



# ORC CURRICULUM MAP

## Grade 1 Science

*Topics Included: Creating Colour, Seasonal Changes, Senses, Needs of Animals and Plants*

*Resources Included: Scholastic GO! (formerly Amazing Animals of the World), BookFLIX, World Book Early World of Learning, PebbleGO Science, PebbleGO Animals, PowerKnowledge Physical Science, PowerKnowledge Earth and Space Science, PowerKnowledge Life Science*

*Published: October 25, 2016*

*Updated: July 17, 2018*

Jamie Davis, former ORC Coordinator

ORC@thealbertalibrary.ab.ca

---

## Crash Course Kids Disclaimer

These Curriculum Maps have been updated to include the YouTube educational web series *Crash Course Kids*. This web series, from the producers of *Crash Course*, is geared towards elementary grade science. It includes topics related to Earth Science, Physical Science, Biology, Astronomy, and more. These videos can sometimes contain irreverent humour. We encourage educators to preview the videos for appropriateness first before showing them in a classroom or library setting.

---

---

## Background and Access Information

Learn Alberta's Online Reference Centre is a \$1.2 million collection of authoritative curricular aligned resources that are licensed on behalf of all students, staff, parents and public librarians learning/teaching/supporting the Alberta curriculum.

To Access the Online Reference Centre:

1. Go to [LearnAlberta.ca](http://LearnAlberta.ca)
2. Select English or French
3. Click on "Online Reference Centre" in the tab along the top of the screen
4. In school while on a school device, users do not need to enter a username or password. Users are able to enter any database or website instantly.
5. Access from a person device in school or remotely from outside of the school will require the user to enter a username/password once to unlock all of the resources.
6. Please share your district's ORC username/password with your students, parents of your students, student teachers and fellow staff members. Please do not share the username and password information on an open website (a website that does not require the user to login).

---

## How to Use This Guide

Attached please find a listing of databases found on Learn Alberta's Online Reference Centre (ORC) that directly support specific learner outcomes in the grade two science and social studies curricula.

Formatting Overview for Scholastic GO! (formerly Amazing Animals of the World):

### **Curricular Topic**

*Specific Learner Outcome (SLO)*

Resources for Students Reading at Grade Level  
Scholastic GO! (formerly Amazing Animals of the World)

- Click search button
  - Search "search term"
    - Select Reading level
      - Article Title

Resources for Students Reading Above Grade Level  
Scholastic GO! (formerly Amazing Animals of the World)

- Click search button
  - Advanced Search
    - Search Titles Only
      - Select Reading level
        - Article Title

Formatting Overview for BookFLIX:**Curricular Topic***Specific Learner Outcome (SLO)*

BookFLIX

- Theme (Animals and Nature, Earth and Space, etc.)
  - Pair Tab
    - Book Pairing

Formatting Overview for PebbleGO Databases:**Curricular Topic***Specific Learner Outcome (SLO)*

Name of the Database

- Topic
  - Subtopic
    - Article Title
      - Article Sections

Formatting Overview for PowerKnowledge Databases:**Curricular Topic***Specific Learner Outcome (SLO)*

Name of the Database

- Topic
  - Subtopic
    - Article Title with Hyperlink
      - Article Sections

If you have any questions regarding this guide or if you would like a guide for additional grades please contact Bethany Arsenault, ORC Coordinator at [barsenault@thealbertalibrary.ab.ca](mailto:barsenault@thealbertalibrary.ab.ca)

---

# Grade 1 Science

---

## Topic A: Creating Colour

---

*SLO: Students will:*

*1. Identify colours in a variety of natural and manufactured objects.*

World Book Early World of Learning

- Read
  - Trek's Travels
    - [Trek Learns About Colors](#)

*SLO: Students will:*

*6. Distinguish colours that are transparent from those that are not. Students should recognize that some coloured liquids and gels can be seen through and are thus transparent and that other colours are opaque.*

PebbleGO Science

- Physical Sciences
  - Light
    - What is Light
      - Article Sections: Transparent or Translucent, Blocking or Reflecting

*SLO: Students will:*

*10. Demonstrate at least one way to separate sunlight into component colours.*

### **Resources for Students Reading at Grade Level**

BookFLIX

- Earth and Sky
  - Pairs: 1-4
    - The Dot/All the Colors of the Rainbow

PebbleGO Science

- Earth and Space Sciences
  - Weather
    - Wet Weather
      - Rainbows
- Physical Sciences
  - Light
    - Colors
      - Article Sections: What Is Color?, White Light, Rainbows

### **Resources for Students Reading Above Grade Level**

PowerKnowledge Physical Science

- Energy and Matter
  - Light and Sound
    - All About Light
      - Article Sections: [All About Light](#), [Light Waves](#), [The Visible Spectrum](#), [White Light](#), [Light Refraction](#)

## Topic B: Seasonal Changes

---

*SLO: Describe the regular and predictable cycle of seasonal changes: changes in sunlight, changes in weather.*

*SLO: Identify and describe examples of plant and animal changes that occur on a seasonal basis.*

*SLO: Identify human preparations for seasonal change and identify activities that are done on a seasonal basis.*

### **Resources for Students Reading at Grade Level**

#### BookFLIX

- Animals and Nature
  - Pairs: 1-4
    - And Then It's Spring/How do you Know It's Spring?
  - Pairs: 5-8
    - Bear Has a Story to Tell/How do you Know It's Winter?
  - Pairs: 5-8
    - Bear Snores On/A Bear Cub Grows Up
  - Pairs: 17-20
    - Fletcher and the Falling Leaves/How Do You Know It's Fall?

#### PebbleGO Animals

- Animal Behavior
  - Animals in the Fall
  - Hibernation
  - Migration
- Birds
  - Other Birds
    - Canada Geese
      - Article Sections: Habitat, Food
    - Ducks
      - Article Section: Habitat
- Mammals
  - Bears



- Black Bears
  - Article Sections: Habitat, Food, Life Cycles
- Polar Mammals
  - Arctic Hares
    - Article Sections: Body, Habitat, Food
  - Caribou
    - Article Sections: Body, Habitat, Food, Fun Facts
  - Lemmings
    - Article Sections: Body, Food, Fun Facts
  - Snowshoe Hares
    - Article Sections: Body, Habitat, Food

### PebbleGO Science

- Earth and Space
  - Weather
    - About Weather
      - Spring Weather
      - Summer Weather
      - Fall Weather
      - Winter Weather
      - Sunlight
    - Cold Weather
      - About Cold Weather
    - Hot Weather
  - Seasons
    - What Are Seasons?
    - Fall
      - Fall Weather
      - Animals in Fall
      - People in Fall
      - Plants in Fall
    - Spring
      - Spring Weather
      - Animals in Spring
      - People in Spring
      - Plants in Spring

- Summer
  - Summer Weather
  - Animals in Summer
  - People in Summer
  - Plants in Summer
- Winter
  - Winter Weather
  - Animals in Winter
  - People in Winter
  - Plants in Winter

#### World Book Early World of Learning

- Read
  - Welcome to Reading
    - [Seasons](#)
- Know It!
  - Weather
    - [Changing Seasons](#)
    - [Cold Winter](#)
    - [Cool Autumn](#)
    - [Hot Summer](#)
    - [Warm Spring](#)
- Classics
  - Songs
    - [Eensy Weensy Spider](#)

#### **Resources for Students Reading Above Grade Level**

##### PowerKnowledge Earth and Space Science

- Earth Cycles
  - [Four Seasons](#)

##### PowerKnowledge Life Science

- Animals
  - Mammals

- [Bears](#)
      - Article Section: [Sleeping Through the Winter](#)
        - [Black Bears](#)
          - Article Section: [The Big Sleep](#)
        - [Grizzly Bears: Wild and Strong](#)
          - Article Section: [A Long Winter Nap](#)
        - [Polar Bears](#)
          - Article Section: [A Long Winter's Nap](#)
    - [Beavers](#)
      - Article Sections: [Busy Beavers](#), [A Cozy Coat](#)
    - [Caribou of the Arctic](#)
      - Article Sections: [What's for Dinner?](#), [Caribou on the Move](#)
    - [White-Tailed Deer](#)
      - Article Section: [What do White-Tailed Deer Eat?](#)
  - Reptiles and Amphibians
    - Frogs
      - [Bullfrogs](#)
        - Article Section: [Spring Into Action](#)
- Habitats and Ecosystems
  - Biomes and Habitats
    - [Forest Habitats](#)
      - Article Sections: [Falling Leaves](#), [Needle Leaves](#)
- Life Cycles
  - Animal Life Cycles
    - [Life Cycle of a Bear](#)
      - Article Section: [Time to Sleep](#)
  - Plant Life Cycles
    - [How Trees Grow](#)
      - Article Section: [Quiet at Work](#)
- Plants
  - [Deciduous Forests](#)
    - Article Section: [Deciduous Forests](#)
- Survival and Adaptation
  - Migration

- [Caribou Migration](#)
  - Article Sections: [The Caribou's Journey](#), [Antlers and Hooves](#), [Caribou in North America](#), [All About Migration](#), [Caribou Migration](#), [Life in the Herd](#), [Food and Predators](#)
- [Humpback Whale Migration](#)
  - Article Sections: [A Humpback's Journey](#), [Finding Food and Staying Warm](#), [Hungry Humpbacks](#)
- [Monarch Butterfly Migration](#)
  - Article Sections: [Migrating Monarchs](#), [Winter Ranges](#), [Spring Migration](#), [Monarch Butterfly Migration](#)

#### Crash Course Kids

- [Seasons and the Sun: Crash Course Kids 11.1](#)
-

## Topic C: Senses

---

*SLO: Identify each of the senses, and explain how we use our sense in interpreting the world.*

### **Resources for Students Reading at Grade Level**

#### BookFLIX

- Animals and Nature
  - Pairs: 41-44
    - That New Animal/Let's Explore the Five Senses with City Dog and Country Dog

#### PebbleGO Science

- Life Sciences
  - Humans
    - Senses
      - Hearing
      - Seeing
      - Smelling
      - Tasting
      - Touching

#### World Book Early World of Learning

- Read
  - Trek's Travels
    - [Trek Learns About Sounds](#)
    - [Trek Learn About Taste and Smell](#)
- Know It!
  - Me, Myself, and I
    - [See and Hear](#)
    - [Taste and Smell](#)
    - [Touch and Feel](#)

## **Resources for Students Reading Above Grade Level**

PowerKnowledge Life Science

- Human Body
  - [Ears](#)
    - Article Sections: [The Ears](#), [How Do We Hear?](#), [Millions of Sounds](#)
  - [Eyes](#)
    - Article Sections: [Eyes on the World](#)
  - [Nose](#)
    - Article Sections: [Your Nose](#), [Smell](#), [Taste](#), [Good Smells](#)

*SLO: Recognize the limitations of our senses, and identify situations where our sense can mislead.*

## **Resources for Students Reading at Grade Level**

PebbleGO Social Studies

- Culture and Awareness
  - Understanding Disabilities
    - Blindness
    - Deafness

## **Resources for Students Reading Above Grade Level**

PowerKnowledge Life Science

- Human Body
  - [Ears](#)
    - Article Sections: [Does Everyone Hear the Same Way?](#), [Living Without Sound](#)
  - [Eyes](#)
    - Article Section: [Eye Trouble](#)
  - [Nose](#)
    - Article Section: [The Common Cold](#)

*SLO: Recognize that other living things have senses, and identify ways that various animals use their senses.*

### **Resources for Students Reading Above Grade Level**

PowerKnowledge Life Science

- Human Body
    - [Ears](#)
      - Article Section: [Hearing in Other Animals](#)
-

## Topic D: Needs of Animals and Plants

---

*SLO: Contrast Living and nonliving things.*

### **Resources for Students Reading at Grade Level**

PebbleGO Science

- Life Sciences
  - Life Sciences
    - Living or Nonliving

### **Resources for Students Reading Above Grade Level**

PowerKnowledge Life Science

- Classification
  - [Classification of Living and Nonliving Things](#)
    - Article Sections: [Classification](#), [Living and Nonliving](#)

*SLO: Identify examples of plants and animals that are normally under human care (domesticated) and those that are normally independent of human care (wild).*

*SLO: Identify requirements of animals to maintain life; i.e., air, food water, shelter, space; and recognize that we must provide these for animals in our care.*

### **Resources for Students Reading at Grade Level**

Scholastic GO! (formerly Amazing Animals of the World)

- Search "Mammals"
  - Level 1
    - Cat
    - Guinea Pig
    - Dog
    - Sheep
    - Pig
    - Woodchuck



- Killer Whale
- Grizzly Bear
- Bobcat
- Raccoon
- Sea Otter
- Search "Birds"
  - Level 1
    - Eagle
    - Canada Goose
    - Woodpecker
    - Blue Jay
    - Cardinal
    - Penguin
- Search "Fish"
  - Level 1
    - Clown fish
    - Guppy
    - Angelfish
    - Atlantic Cod
    - Swordfish
    - Great White Shark

#### BookFLIX

- Animals and Nature
  - Pairs: 1-4
    - Bark George/Pets at the Vet
  - Pairs: 21-24
    - Giggle, Giggle, Quack/Living on Farms
  - Pairs: 33-36
    - Lon Po Po/Wolves
- Earth and Sky
  - Pairs: 9-12
    - Planting a Rainbow/It Could Still Be a Flower
- People and Places
  - Pairs: 1-4
    - Children Make Terrible Pets/Pets at the White House

- Family and Community
  - Pairs: 45-48
    - Owen/Mice
- Adventure
  - Pairs: 5-8
    - Scaredy Squirrel/Squirrels

### PebbleGO Animals

- Animals Habitats
  - Desert Animals
  - Grassland Animals
  - Ocean Animals
  - Polar Animals
  - Rain Forest Animals
  - Wetland Animals
  - Woodland Animals
- Birds
  - Birds of Prey
    - Eagles
    - Falcons
    - Hawks
    - Owls
    - Vultures
- Penguins
  - Adelle Penguins
  - African Penguins
  - Emperor Penguins
  - King Penguins
- Songbirds
  - Blue Jays
  - Cardinals
  - Crows
  - Orioles
  - Robins
  - Sparrows
- Other Birds

- Arctic Terns
- Canada Geese
- Ducks
- Emus
- Flamingos
- Hummingbirds
- Kingfishers
- Parrots
- Peacocks
- Pelicans
- Puffins
- Wild Turkeys
- Woodpeckers
- Mammals
  - Bears
    - Black Bears
    - Giant Pandas
    - Grizzly Bears
  - Grassland Mammals
    - Bison
    - Moles
    - Prairie Dogs
    - Polar Mammals
  - Wetland Mammals
    - Beaver
    - Muskrats
    - River Otters
  - Whales and Other Water Mammals
    - Beluga Whales
    - Blue Whales
    - Dolphins
    - Gray Whales
    - Humpback Whales
    - Killer Whales
    - Manatees
    - Sea Lions

- Sea Otters
  - Seals
- Wildcats
  - Bobcats
  - Cougars
- Woodland Mammals
  - Badgers
  - Chipmunks
  - Coyotes
  - Deer
  - Hedgehogs
  - Mice
  - Moose
  - Porcupines
  - Raccoons
  - Skunks
  - Squirrels
  - Wolves
  - Woodchucks
  - Other Mammals
- Other Mammals
  - Bats
- Pets and Farm Animals
  - Pets
    - Cats
    - Dogs
      - American Staffordshire Terrier
      - Bichons Frises
      - Boxer
      - Bulldogs
      - Chihuahuas
      - Cocker Spaniels
      - Collies
      - Dachshunds
      - German Shepherds
      - Golden Retrievers

- Labrador Retrievers
- Poodles
- Pugs
- Shih Tzus
- Yorkshire Terrier
- Ferrets
- Guinea Pigs
- Hamsters
- Hermit Crabs
- Persian Cats
- Pet Birds
- Pet Fish
- Pet Rabbits
- Siamese Cats
- Farm Animals
  - Chickens
  - Cows
  - Donkeys
  - Geese
  - Goats
  - Horses
  - Pigs
  - Sheep

#### PebbleGO Science

- Life Sciences
  - Plants
    - Plant Habitats
      - Desert Plants
      - Grassland Plants
      - Ocean Plants
      - Polar Plants
      - Rain Forest Plants
      - Wetland Plants
      - Woodland Plants

## World Book Early World of Learning

- Read
  - Welcome to Reading
    - Level C
      - [Tons of Tomatoes](#)
- Know It!
  - Animal Homes
    - [Birds' Nests](#)
    - [Dens](#)
    - [Hives and Insect Nests](#)
    - [Holes and Tunnels](#)
    - [Lodges](#)
    - [Logs and Leaves](#)
    - [Pet's Homes](#)
    - [Shells](#)
    - [Treehouses](#)

## **Resources for Students Reading Above Grade Level**

Scholastic GO! (formerly Amazing Animals of the World)

- Homepage (click search button)
  - Click Advanced Search (Top middle of page)
    - Search Titles Only
      - "Mammals"
        - Level 2
          - Hoofed Mammals
      - "Birds"
        - Level 2
          - Birds as Pets
          - Ostriches and Other Flightless Birds
      - "Fish"
        - Level 2
          - Fish as Pets

## PowerKnowledge Life Science

- Animals
  - Farm Animals

- Horses
- Cattle
- Chickens
- Donkeys
- Geese
- Goats
- Sheep
- Pets
  - Cats
  - Dogs
  - Horses
  - Fish
  - Guinea Pigs
  - Pet Snakes
  - Rabbits
  - Turtles
- Rescue and Helping Animals
  - Detector Dogs
  - Guide Dogs
  - Police Dogs
  - Shepherding Dogs
  - Sled Dogs
  - Therapy Dogs
- Mammals
  - Bats
  - Bears
  - Wolves and Wild Dogs
  - Beavers
  - Blue Whales: World's Largest mammals
- Fish and Other Water Creatures
  - Sharks
  - Dolphins
  - Jellyfish
  - Orcas
  - Otters
  - Penguins

- Sea Otters
- Sea Turtles
- Starfish
- Walruses

*SLO: Identify the requirement of plants to maintain life; i.e., air, light, suitable temperature, water, growing medium, space, and recognize that we must provide these for plants in our care.*

*SLO: Identify ways that land plants depend on soil.*

### **Resources for Students Reading at Grade Level**

#### BookFLIX

- Animals and Nature
  - Pairs: 33-36
    - Planting a Rainbow/It Could Still be a Flower
- Earth and Sky
  - Pairs: 5-8
    - Miss Rumphius/From Seed to Dandelion

#### PebbleGO Science

- Earth and Space Sciences
  - Earth Science
    - Earth Features
      - Soil
        - Article Sections: What Soil Does
  - Seasons
    - Spring
      - Flower Blossoms
- Life Sciences
  - Plants
    - What Are Plants?
      - Article Sections: What Are Plants, What Plants Need, People and Plants

### **Resources for Students Reading Above Grade Level**



## PowerKnowledge Life Science

- Plants
  - [All About Plants](#)
  - [How Flowers Grow](#)
  - [How Fruit Grows](#)
  - [How Plants Grow](#)
  - [How Vegetables Grow](#)
  - [Plant Development and Growth](#)
  - [Water and Plants](#)

## Crash Course Kids

- [Gotta Eat!: Crash Course Kids #1.1](#)
- [Resources: Welcome to the Neighborhood: Crash Course Kids #2.1](#)

*SLO: Recognize that some plants and animals must adapt to extreme conditions to meet their basic needs; e.g., arctic and desert plants and animals.*

## **Resources for Students Reading at Grade Level**

### BookFLIX

- Animals and Nature
  - Pairs: 1-4
    - Antarctic Antics/Antarctica

### PebbleGO Animals

- Animals Habitats
  - Desert Animals
  - Polar Animals
  - Rainforest Animals

### PebbleGO Science

- Earth Sciences
  - Ecosystems
    - Deserts

- Tundra
- Life Sciences
  - Adaptations

#### World Book Early World of Learning

- Know It!
  - Plants
    - [Cactus](#)
    - [Venus's Flytrap](#)
  - Rain Forest Animals
    - [Colorful Birds of the Rain Forest](#)

### **Resources for Students Reading Above Grade Level**

#### PowerKnowledge Life Science

- Plants
  - Strange Plants
    - [Prickly Plants](#)
  - [Water and Plants](#)
    - Article Sections: [Plants in Dry Places](#), [Animal Adaptations](#)
- Survival and Adaptation
  - Animals and Their Environments
    - [Animals of the Savannah](#)
    - [Animals of the Tropical Rain Forest](#)
    - [Caribou of the Arctic](#)
    - [Desert Animals](#)
    - [Polar Bears of the Arctic](#)
    - [Walruses of the Arctic](#)
    - [Whales of the Arctic](#)
  - Features of Survival
    - [Beaks](#)
    - [Bugs: In Flight \(Wings\)](#)
    - [Camouflage](#)
    - [Feet](#)
    - [Skin and Hide](#)
    - [Tails](#)

- [Teeth](#)
- [Tongues](#)
- Understanding Adaptations
  - [Animal Adaptations for Survival](#)
  - [Behavioral and Physical Adaptations](#)

*SLO: Give examples of ways in which animals depend on plants and ways in which plants depend on animals; e.g., particular plants may serve as a source of food and shelter, animals may help spread pollen and seeds.*

### **Resources for Students Reading at Grade Level**

#### BookFLIX

- Animals and Nature
  - Pairs: 29-32
    - In the Small, Small Pond/Life in a Pond

#### PebbleGO Science

- Life Sciences
  - Food Chains and Webs

### **Resources for Students Reading Above Grade Level**

#### PowerKnowledge Life Science

- Habitats and Ecosystems
  - Understanding Habitats and Ecosystems
    - [Organisms and the Environment](#)
- Science Fair Projects and Experiments
  - [From Roots to Flowers](#)
  - [Sunlight and Plant Growth](#)
  - [Water and Plant Growth](#)
  - [When Plants Get Less Air](#)