleksandr Rybalko | Dreamstime.com

Features

Photo by Stehen Ausmus U.S. Department of Agriculture

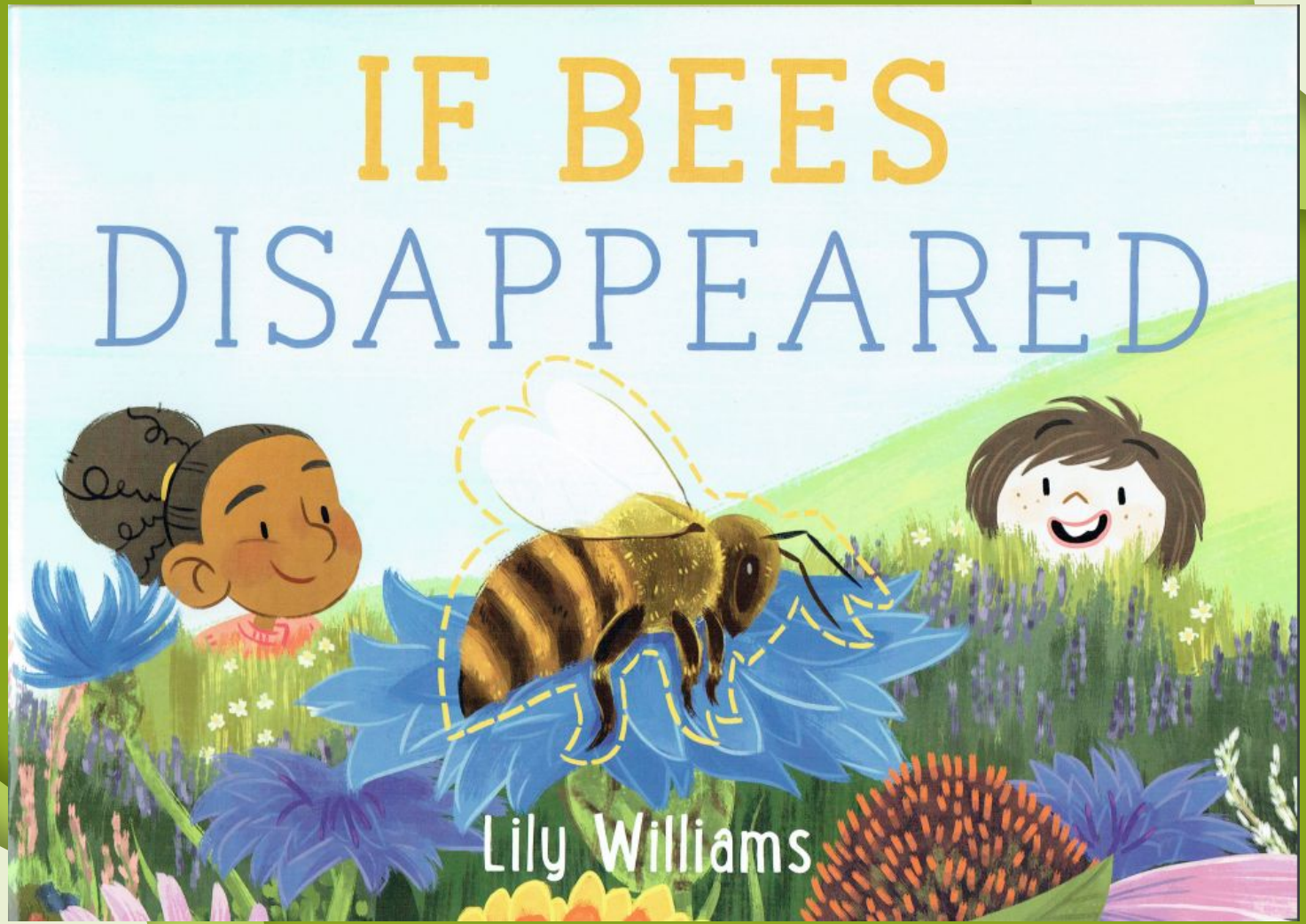
Bees

Disappearance of Bees - Ensuring they have a safe place to live
Source: Twinkl.ca free resource

Source:

Life Cycle

Cross Curricular - Graphing created by Twinkl.ca



If Bees Disappeared
Author: Lily Williams
Publisher: Scholastic
ISBN 9781338835311

HOW YOU CAN HELP SAVE BEES

If we take small steps now to help bees, we can make a big impact on our future.

- Bee vocal! Tell your friends, tell your parents, tell your community how bees need our help. The more people who know about bees, the more people will care about them and do something to protect them.
- Plant bee-friendly flowers! Bees like simple flowers that they can enter easily, long flowering seasons, and lots of color. Look up what native bee-friendly flowers would be best for where you live.
- Don't overweed your garden or use harsh chemicals. A little bit of untidiness in a garden allows solitary wild bees places to nest and forage.
- Create bee hotels for wild bee species. Wild solitary bees and mason bees may not make honey, but they are great pollinators. Having a healthy wild bee population to supplement honeybees is a great way to help pollination.
- Support local beekeepers by buying their small-batch honey. Responsible and sustainable beekeepers make sure they are leaving enough honey for the bees to be healthy, and by purchasing local honey, you are keeping a beekeeper who is raising healthy local bee populations in business.
- Purchase bee-friendly foods. Some packaging information on foods tells you if the crops were planted in a way that helps bees.
- Get involved with other bee enthusiasts! Scientists appreciate homegrown efforts to aid local bee populations.
- Speak up for the bees! Let your politicians know how you feel about protecting bees and limiting pesticide use. When you are able to, vote with bees in mind!
- Become a beekeeper (with your parents' approval). Beekeeping is an excellent way to keep bee populations strong and to monitor for local disease among bees.

Williams, L. I*f Bees Disappeared*. Scholastic Publishing. 2021.

Possible Case Studies

Group 1

Butterflies

File

Group 2

Hen

Select your files from Sparklebox

Example only

Group 3

Bean

File

Group 4

Frog

Select your files from Sparklebox

Example only

Group 5

Robin

File

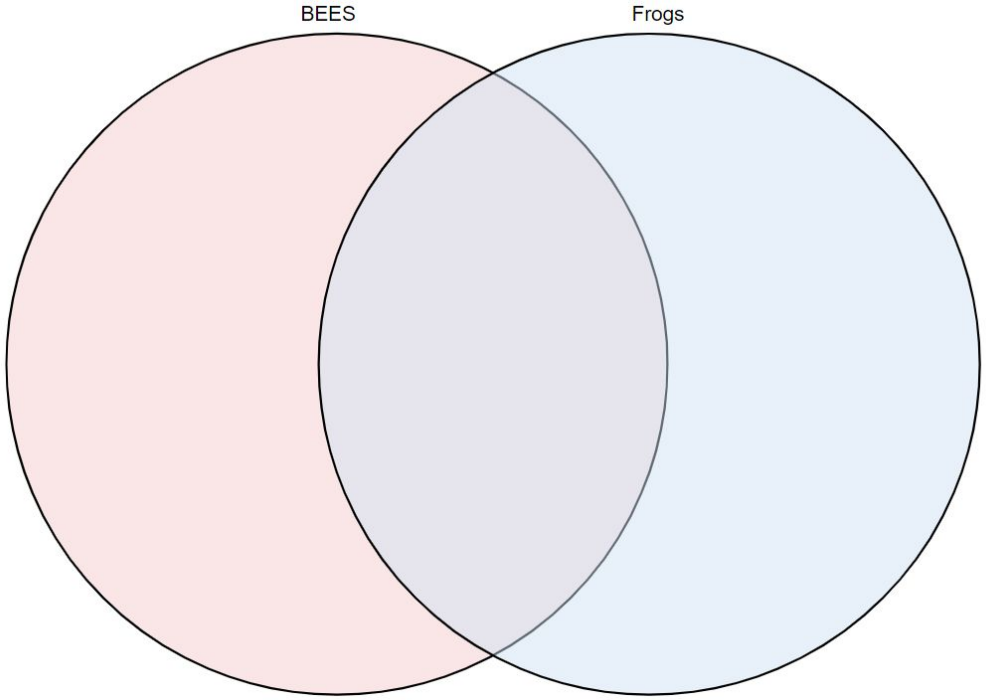
Group 6

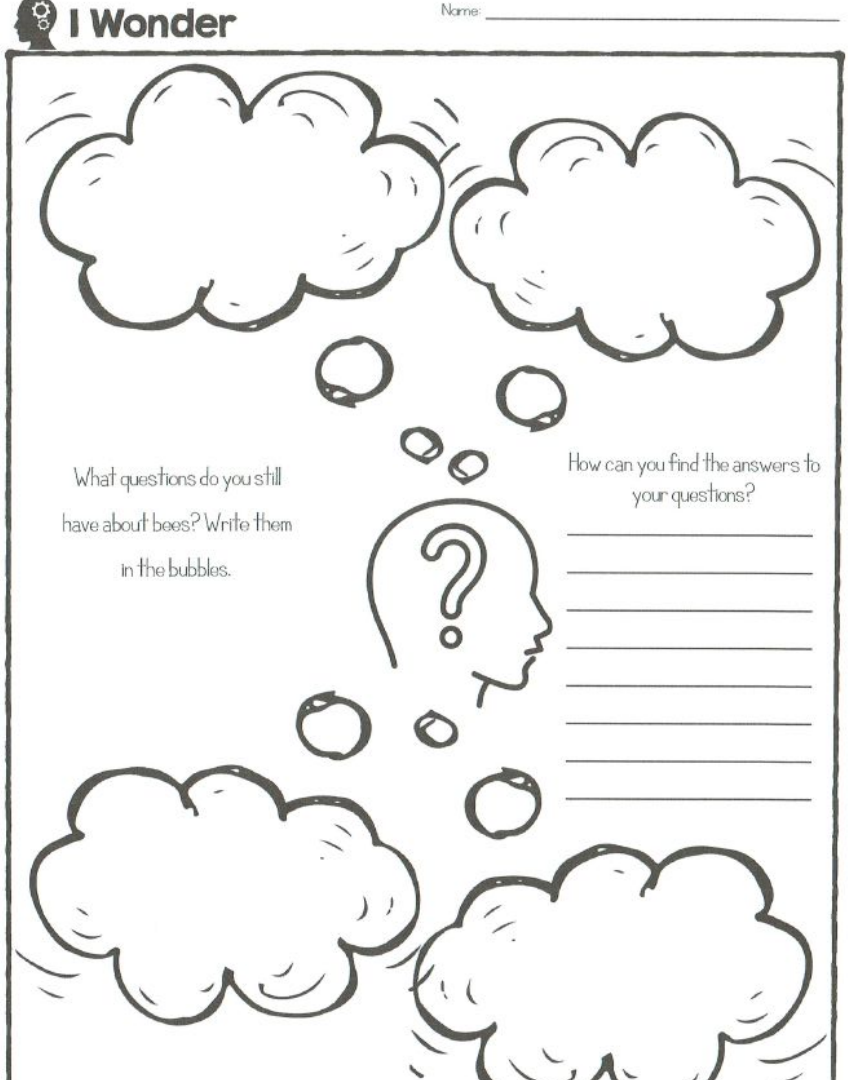
Sunflower

File

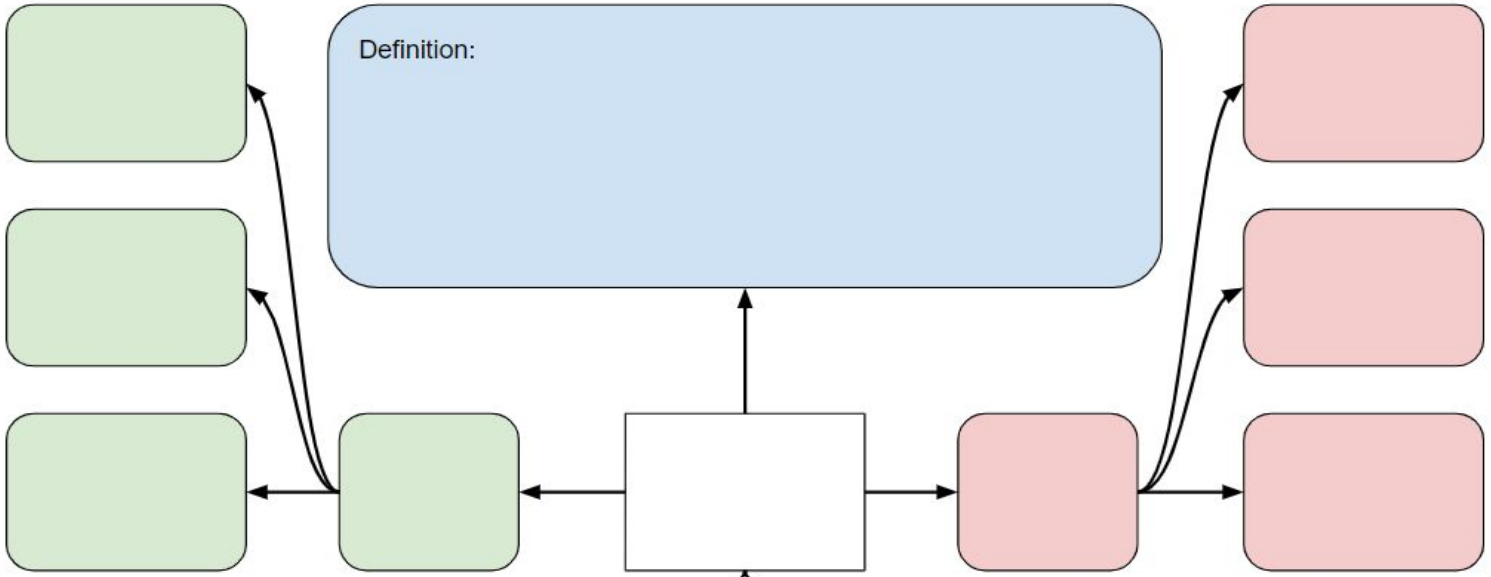
Dog/Cat/Cow/Horse

Consolidating Our Thinking





Summing Up My Thinking



Used in a sentence:

Pictures related to the word:

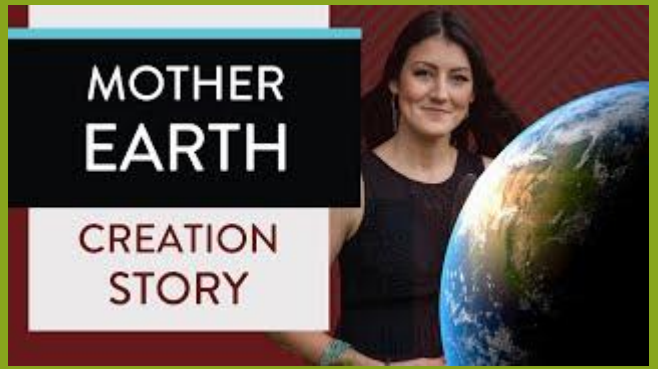
1LS1.4: Understanding

The ways in which **individuals or groups** relate to **land**, **plants**, and **animals** can influence **cultural practices.**

The **relationship** individuals or groups have with **land**, **plants**, and **animals can influence their cultural practices.**

Sacred Relationship Short

Connecting to the Spirit of Mother Earth



Creation Story 🌎 (The MOTHER Earth Creation Story - Indigenous Teaching)

Integrating Scientific Methods

Photo by Zoe Schaeffer on Unsplash

Scientific Method	
Investigation Grade 1	**Investigation Grade 2**
Steps followed during an investigation include ● asking questions ● making predictions ● gathering data *(observation)* ● forming conclusions	Steps followed during an investigation include ● asking questions ● making predictions ● planning the investigation (CS) ● observing and recording data ● analyzing data reaching conclusions ● discussing observations and conclusions
Concepts ● prediction ● conclusion ● observation ● record	Concepts ● data ● purpose ● analyzing

Integrating Computer Science

Computer Science Grade 1		Computer Science Grade 2	
Knowledge	**Skills**	**Knowledge**	**Skills**
Instructions are directions that can be followed and given in various **forms,** including verbal, audio, visual, and written.	***Follow instructions with two or three steps given in different forms.*** ***Sequence two or three instruction steps to achieve a desired outcome.*** ***Exchange ideas for creating three-step instructions that achieve a desired outcome.***	**Instructions** can be created to be precise, reliable, and efficient to achieve the desired outcome.	***Work individually or in groups to create instructions using precise words, pictures, or diagrams.*** ***Create three-step to four-step instructions that achieve a desired outcome.*** ***Exchange ideas to design clear three- to four-step instructions, including repetition, to achieve a desired outcome.***
Many types of **instructions** need to be in a specific **order**, such as ● directions ● recipes ● computer programs ● safety protocols		Concepts ● precision ● reliable ● efficient ● debugging ● outcome ● repeated steps	

Assessment

Photo by imagenation.jpeg on Unsplash

Using Skills and Procedures as Assessments

2LS1.1: **Discuss** ways to respect plants and animals while interacting in various environments.
2LS1.1: Explain positive and negative impacts of human behaviour on plants and animals.
2LS1.2: Identify similarities between offspring and their parents.
2LS1.3: **Represent** the life **cycles of various plants and animals.**
2LS1.3: Discuss and compare (similarities and differences) life cycles of various plants and animals.
2LS1.4: Discuss how humans might interact with land, plants, and animals if they see land, plants, and animals as equals.
2LS1.4: Identify ways (provide examples) in which people show care for land, plants, and animals through cultural practices.

SURFACE

2LS1.1: **Discuss** ways to respect plants and animals while interacting in various environments.

- What is a relationship? Provide examples.
- What is human behaviour? What kinds of behaviours do you see around the room?
- Give examples of positive and negative impacts of different behaviours.

2LS1.3: **Represent** the life **cycles of various plants and animals.**

SURFACE or DEEP?

2LS1.1: **Discuss** ways to respect plants and animals while interacting in various environments.
2LS1.1: Explain positive and negative impacts of human behaviour on plants and animals.
2LS1.2: Identify similarities between offspring and their parents.
2LS1.3: **Represent** the life **cycles of various plants and animals.**
2LS1.3: Discuss and compare (similarities and differences) life cycles of various plants and animals.
2LS1.4: Discuss how humans might interact with land, plants, and animals if they see land, plants, and animals as equals.
2LS1.4: Identify ways (provide examples) in which people show care for land, plants, and animals through cultural practices.

Moving Skills and Procedures Statements to a Deep Phase Assessment

Skills and Procedure Statement: **Explain** positive and negative impacts of human behaviour on plants and animals.

Understanding: **Plants and animals can be affected by human behaviour.**

To lift the skills and procedure statement from "surface" to "deep,"

- **Present students with a new/unfamiliar text (video, story, photo, etc.)**
- **Ask a conceptual question.**
  - **Eg. Explain how the video is an example that shows plants and animals can be affected by humans (positively or negatively)?**

Deep Strategy

Conceptual Question

A conceptual question is one that asks students to form a relationship between concepts that is meaningful and logical.

Students should be able to come up with examples that support their statement of relationship.

Examples of Conceptual Questions

Present students with a new context. Then ask the conceptual question

2LS1.1: **Plants** and **animals** can be affected by **human behaviour.**

- **Can plants and animals can be affected by human behaviour? Use the video we just watched to help explain your thinking.**

2LS1.2: **Plants** and **animals** share **similarities** with their **offspring.**

- **Do plants and animals share similarities with their offspring? Provide an example. Use what you saw in the book we read to help explain.**

2LS1.3: **Plants** and **animals** have **observable patterns** or **stages** in their **development.**

- **How are plants, patterns, and stages of development related?**

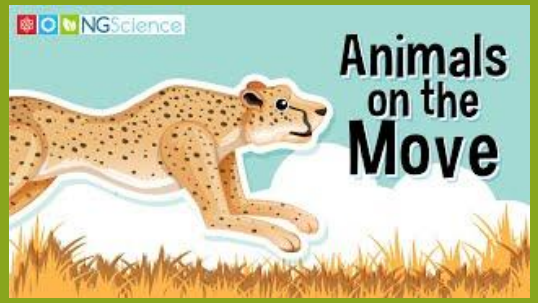
Resources


Photo by imagenation.jpeg on Unsplash
Montagne de Tirausson
Mourèze
PR
29
MOYEN
3H • 7.5KM

Sparkle Box

Resource to consider

Additional resources to Supplement your lessons



Animals on the Move - NG Science

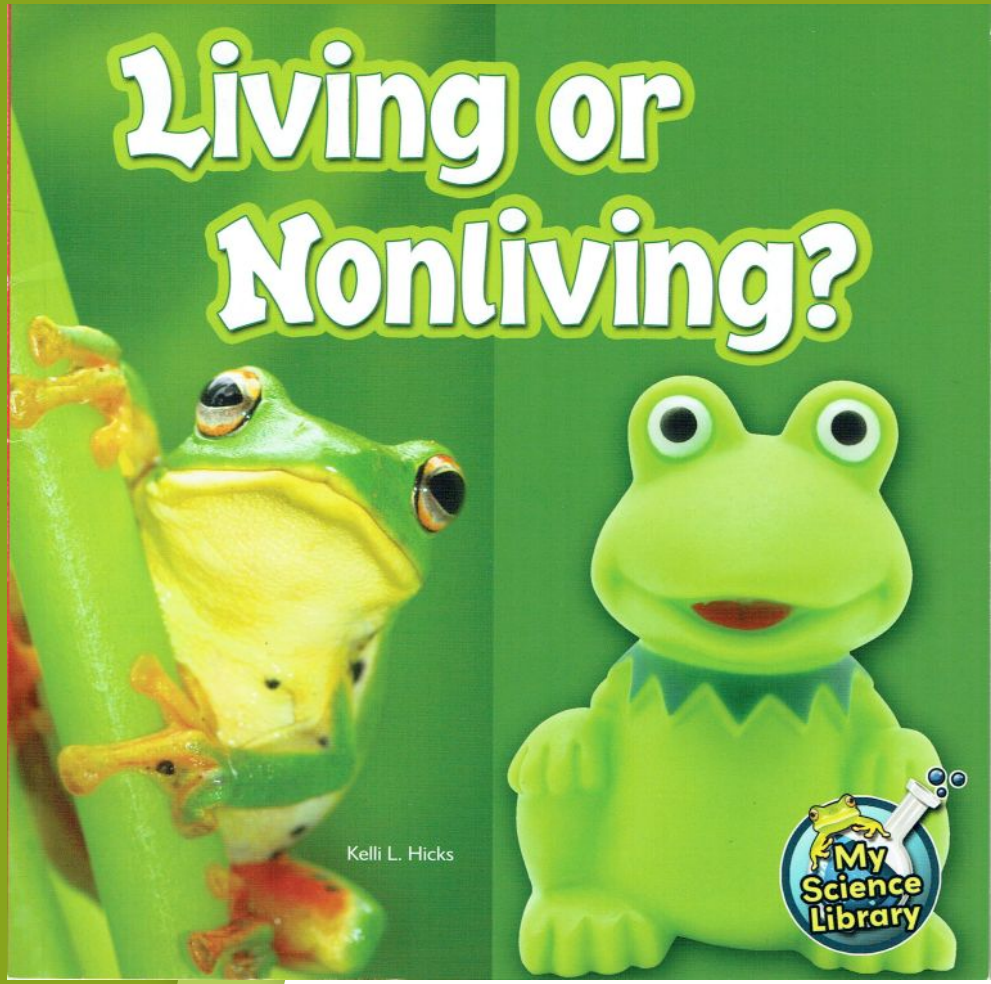
Living and Non-Living Things | Science for KIDS!

Living vs Nonliving
PBS Learning Media Lesson Plan

The needs and characteristics of Living Things
Lesson Plans and additional resources
Source: mrcollinson.ca

Lesson using the Inquiry Approach - 5E's

Living or Nonliving?
Level 1
Author: Kelli L. Hicks
Publisher: Rourke Educational media
ISBN: 9781617419454



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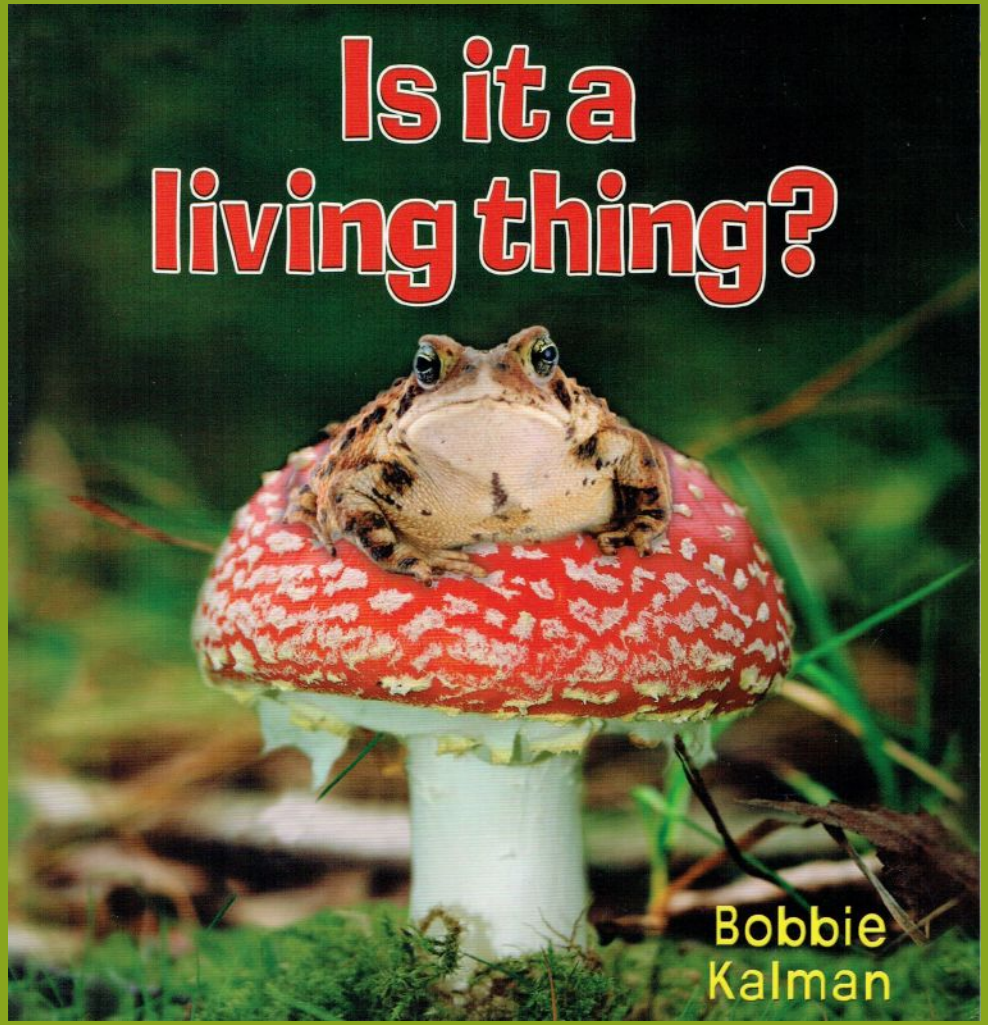
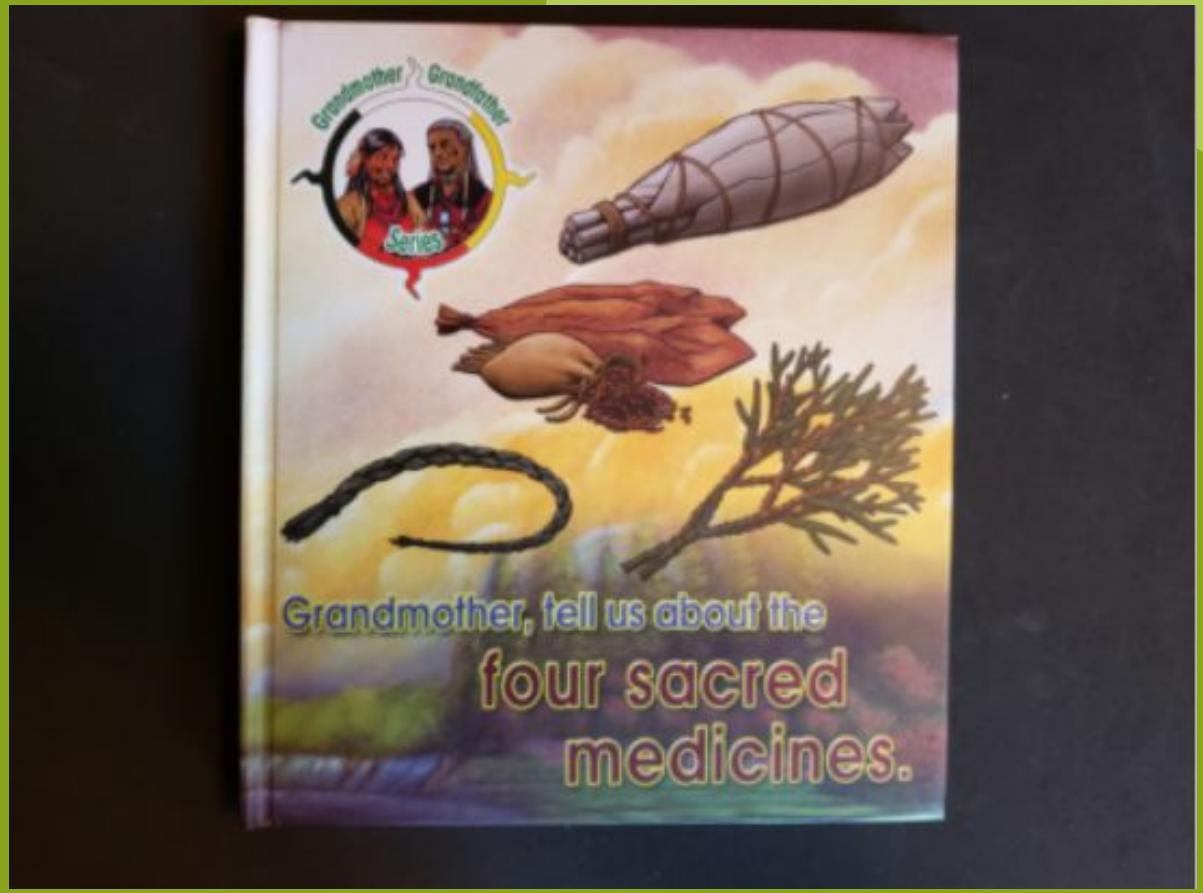


A Compare and Contrast Book (with a teacher guide)



Grandfather and Grandmother Series - NativeReflections.com

Computing Science

Grade 2 Living Systems and Computing Science Recording (12 min)

Grade 2 Living Systems Slide Deck

Sample: The Achievement Chart for Science and Technology, Grades 1–6 Ontario Ministry of Education

Knowledge and Understanding – Subject-specific content acquired in each grade (knowledge), and the comprehension of its meaning and significance (understanding)

Categories	Level 1	Level 2	Level 3	Level 4
	The student:			
Knowledge of content (e.g., facts, terminology, definitions)	demonstrates limited knowledge of content	demonstrates some knowledge of content.	demonstrates considerable knowledge of content	demonstrates thorough knowledge of content
Understanding of content (e.g., concepts, ideas, theories, principles, procedures, processes)	demonstrates limited understanding of content	demonstrates some understanding of content	demonstrates considerable understanding of content	demonstrates thorough understanding of content

Thinking and Investigation – The use of critical and creative thinking skills and inquiry and problem-solving skills and/or processes

Categories	Level 1	Level 2	Level 3	Level 4
	The student:			

Thanks!

Do you have any questions?

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Ted Zarowny (ted.zarowny@erlc.ca)

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