

Polar Unit

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3 Week Unit

Telling Time To The Half Hour - Adding and Subtracting Two-Digit Numbers Without Regrouping

Fiction and Non-Fiction - Research Project - Blubber Experiment

Fresh Water vs. Salt Water Experiment

Unit Summary and Rationale

This Polar Unit is designed as an introductory unit for telling time to the hour and half hour, adding and subtracting two-digit numbers without regrouping, knowing the differences between fiction and non-fiction, and finding ways to research information. The unit cohesively integrates polar climate with the First Grade Common Core Standards.

Essential Questions	Big Ideas
<ul style="list-style-type: none">•What is a polar climate?•What kinds of animals live in the polar climate? Why?•How do you add two-digit numbers?•How is the clock divided? Can you read a clock to the hour, or half-hour?•What is the difference between fiction and non-fiction books?•How do polar bears stay warm?	<ul style="list-style-type: none">•Students will know different kinds of animals that live in a polar climate, and where the polar climates are located.•Students will be able to read a clock to the hour and half-hour.•Students will be able to add and subtract two-digit numbers without regrouping.•Students will be able to compare and contrast fiction and non-fiction books.•Students will be able to explain that polar bears have a layer of blubber that aids in keeping them warm.

Unit Standards:

CCSS.ELA-Literacy.RL.1.5 Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.

CCSS.ELA-Literacy.RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

CCSS.ELA-Literacy.RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1.

CCSS.ELA-Literacy.W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.

CCSS.ELA-Literacy.SL.1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.

CCSS.ELA-Literacy.L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

CCSS.ELA-Literacy.L.1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Represent and solve problems involving addition and subtraction.

Use place value understanding and properties of operations to add and subtract.

Tell and write time.

Unit Connection College and Career Ready Descriptions:

- Students will demonstrate independence.
- Students will build strong content knowledge.
- Students will use technology and digital media strategically and capably.

Learning Tasks:

Reading Tasks

Research polar animals
As a class, read “Tacky” and “Snow Bear”
Running Record (Assessment)

Writing Tasks

Create a “Polar Habitats Snow Globe Book”
Compare and contrast fiction and non-fiction books.

Discussion Tasks

Orally present findings about the polar climate to the class.

Language/Vocabulary Tasks

Define and use listed vocabulary words.
Classify nouns, verbs, and adjectives.

Math Tasks

Make a clock manipulative
Use “Tens Sticks” and “Ones Cubes” to add and subtract two-digit numbers.

Science Tasks

Blubber experiment
Fresh water versus salt water experiment

Skills:

Students should be able to:

- Use an encyclopedia, books, and the internet to research topics.
- Orally present a research project to the class.
- Read a clock to the hour and half-hour.
- Add and subtract two-digit numbers without regrouping.
- Define key terms and vocabulary words.
- Explain how polar bears stay warm despite their cold environment.
- Determine if a word is a noun, verb, or adjective.

Key Terms / Vocabulary:

Vocabulary Word	Definition	Vocabulary Word	Definition
climate	weather conditions	mammal	a vertebrate animal that gives birth to live young
parka	a warm outer jacket	Predator	an animal that hunts other animals
somersault	a flip where your feet go over your head	blubber	a thin layer of fat
enormous	huge	insulate	to line an object to keep it hot or cold
lemmings	mouselike animal	Arctic	the cold region surrounding the North Pole

Assessments:

Diagnostic

Adding and Subtracting Without Regrouping Pre-Assessment

Formative

Running Records- assessed on every Thursday of the unit.

Summative

Adding and Subtracting Without Regrouping Post-Assessment

Telling Time Test

Polar Habitats Snow Globe Book

Vocabulary Definition Matching Assessment

Resources / Text Selections:

“Snow Bear” – Jean George

“Arctic Babies” – Kathy Darling

“Antarctic Antics” – Judy Sierra

“Scholastic Encyclopedia of Animals”- Laurence Pringle

Additional Notes:

Name: _____ Date: _____

Vocabulary Match

climate

mouselike animal

parka

huge

somersault

a warm outer jacket

enormous

to line an object to keep it hot or cold

lemmings

a thin layer of fat

mammal

the cold region surrounding the North Pole

Predator

weather conditions

blubber

a vertebrate animal that gives birth to live young

insulate

a flip where your feet go over your head

Arctic

an animal that hunts other animals

Daily 5 Schedule

Work With Words	Work on Writing	Work on Computers	Read to Self	Read With a Partner
Sentence Types NB	Let's Make a Statement	Research Penguin	Research Penguin	IPICK
Compound Words	Penguin Snow Globe	RAZ-Kids	IPICK	IPICK
Winter Blends	Let's Ask a Question	RAZ-Kids	IPICK	IPICK
R and L Blends	Mixed Up Cocoa	Research Polar Bear	Research Polar Bear	IPICK
S Blends	Polar Bear Snow Globe	RAZ-Kids	IPICK	IPICK
Verbs	Action Words	RAZ-Kids	IPICK	IPICK
Verb WS	Following Winter Directions	Research Walrus	Research Walrus	IPICK
Parts of Speech	Walrus Snow Globe	RAZ-Kids	IPICK	IPICK
Beginning Digraphs	The Snowball Fight	RAZ-Kids	IPICK	IPICK
Ending Digraphs	Capitalizing Dates	Research Arctic Fox	Research Arctic Fox	IPICK
ch or sh Digraphs	Arctic Fox Snow Globe	RAZ-Kids	IPICK	IPICK
Spin, Read, and Trace a Digraph	Working With Commas	RAZ-Kids	IPICK	IPICK
Spin, Read, and Trace a Digraph	Writing Sentences with Commas	RAZ-Kids	IPICK	IPICK
Plural Nouns		RAZ-Kids	IPICK	IPICK

