THE ADVENTURES WITH FRISBEE ROB

The Long Way Down

Adventure 001: Isaac Newton

COMPLETE TEACHER GUIDE SET

KINDERGARTEN

ELAL	Math	Science	Social Studies	PE & Wellness

Wonder in Motion

Alberta K–6 Curriculum · Adventure 001

THE ADVENTURES WITH FRISBEE ROB

The Long Way Down

Adventure 001: Isaac Newton

KINDERGARTEN

ENGLISH LANGUAGE ARTS and LITERATURE

Teacher Guide

Three Journeys: Retell It in Order

GRADE	SUBJECT	TIME
Kindergarten	ELAL	2 × 30 minutes

CENTRAL QUESTION

How can we retell the important parts of Rob and Newton's adventure so a listener understands what happened?

Wonder in Motion

Lesson at a Glance

Teachers with a continuous 60-minute block may teach both sessions together.

Story connection	The apple, frisbee, and leaf all return, but each follows a different path. Rob notices what happens, asks questions, and carries one final question home.
ELAL focus	Listening comprehension, identifying important details, sequencing events, oral retelling, discussion, and dramatization.
Learning intention	We are learning to listen for important events and details and retell them in an order that helps another person understand.
Core experience	Across two 30-minute sessions, students collaboratively build a three-part story path, rehearse how to communicate important events and details, and combine their ideas in a shared living retell.
Flexible use	**Session 1 is a complete core lesson and can be used independently.** Session 2 continues the same Wonder Lab by giving students additional time to rehearse, refine, share, and deepen their thinking.
Use after reading	Read *Adventure 001: The Long Way Down* before beginning. The story reading is separate from the two ELAL sessions.
Story context	Isaac Newton was a real historical person. Rob's visit, their conversation, and the events they experience together are imaginative parts of the story.

Optional Teacher-Spoken Success Indicators

- I can share an important event or detail from the story.
- I can put story events in an order that makes sense.
- I can help retell part of the story so someone else can understand what happened.

How to Use This Guide

THE GUIDE IS A TOOL, NOT A SCRIPT

This guide is designed to support responsive teaching rather than prescribe every word or action.

Session 1 is a complete 30-minute Kindergarten Comprehension lesson and can be taught independently.

Session 2 continues the same learning through rehearsal, refinement, sharing, and questioning. It does not introduce additional curriculum.

Follow productive student thinking and conversation while protecting the central question, selected Comprehension KUSP, meaningful participation, and approximate lesson timing.

Adjust examples, grouping, response modes, and pacing to meet the needs of the learners in front of you.

The goal of the second session is not to do more.

It is to give students enough time to **think, try, improve, and communicate what they understand.**

Curriculum Alignment

Session 1 provides sufficient opportunities to gather evidence of the selected KUSP. Session 2 offers additional opportunities for students to demonstrate and communicate their understanding.

These lessons do not assess the complete learning outcome.

Organizing Idea	**Comprehension:** Text comprehension is supported by applying varied strategies and processes and by considering both particular contexts and universal themes.
Guiding Question	How are messages understood?
Learning Outcome	Children demonstrate understandings of messages communicated in texts.
Assessment Focus	Gather formative evidence of selected Kindergarten Comprehension KUSP through students' discussion, sequencing, responses to the story, and contributions to the class story path.

Selected KUSP for These Lessons

KUSP element	Selected curriculum learning	What it looks or sounds like
Knowledge	Details include specific information that helps the reader to understand texts. Sequencing involves putting events in a correct or appropriate order.	Students identify accurate characters, actions, objects, settings, or questions from the adventure and place events in an understandable order.
Understanding	Understanding texts involves describing ideas, information, and details.	Students communicate enough accurate information about an event for another person to understand what happened.
Skills & Procedures	Discuss ideas and details from texts. Sequence events from a text. Retell the beginning, middle, or ending of a text. Retell or dramatize a story, including characters and events.	Students contribute details to the class story path, place events in sequence, practise a retell, and communicate part of the story through speech, gesture, acting, drawing, props, or another appropriate response mode.

Curriculum source: Government of Alberta, English Language Arts and Literature (K–6) Curriculum, Comprehension, pp. 17–19. *View the Alberta program of study*

Teacher Preparation

STANDARD PATHWAY

Use these two 30-minute sessions after students have heard *Adventure 001: The Long Way Down*.

Session 1: Build the Story is the core lesson. Students reconnect with the adventure, see comprehension thinking modelled, and collaboratively build an understandable sequence of important events.

Session 2: Tell the Story continues the same Wonder Lab. Students return to the class story path, rehearse their retelling, refine it for a listener, share their understanding, and explore questions of different depths about the Adventure.

If only one 30-minute period is available, teach Session 1.

If a continuous 60-minute block is available, the two sessions can be taught together with a brief transition or movement break between them.

Flexible Use of the Guide

Core Pathway | 30 minutes

Teach **Session 1: Build the Story**.

Students experience:

Get Curious → Model → Build → Think It Through

This is a complete Kindergarten Comprehension lesson and provides opportunities to gather formative evidence of the selected KUSP.

Full Wonder Lab | 2 × 30 minutes

Teach both sessions.

Students experience the complete Wonder Lab cycle:

Model → Build → Rehearse → Share

Session 2 deepens the same learning rather than adding additional curriculum.

It also provides time for students to reflect on and question the Adventure through:

Puddle → Pond → Lake → Ocean

Continuous Block | ~60 minutes

If scheduling allows, Sessions 1 and 2 may be taught consecutively.

Take a brief movement or transition break after the first **Think It Through** before beginning **Reconnect**.

Materials

- A copy of *Adventure 001: The Long Way Down*
- Whiteboard, chalkboard, or chart paper and marker
- Three reusable cards or sticky notes labelled **Beginning**, **Middle**, and **Ending** — or **First**, **Next**, and **Last**
- Teacher-held props: a frisbee, an apple, and a leaf **OR** quick sketches representing the park, orchard, and Moon

Before Students Begin

- Create three spaces on the board for **Beginning**, **Middle**, and **Ending**.
- Add a simple picture or symbol to each space if helpful.
- Keep the class story path from Session 1 available for Session 2.
- Use professional judgment to choose the Session 2 grouping—partners, groups of three, or whole group—that best supports student participation. Early in the year, whole-group practice may help students establish the routine, build confidence, and understand what successful participation looks and sounds like.
- Keep the three story objects or sketches nearby for visual support.

Substitutions: Use pictures, gestures, spoken words, or imagined objects instead of physical props.

Useful Vocabulary

Pre-teach essential vocabulary through an explicit vocabulary routine, providing students with opportunities to build meaning, interact with the words, and use them in context before and throughout the lesson.

Story and comprehension words:
character • event • beginning • middle • ending • sequence • detail • retell • question

Movement words from the adventure may include:
throw • catch • fall • glide • drift • twirl • spin • curve • float • return

A **detail** is a small piece of information that helps someone understand what happened.

A **sequence** is the order in which events happen.

To **retell** means to share the important parts of a story in your own way.

Supporting Our Diverse Learners

Use these supports proactively while preparing and teaching the two sessions.

Make it accessible	Reread short excerpts as needed. Use the three story landmarks and visual sequence cards. Give one direction at a time.
Support language	Model **First**, **Next**, **Then**, **After that**, and **Last**. Preview useful story and movement words. Allow partner rehearsal or home-language rehearsal

	where appropriate.
Offer response choices	Accept speaking, pointing, drawing, acting, gesture, prop movement, communication devices, or assistive technology.
Support participation	Offer seated gestures, narrator roles, prop roles, sequence-card roles, quieter partner responses, or time to observe before participating.
Reduce memory load	Keep the class story path visible throughout both sessions and revisit short portions of the story when required.
Support rehearsal	Allow additional think time, repeat the same partner task, or let students practise with the teacher before sharing with a larger group.
Preserve the learning	Change the response mode, amount of scaffolding, number of events, or size of the audience — not the comprehension goal. Students still communicate accurate story information and demonstrate an understanding of sequence.

KUSP Assessment: Evidence to Notice

FORMATIVE ASSESSMENT

Gather evidence through observations and conversations across both sessions.

Session 1 provides sufficient opportunities to gather evidence of the selected KUSP. Session 2 gives students additional opportunities to demonstrate and communicate their understanding.

Evidence source	Listen or look for	Possible teacher note
Observation	Student places or represents an event in an appropriate part of the story; participates through speech, gesture, pointing, acting, drawing, props, or technology.	“Places an orchard event in the middle of the story.”
Conversation	Student communicates an accurate event or detail; explains what happened before or after; discusses story information.	“Names Newton dropping the apple and explains that it happened after Rob arrived.”
Product	Contributions to the three-part story path show appropriate sequence and relevant details.	“Uses class map to connect one event to the next.”

The Two-Session Flow

Session 1 — Build the Story | 30 minutes

Time	Section	Student experience	Teacher move
~5 min	**Get Curious**	Reconnect with memorable events and details from the Adventure.	Invite memories, gestures, and movement words without correcting or explaining.
~5 min	**Wonder Lab: Model**	Notice how a storyteller selects important information and puts it in order.	Think aloud briefly and make the comprehension process visible.
~15 min	**Wonder Lab: Build**	Collaboratively create a Beginning–Middle–Ending story path.	Prompt for important events, useful details, and understandable sequence.
~5 min	**Think It Through**	Explain how order and details help someone understand a story.	Use the class story path as evidence and gather formative KUSP evidence.

Session 2 — Tell the Story | 30 minutes

Time	Section	Student experience	Teacher move
~5 min	**Reconnect**	Revisit the class story path and reactivate the sequence.	Invite students to reconstruct the story before reviewing it together.
~8 min	**Wonder Lab: Rehearse**	Practise communicating one part of the story and refine it for a listener.	Prompt students to add, remove, clarify, or reorganize details when needed.
~9 min	**Wonder Lab: Share**	Combine contributions into a shared living retell.	Support clear communication without turning the activity into a performance exercise.
~3 min	**Think It Through**	Reflect on what made the retell understandable.	Connect student observations to details, sequence, and

Time	Section	Student experience	Teacher move
			comprehension.
~5 min	**Keep Wondering**	Generate and explore questions of different depths about the Adventure.	Use Puddle–Pond–Lake–Ocean language to deepen story-based wondering.

Session 1 — Build the Story

Get Curious | ~5 minutes

Reconnect students to the Adventure.

Show the apple, frisbee, and leaf or display simple pictures of them.

Briefly revisit the idea:

> ***"They all returned … but each followed a different path."***

Invite students to respond with words, gestures, movements, or another accessible response mode.

Ask:

- What do you remember happening with the apple?
- What do you remember happening with the frisbee?
- What do you remember happening with the leaf?
- Which moment from Rob and Newton's adventure stayed in your mind?
- Can your hand or body show one of the paths?

Record two or three useful words or quick sketches from student responses.

TEACHER MOVE
Accept different accurate memories. The purpose is to reactivate understanding before asking students to organize the story.

2. Wonder Lab

Model | ~5 minutes

Demonstrate how a storyteller can select important information and put it in an understandable order.

Hold up or point to the apple.

Say something such as:

> ***"First, Newton held up the apple. Next, he opened his hand. Last, the apple fell."***

Point to the sequence cards as you speak.

Then think aloud:

> ***"I remembered lots of things about the apple, but I didn't tell every single thing. I chose the parts that helped you understand what happened."***

Ask students what they noticed about your retell.

FACILITATION PROMPTS

- What happened first?
- What happened after that?
- What happened last?
- Which detail helped you understand what was happening?
- Did I have to repeat every word from the story?
- What would happen if I told those events in a different order?

TEACHER MOVE

Make the thinking visible. The model is not about giving students the answer; it demonstrates that understanding a story involves noticing important information and organizing it.

Build | ~15 minutes

Create a three-part class story path.

Place the **Beginning**, **Middle**, and **Ending** cards where everyone can see them.

Explain:

> ***"Now we're going to decide which parts of Rob and Newton's adventure someone really needs to know to understand what happened."***

Invite students to suggest events and decide together where they belong.

Beginning

Possible important events include:

- Rob throws his frisbee in the park.
- He wonders why it does not fall right away.
- The Wind carries him away.

Middle

Possible important events include:

- Rob arrives in the orchard and meets Newton.
- Newton drops the apple.
- Rob throws the frisbee.
- They watch the apple, frisbee, and leaf return along different paths.
- Rob and Newton keep asking questions.

Ending

Possible important events include:

- Rob looks toward the Moon.
- He wonders why the Moon does not fall.

- The Wind carries Rob home.
- Rob returns with another question.

Do not require every detail above.

Students should participate in deciding which details are useful and which can be left out while still communicating the important events.

Use quick sketches, symbols, words, props, or student gestures to represent the selected events.

FACILITATION PROMPTS

- Who is in this part of the story?
- Where are they?
- What important thing happens?
- Does that belong near the beginning, middle, or ending?
- What makes you think so?
- What happened before that?
- What happened after that?
- Which detail would help someone understand this part?
- Is there something we could leave out and still understand what happened?
- Are we missing anything important?
- Would our story still make sense if we moved this event?

TEACHER MOVE

Resist turning the story path into a teacher-created summary. Students should do the selecting and sequencing whenever possible.

Draw or record simple representations rather than complete sentences so the story path remains a thinking tool rather than a script.

Think It Through | ~5 minutes

Step back from the finished class story path.

Invite students to look across the entire sequence.

Ask:

- What happened near the beginning?
- What important event belongs in the middle?
- What happened near the ending?
- How did we decide where an event belonged?
- Which details did we decide were important?
- Did we need every detail from the story?
- How does putting events in order help someone understand what happened?

Invite students to turn and talk or contribute to the whole-group discussion.

Sample Response Guidance

Story part	One possible response — not a required script

Beginning	Rob throws his frisbee, wonders why it does not fall right away, and the Wind carries him away.
Middle	Rob meets Newton. They watch an apple, frisbee, and leaf return in different ways and wonder why.
Ending	Rob looks toward the Moon, asks why it does not fall, and returns home carrying another question.

Look for an understandable sequence and accurate story information rather than one exact wording.

Students may select different details and still demonstrate strong comprehension.

Session 1 Closing

Tell students:

> ***"We built the important parts of the Adventure today. Next time, we'll use what we built to help us tell the story so someone else can follow it."***

If Session 1 is the only lesson being taught, finish by asking:

> ***"What is one important part of Rob and Newton's Adventure you would want someone else to remember?"***

Session 2 — Tell the Story

Reconnect | ~5 minutes

Return to the class story path from Session 1.

Before reviewing it in detail, invite students to help reconstruct the sequence.

Ask:

- What do you remember from our beginning?
- What happened after Rob arrived in the orchard?
- What belongs near the ending?
- What detail do you remember adding?

Use student responses to revisit the story path.

Then intentionally hide, move, or point to one event and ask:

> ***"Would our story still make sense like this?"***

Allow students to notice and correct the sequence.

TEACHER MOVE
Reconnection should reactivate student thinking rather than become a teacher recap.

2. Wonder Lab

Rehearse | ~8 minutes

Explain:

> ***"We know what happened. Now we need to practise telling it in a way another person can understand."***

Students work with a partner.

Partner A chooses one part of the story — beginning, middle, or ending — and tells or shows what happened.

Partner B listens or watches.

Partner B helps make the message clearer by contributing one of the following:

- another accurate detail
- what happened before or afterward
- a useful sequence word
- a gesture or movement
- a character action
- a question that helps clarify the event

Switch roles.

Students may use sequence language such as:

First...
Next...
Then...
After that...
Last...

Speaking is not required when another response mode clearly communicates understanding.

After an initial attempt, invite students to rehearse the same part again.

Ask them to make **one small improvement** based on what their listener needed.

FACILITATION PROMPTS

- Can you tell or show your partner what happened?
- Does your listener know who is in this part?
- Does your listener know what happened?
- What detail could you add?
- Is there a detail you don't really need?
- What happened before this?
- What happened next?
- Which sequence word could help?
- Can you show the event with your body or hands?
- What could you change to make your retell easier to understand?

TEACHER MOVE

Allow students to try, notice something, and try again.

Listen for comprehension rather than polished speaking.

Share | ~9 minutes

Bring the class together to create a **living retell** of *The Long Way Down*.

Assign students or small groups to:

Beginning
Middle
Ending

Each group decides how to communicate its part using one or more of the following:

- a short spoken line
- gesture
- character action
- sound
- prop movement
- picture or visual
- narrated action
- another accessible representation

Give groups a short preparation period using the class story path as support.

Then move through the story in sequence.

The teacher or a student narrator may provide short transitions between groups.

After the complete retell, ask:

> ***"Was there anywhere our listener might have become confused?"***

If appropriate, revisit one section and let students refine it before repeating that portion.

FACILITATION PROMPTS

- What does the audience need to know about your part?
- Which event is most important to show?
- Which detail will help the audience understand?
- What should come immediately before your part?
- What should come after?
- How can your voice, face, body, picture, or prop communicate meaning?
- Is anything missing?
- Is there anything we could remove and still understand the story?
- How could we make this part clearer?

TEACHER MOVE

Share is about communicating understanding, not producing a polished performance.

Students can participate differently while contributing to the same comprehension task.

Think It Through | ~3 minutes

After the living retell, ask students to think about what helped them understand it.

Ask:

- What helped you know what was happening?
- How did putting the events in order help?
- Which detail made part of the story clearer?
- Did practising change anything?
- How did practising before sharing help us?

Return briefly to the central question:

How can we retell the important parts of Rob and Newton's adventure so a listener understands what happened?

Accept several student responses.

Keep Wondering | ~5 minutes

Questions can be small and focused, or they can invite us to think more deeply about different parts of a story.

Introduce four question depths using bodies of water:

PUDDLE

A small question about **one thing we can notice or remember from the Adventure**.

Examples:

- What did Newton drop?
- Where did Rob meet Newton?
- What three things did Rob and Newton watch return?

POND

A question that asks us to **put a few story details together**.

Examples:

- How did the apple, frisbee, and leaf move differently?
- What happened after Rob arrived in Newton's orchard?
- How were Rob and Newton alike when they noticed something surprising?

LAKE

A question that asks us to **think across different parts of the Adventure**.

Examples:

- Why did Rob and Newton keep comparing what happened to the apple, frisbee, and leaf?
- How did Rob's questions change from the beginning of the story to the ending?
- Why were the different paths of the apple, frisbee, and leaf important to the Adventure?

OCEAN

A deep question about the Adventure that may have **more than one thoughtful answer**.

Examples:

- Why do you think Rob leaves the Adventure with another question instead of an answer?
- What do Rob's questions tell us about the kind of person he is?
- Why do you think the story ends with Rob looking at the Moon?

The purpose is not for Kindergarten students to correctly label every question independently.

The water language gives students a simple way to notice that questions can invite different depths of thinking.

Invite Student Questions

Return attention to *The Long Way Down*.

Ask:

- **"What are you still wondering about this Adventure?"**
- Accept questions about the characters, events, objects, actions, illustrations, questions, or ideas within the story.

Choose several student questions and wonder aloud together:

> ***"Does this feel like a Puddle, Pond, Lake, or Ocean question?"***

There does not need to be one perfect classification. Briefly discuss what makes one question feel deeper than another.

FACILITATION PROMPTS

- Is your question about one detail or several parts of the story?
- Could we point to one place in the Adventure that helps us answer it?
- Would we need to think about several parts?
- Could two people have different thoughtful answers?
- What part of the story made you wonder that?
- Can we make this Puddle question a little deeper?
- What could turn this Pond into a Lake?

TEACHER MOVE

Keep questions anchored to the Adventure. A deeper question does not need to move into another subject or introduce information students have not encountered. Depth comes from noticing, connecting, interpreting, and wondering more deeply about the story itself.

Close with one student-generated question that the class would like to keep wondering about.

> ***"Every adventure begins with a question. Keep wondering."***

Likely Misconceptions and Helpful Responses

If students...	Try this teacher response
Choose a favourite event as the beginning even though it occurs later	"That is an important event. What happened before it?" Return to the story path.

If students...	Try this teacher response
Try to repeat the story word for word	"A retell shares the important parts in your own way. What does your listener really need to know?"
Include so many details that the sequence becomes unclear	"Which details are most important for understanding what happened?"
Leave out information needed to understand an event	"What could you add so someone who did not hear the story would understand?"
Think their first attempt must be perfect	"Rehearsing means we get to try, notice something, and make our next try clearer."
Move completely away from the Adventure when generating questions	"What happened in Rob and Newton's Adventure that made you wonder about that?" Help the student reshape the question around the story.
Think an Ocean question must be about a physically bigger object or topic	"Ocean doesn't mean the question is about something huge. It means the question asks us to think deeply."
Believe there is only one correct way to retell the story	"Two storytellers can choose different details and still communicate the important events accurately."

Use the Evidence Next

- **If a student identifies an isolated event:** offer two or three visual choices and ask what happened before or after.
- **If a student can sequence events but provides few details:** ask what information would help a listener picture or understand the event.
- **If a student includes details but struggles with order:** use the Beginning–Middle–Ending cards and physically place events.
- **If a student communicates accurately and independently:** invite them to decide which details are most important or whether anything could be removed.
- **If a student generates primarily Puddle questions:** model how one question can be deepened by connecting details or considering more than one part of the Adventure.
- **If a student generates a thoughtful story-based question:** preserve it even when the class cannot answer it. The purpose of Keep Wondering is to value worthwhile questions as well as answers.
- **If a student demonstrates strong comprehension nonverbally:** acknowledge the evidence and continue offering multiple ways to communicate thinking.

Optional ELAL Extensions

Use these only when they naturally support classroom learning. They are not required parts of the two-session experience.

Illustration Detective

Return to one or more story illustrations.

Ask students what information the image provides about:

- character
- setting
- action
- event

Discuss how pictures can help us understand a story.

Movement Word Collection

Collect verbs from the Adventure such as:

fall • glide • drift • twirl • spin • curve • float

Act out the differences and discuss how the words help listeners picture what happens.

Question Hunt

Recall questions Rob asks during the Adventure.

Ask students what Rob is trying to understand when he asks each question.

Students can consider whether each question feels more like a **Puddle, Pond, Lake, or Ocean** question and explain their thinking.

Retell Remix

Intentionally mix up three story events.

Ask students to notice the problem and put them back into an order that helps the story make sense.

Every adventure begins with a question.
Keep wondering.

THE ADVENTURES WITH FRISBEE ROB

The Long Way Down

Adventure 001: Isaac Newton

KINDERGARTEN

MATHEMATICS

Teacher Guide

The Size Surprise: Bigger in What Way?

GRADE	SUBJECT	TIME
Kindergarten	Mathematics	2 × 30 minutes

CENTRAL QUESTION

How can we compare the apple, frisbee, and leaf in different ways to describe their size?

Wonder in Motion

Lesson at a Glance

Story connection	Rob and Newton carefully observe an apple, frisbee, and leaf. The three objects are different from one another in many ways. Mathematicians can also look closely at these objects and compare measurable attributes such as length, area, and weight.
Math focus	Identifying measurable attributes, making direct comparisons, using comparative language, and recognizing that “bigger” can mean different things depending on the attribute being compared.
Learning intention	We are learning to compare two objects using one measurable attribute at a time and describe what we notice with mathematical language.
Core experience	Across two 30-minute sessions, students investigate the story objects through direct comparison. They collaboratively build a Size Comparison Board, rehearse how to describe comparisons clearly, and share evidence showing why an object may be bigger in one way but smaller in another.
Flexible use	Session 1 is a complete core lesson and can be used independently. Session 2 continues the same Wonder Lab by giving students additional time to compare, rehearse, explain, share, and deepen their mathematical thinking. Teachers with a continuous 60-minute block may teach both sessions together.
Use after reading	Read Adventure 001: The Long Way Down before beginning. The story reading is separate from the two Mathematics sessions.
Story context	Isaac Newton was a real historical person. Rob’s visit, their conversation, and the events they experience together are imaginative parts of the story.
Important mathematical distinction	Students are comparing measurable attributes of the apple, frisbee, and leaf. They are not using these comparisons to explain why the objects move differently in the Adventure. The different paths provide the story connection; explaining the motion belongs to later scientific investigation.

Optional Teacher-Spoken Success Indicators

I can tell what I am comparing about two objects.

I can compare two objects directly.

I can use words such as longer, shorter, heavier, or lighter to describe what I notice.

I can explain why saying one object is “bigger” may not tell us enough.

How to Use This Guide

THE GUIDE IS A TOOL, NOT A SCRIPT

This guide is designed to support responsive teaching rather than prescribe every word or action.

Session 1 is a complete 30-minute Kindergarten Measurement lesson and can be taught independently.

Session 2 continues the same learning through rehearsal, refinement, sharing, and questioning. It does not introduce additional curriculum.

Follow productive student thinking and conversation while protecting the central question, selected Measurement KUSP, meaningful participation, and approximate lesson timing.

Adjust examples, objects, grouping, response modes, and pacing to meet the needs of the learners in front of you.

The exact result of a comparison may depend on the apple, frisbee, leaf, or substitute objects being used. Students should observe and compare the actual objects rather than memorize predetermined answers.

The goal of the second session is not to do more.

It is to give students enough time to compare, think, try, improve, and communicate their mathematical understanding.

Curriculum Alignment

Organizing Idea	Measurement: Attributes such as length, area, volume, and angle are quantified by measurement.
Guiding Question	In what ways can size be distinguished?
Learning Outcome	Children explore size through direct comparison.
Assessment Focus	Gather formative evidence of selected Kindergarten Measurement KUSP through students' identification of measurable attributes, direct comparison of familiar objects, use of comparative language, and explanations of what is being compared. Session 1 provides sufficient opportunities to gather evidence of the selected KUSP. Session 2 offers additional opportunities for students to demonstrate and communicate their understanding. These lessons do not assess the complete learning outcome.

Selected KUSP for These Lessons

KUSP element	Selected curriculum learning	What it looks or sounds like
Knowledge	Size can be interpreted in many ways according to measurable attributes, such as: the length of an object how much flat space an object covers (area) how much a container holds (capacity) the heaviness of an object (weight) Comparisons of size can be described by using words such as: longer shorter heavier lighter too big too small	Students recognize that objects can be compared in different ways and use language that identifies the specific attribute being compared.
Understanding	Size describes the amount of one measurable attribute of an object or a space. Size may refer to only one measurable attribute at a time. The size of two objects can be compared directly.	Students recognize that a statement such as “the frisbee is bigger” needs more information and clarify whether they are comparing length, area, weight, or another measurable attribute.
Skills & Procedures	Identify measurable attributes of familiar objects to which size may refer. Compare the length, area, weight, or capacity of two objects directly. Describe the size of an object in relation to another object, using comparative language.	Students select an attribute, directly compare two story objects, and communicate the result using appropriate comparative language such as longer, shorter, heavier, or lighter.

Curriculum source: Government of Alberta, Mathematics (K–6) Curriculum, Measurement, p. 10. *View the Alberta program of study*

Teacher Preparation

STANDARD PATHWAY

Use these two 30-minute sessions after students have heard Adventure 001: The Long Way Down.

Session 1: Compare the Objects is the core lesson. Students investigate what “size” can mean, see direct comparison modelled, and collaboratively build a Size Comparison Board using the apple, frisbee, leaf, or suitable substitutes.

Session 2: Prove the Comparison continues the same Wonder Lab. Students return to the comparison board, rehearse comparisons with a partner, refine their mathematical language, share evidence, and explore questions of different depths about the Adventure.

If only one 30-minute period is available, teach Session 1.

If a continuous 60-minute block is available, the two sessions can be taught together with a brief transition or movement break between them.

Flexible Use of the Guide

Core Pathway | 30 minutes

Teach Session 1: Compare the Objects.

Students experience:

Get Curious → Model → Build → Think It Through

This is a complete Kindergarten Measurement lesson and provides opportunities to gather formative evidence of the selected KUSP.

Full Wonder Lab | 2 × 30 minutes

Teach both sessions.

Students experience the complete Wonder Lab cycle:

Model → Build → Rehearse → Share

Session 2 deepens the same learning rather than adding additional curriculum.

It also provides time for students to reflect on and question the mathematics of the Adventure through:

Puddle → Pond → Lake → Ocean

Continuous Block | ~60 minutes

If scheduling allows, Sessions 1 and 2 may be taught consecutively.

Take a brief movement or transition break after the first Think It Through before beginning Reconnect.

Materials

A copy of Adventure 001: The Long Way Down

A frisbee

An apple

One or more leaves

Whiteboard, chalkboard, or chart paper and marker

Three cards or headings:

- WHAT ARE WE COMPARING?
- HOW ARE WE COMPARING THEM?
- WHAT DO WE NOTICE?

Optional pan balance for directly comparing weight

Optional string, strips of paper, or another aid for comparing lengths

Optional flat representations of the objects for comparing area

Optional attribute cards or symbols for:

length

area

weight

Before Students Begin

Create a class Size Comparison Board with three spaces:

Objects

Attribute

Comparison

For example:

apple + leaf | length | _____ is longer than _____.

Have the apple, frisbee, and leaf available where all students can see them.

Choose objects that allow students to make visible, meaningful comparisons.

If using a balance, prepare it for direct weight comparisons without introducing standard units.

Decide which attributes will be emphasized.

Length and weight provide the clearest direct comparisons for the three story objects.

Area may also be explored when appropriate by directly comparing or superimposing suitable flat objects or representations.

Capacity does not need to be included simply because it appears in the curriculum. It is not a natural attribute for these particular story objects.

- Use professional judgment to choose the Session 2 grouping—partners, groups of three, or whole group—that best supports student participation. Early in the year, whole-group practice may help students establish the routine, build confidence, and understand what successful participation looks and sounds like.

Keep the Size Comparison Board available for Session 2.

Substitutions

Use classroom objects, photographs, drawings, or safe replicas when the actual story objects are unavailable.

When using pictures, avoid making claims about weight from the picture alone.

Useful Vocabulary

Pre-teach essential vocabulary through an explicit vocabulary routine, providing students with opportunities to build meaning, interact with the words, and use them in context before and throughout the lesson.

Mathematics words:

compare • size • attribute • length • area • weight • longer • shorter • heavier • lighter • same

Story words:

apple • frisbee • leaf • object • path • fall • glide • drift

An attribute is something about an object that we can notice or describe.

Length tells us how long an object is from one end to another.

Area describes how much flat space something covers.

Weight describes how heavy or light an object is.

To compare means to look at two things to determine how they are alike or different in a particular way.

When we compare size, we need to know which attribute we are comparing.

Supporting Our Diverse Learners

Use these supports proactively while preparing and teaching the two sessions.

Make it accessible	Use real objects whenever possible. Allow students to touch, hold, align, superimpose, or otherwise directly compare safe objects.
Support language	Model sentence frames such as: The _____ is longer than the _____. The _____ is shorter than the _____. The _____ is heavier than the _____. The _____ is lighter than the _____. We are comparing _____.
Offer response choices	Accept speaking, pointing, holding objects, positioning objects, using a balance, selecting attribute cards, drawing, gesture, communication devices, or assistive technology.
Support participation	Offer roles such as object holder, attribute chooser, comparison checker,

	balance observer, board recorder, or mathematical reporter.
Reduce memory load	Keep the three story objects and attribute cards visible throughout both sessions. Introduce one attribute at a time.
Support rehearsal	Allow students to physically repeat a comparison before explaining it. Let students practise the same comparison with a teacher or partner before sharing with the whole group.
Preserve the learning	Change the objects, number of choices, language demands, or response mode—not the mathematical goal. Students still identify one measurable attribute at a time and directly compare two objects.

KUSP Assessment: Evidence to Notice

FORMATIVE ASSESSMENT

Gather evidence through observations and conversations across both sessions.

Session 1 provides sufficient opportunities to gather evidence of the selected KUSP.

Session 2 gives students additional opportunities to demonstrate and communicate their understanding.

Evidence source	Listen or look for	Possible teacher note
Observation	Student identifies an attribute that can be compared and uses an appropriate direct-comparison action.	“Aligns the apple and leaf before deciding which is longer.”
Conversation	Student uses comparative language and identifies what attribute is being compared.	“Changes ‘the frisbee is bigger’ to ‘the frisbee is longer than the apple.’”
Product	Contributions to the Size Comparison Board show two objects, one measurable attribute, and an appropriate comparison.	“Chooses weight and records the observed heavier/lighter relationship using the class objects.”

The Two-Session Flow

Session 1 — Compare the Objects | 30 minutes

Time	Section	Student experience	Teacher move
~5 min	**Get Curious**	React to the question "Which is bigger?" and notice that the answer may depend on what is being compared.	Welcome different answers and ask students to clarify what they mean by bigger.
~5 min	**Wonder Lab: Model**	Watch two objects being compared using one attribute and then a different attribute.	Make the attribute explicit and demonstrate fair direct comparison.
~15 min	**Wonder Lab: Build**	Collaboratively build a Size Comparison Board using different pairs of story objects and measurable attributes.	Keep students focused on one attribute at a time and prompt precise comparative language.
~5 min	**Think It Through**	Explain why one object can be bigger in one way but smaller in another.	Connect students' observations to the mathematical meaning of size and attribute.

Session 2 — Prove the Comparison | 30 minutes

Time	Section	Student experience	Teacher move
~5 min	**Reconnect**	Revisit the Size Comparison Board and reconstruct how comparisons were made.	Ask students to name the attribute before naming the result.
~8 min	**Wonder Lab: Rehearse**	Work with a partner to select, make, and explain a direct comparison.	Prompt students to prove rather than guess.
~9 min	**Wonder Lab: Share**	Present comparisons and demonstrate the evidence used.	Focus audience attention on the attribute and comparison method.
~3 min	**Think It Through**	Reflect on what makes a comparison clear and fair.	Return to the central question and the importance of naming the attribute.
~5 min	**Keep Wondering**	Generate and explore questions of different depths about the story objects and mathematical comparisons.	Use Puddle–Pond–Lake–Ocean language to deepen story-based mathematical wondering.

Session 1 — Compare the Objects

Get Curious | ~5 minutes

Reconnect students to the Adventure.

Show the apple, frisbee, and leaf.

Ask:

- "Which one is the biggest?"
- Do not immediately define what biggest means.
- Invite several responses.
- Students may disagree.

Follow with:

- How do you know?
- What does bigger mean?
- Could someone choose the apple while someone else chooses the frisbee?
- Could they both have a reason?
- What could we compare about these objects?

Record useful student language.

Then introduce the mathematical challenge:

> *"Mathematicians need to be very clear about what they are comparing. Today we are going to discover that 'bigger' can mean more than one thing."*

TEACHER MOVE

Do not resolve the original question yet.

The productive uncertainty creates the need for measurable attributes.

Wonder Lab

Model | ~5 minutes

Choose two story objects.

For example, use the frisbee and apple.

Say:

> *"I could say, 'The frisbee is bigger than the apple.' But that does not tell you exactly what I compared."*

Introduce length.

Ask:

- "How could we compare which object is longer?"
- Model a direct comparison by aligning the objects appropriately.

State an observation based on the actual objects:

> *"When I compare their length, I can say _____ is longer than _____."*

Now change the attribute.

Ask:

- "What if I want to compare which one is heavier?"
- Use a direct comparison appropriate to the available materials, such as a pan balance.
- State the result based on the actual objects.

Think aloud:

> *"The objects did not change. I changed what I was comparing."*
>
> *"If I only say 'bigger,' you do not know whether I mean longer, heavier, or something else."*

FACILITATION PROMPTS

- What two objects am I comparing?
- What attribute am I comparing?
- What did I have to do to compare their length?
- What did I have to do differently to compare their weight?
- Did the objects change?
- Did what I was comparing change?
- What should I say instead of only saying "bigger"?

TEACHER MOVE

Do not predetermine which object should be longer or heavier.

The mathematical evidence comes from the actual objects used in the classroom.

Build | ~15 minutes

Create a class Size Comparison Board.

Use three headings:

- WHAT ARE WE COMPARING?
- HOW ARE WE COMPARING THEM?
- WHAT DO WE NOTICE?

Invite students to choose two story objects.

Possible pairs include:

apple and frisbee

apple and leaf

frisbee and leaf

Then choose one measurable attribute.

Begin with length.

Ask students how the two objects can be compared directly.

Support students in aligning objects appropriately.

Record the class observation using comparative language.

For example:

Objects:
apple + leaf

Attribute:
length

Comparison:
The _____ is longer than the _____.

Repeat using another pair.

Then introduce weight.

Ask:

- "Can we use the same comparison method?"
- Allow students to recognize that another attribute may require another method.
- Use a balance or another appropriate direct comparison.
- Record the observed result.
- If appropriate, explore area with two suitable flat objects or representations.

Ask:

- Which one covers more flat space?
- How could we compare them directly?

Students may superimpose one over another when appropriate.

Continue adding comparisons to the board.

Aim for several examples using at least two different attributes rather than many examples using only one.

FACILITATION PROMPTS

- Which two objects should we compare?
- What do you want to compare about them?
- Are we comparing length or weight?
- How can we compare that attribute directly?
- What should we line up?
- What does the balance show us?
- Which mathematical word describes what we notice?
- Can we say longer or shorter?
- Can we say heavier or lighter?
- Could the answer change if we compare a different attribute?
- If someone says "This one is bigger," what should we ask them?

TEACHER MOVE

Repeatedly ask:

"Bigger in what way?"

This should become the mathematical refrain of the Wonder Lab.

Students should discover that size comparisons require a specified attribute.

Think It Through | ~5 minutes

Step back from the Size Comparison Board.

Ask:

- What different things did we compare today?
- What did length tell us?
- What did weight tell us?
- Did we always use the same method to compare?
- Why not?
- Can an object be longer than another object but lighter than it?
- Can two people disagree about which object is bigger because they are thinking about different attributes?
- Why is "bigger" sometimes not enough information?

Return to the central question:

How can we compare the apple, frisbee, and leaf in different ways to describe their size?

Sample Response Guidance

Possible response:
"We have to say what we are comparing."
"We can compare how long something is."
"We can compare how heavy something is."
• "One thing can be bigger in one way but not in another way." • Look for recognition that size refers to a measurable attribute and that comparisons should focus on one attribute at a time.

Session 1 Closing

Tell students:

> *"Today we discovered that asking which object is bigger is only the beginning. Mathematicians ask another question: bigger in what way?"*
>
> *"Next time, you will make your own comparison and show the class how you know."*

If Session 1 is the only lesson being taught, finish by asking:

> *"What is one comparison you can make between two of Rob and Newton's three objects?"*

Session 2 — Prove the Comparison

Reconnect | ~5 minutes

Return to the Size Comparison Board.

Point to one comparison but cover the attribute.

For example:

frisbee + apple

The _____ is longer than the _____.

Ask:

- What were we comparing?
- How can you tell?
- What word gives us a clue?

Repeat with a heavier/lighter comparison.

Then make a deliberately unclear statement:

> *"The apple is bigger than the leaf."*

Ask:

- "Is that enough information for a mathematician?"
- Invite students to improve the statement.

Possible responses:

- The apple is heavier than the leaf.
- The leaf is longer than the apple.
- The exact statement will depend on the objects being used.

TEACHER MOVE

Reactivate the central insight before students begin independent comparisons:

Name the attribute.

Wonder Lab

Rehearse | ~8 minutes

Students work with partners or small groups.

Give each group access to two story objects, safe substitutes, or teacher-selected comparison materials.

Students complete four steps:

1. Choose two objects.
2. Choose one measurable attribute.

3. Compare the objects directly.
4. Describe what they notice using comparative mathematical language.

Possible sentence frame:

> *"We compared the _____ and the _____."*
>
> *"We compared their _____."*
>
> *"The _____ is _____ than the _____."*

Students then repeat the task using a different attribute when possible.

Ask students to notice whether changing the attribute changes what they can say about the objects.

Partner check:

- What are you comparing?
- How did you compare them?
- What evidence can you show?
- Did you use the correct comparison word?
- Could you make your statement clearer?

After the first attempt, invite students to make one improvement before sharing.

FACILITATION PROMPTS

- What two objects did you choose?
- Which attribute are you comparing?
- How will you compare fairly?
- Can you show me rather than guess?
- What does your comparison prove?
- Which word communicates your result?
- What changes when you choose another attribute?

TEACHER MOVE

The goal is not speed or producing many comparisons.

One carefully made and clearly communicated comparison is stronger evidence of mathematical understanding than several guesses.

Share | ~9 minutes

Bring the class together for a Comparison Showcase.

Invite pairs to demonstrate one comparison.

Students should communicate:

the two objects

the attribute

the direct-comparison method

the result

For example:

> *"We compared the leaf and frisbee."*
>
> *"We compared their length."*
>
> *"We lined them up."*
>
> *"The frisbee is longer than the leaf."*

After each share, ask the audience:

- What attribute did they compare?
- How did they prove it?
- Which comparison word did they use?
- Could these two objects be compared another way?
- Might the result be different if we changed the attribute?

Choose one pair of objects and deliberately compare them in two different ways.

Ask:

> *"Which one is bigger?"*

Allow students to respond:

> *"Bigger in what way?"*

TEACHER MOVE

That response is a major conceptual success.

Students have moved from treating size as one vague property to recognizing measurable attributes.

Think It Through | ~3 minutes

Ask:

- What should we ask when someone says one object is bigger?
- Why do we compare one attribute at a time?
- How does directly comparing objects help us know instead of guess?
- What mathematical words helped us communicate clearly?

Return to the central question:

How can we compare the apple, frisbee, and leaf in different ways to describe their size?

Accept several responses.

Keep Wondering | ~5 minutes

Questions can begin with something small we can notice and become deeper as we connect more mathematical ideas within the Adventure.

Introduce or revisit the four question depths.

PUDDLE

A small question about one mathematical detail from the Adventure.

Examples:

- Which two of the three story objects could we compare by length?
- Which story object could we compare with the frisbee by weight?
- What attribute are we comparing when we ask which object is heavier?

POND

A question that asks us to connect a few mathematical ideas about the story objects.

Examples:

- How could we compare the apple and frisbee in two different ways?
- Could the leaf be longer than another object but lighter than it?
- Why might we get different answers when we ask which story object is bigger?

LAKE

A question that asks us to think across several comparisons or ideas.

Examples:

- How could we describe the apple, frisbee, and leaf without using the word “bigger”?
- How could changing the attribute change the way we order the three story objects?
- Why do mathematicians need to say what attribute they are comparing?

OCEAN

A deep mathematical question about the Adventure that may have more than one thoughtful answer.

Examples:

- If Rob says, “The frisbee is bigger than the apple,” what would we need to know before deciding whether his statement is true?
- Can one story object be both bigger and smaller than another object at the same time, depending on what we compare? How?
- Why might two people look at the same apple, frisbee, and leaf and make different size comparisons while both using correct mathematics?

The purpose is not for Kindergarten students to correctly label every question independently.

The water language gives students a simple way to notice that mathematical questions can invite different depths of thinking.

Invite Student Questions

Return attention to The Long Way Down and the three story objects.

Ask:

- “What are you still wondering about the apple, frisbee, and leaf as a mathematician?”
- Accept questions about measurable attributes and comparisons of the objects within the Adventure.

Choose several student questions and wonder aloud together:

> *“Does this feel like a Puddle, Pond, Lake, or Ocean question?”*

There does not need to be one perfect classification.

Briefly discuss what makes one question invite more mathematical thinking than another.

FACILITATION PROMPTS

- Can we answer your question by making one direct comparison?
- Would we need to compare more than one attribute?
- Could two people have different thoughtful answers?
- What story objects does your question connect?
- Can we make this Puddle question a little deeper?
- What could turn this Pond into a Lake?
- Could we make a question that begins with “How can…” or “Why might…”?

TEACHER MOVE

Keep questions anchored to the Adventure and the mathematics students have explored.

A deeper question does not need to introduce measurement units, formulas, physics, or content beyond the Kindergarten learning.

Depth comes from comparing, connecting, explaining, and reasoning more deeply about the mathematical ideas already present.

Close with one student-generated mathematical question that the class would like to keep wondering about.

“Every adventure begins with a question. Keep wondering.”

Likely Misconceptions and Helpful Responses

If students…	Try this teacher response
If students use “big” or “small” without identifying an attribute:	Try: “Big in what way? Are you thinking about length, weight, or something else?”
If students assume the object that looks largest must also be heaviest:	Try: “Looking gives us an idea. How could we compare the weight directly?”
If students compare two different attributes:	For example, “The frisbee is longer but the apple is heavy.” Try: “Those are both useful observations. Let’s compare the same attribute first. What can we say about their length?”
If students do not align objects when comparing length:	Try: “Where should the two objects begin so our comparison is fair?”

If students...	Try this teacher response
If students think a different comparison result means someone was wrong:	Try: "You compared a different attribute. What did each person compare?"
If students believe "bigger" always describes one fixed property:	Try: "Could this object be longer but lighter? What would that tell us about the word bigger?"
If students try to use size comparisons to explain why the apple, frisbee, and leaf moved differently:	Try: "That is an interesting science question. Our mathematics tells us how the objects compare. It does not yet tell us why they followed different paths."
If students move completely away from the Adventure when generating questions:	Try: "What happened with the apple, frisbee, or leaf that made you wonder that? Can we turn your idea into a question about these story objects?"
If students think an Ocean question must involve an enormous measurement:	Try: "Ocean does not mean physically huge. It means the question asks us to think deeply and connect mathematical ideas."

Use the Evidence Next

If a student identifies an object but not an attribute:

Offer two attribute choices and ask, "Are you comparing length or weight?"

If a student can name an attribute but relies on visual guessing:

Ask them to demonstrate a direct comparison.

If a student directly compares correctly but lacks comparative vocabulary:

Model the sentence frame and allow the student to complete it using longer, shorter, heavier, or lighter.

If a student uses comparative language but compares unfairly:

Return to the objects and ask how they could be positioned or tested so the comparison is clearer.

If a student confidently works with one attribute:

Invite them to compare the same two objects using a different attribute.

If a student recognizes that the comparison can reverse when the attribute changes:

Invite them to explain why both statements can be mathematically correct.

If a student generates primarily Puddle questions:

Model how one question can be deepened by comparing the same story objects in more than one way.

If a student generates a thoughtful story-based mathematical question:

Preserve it even when the class cannot settle on one immediate answer. Keep Wondering values worthwhile mathematical questions as well as solutions.

If a student demonstrates understanding nonverbally:

Record what the student's alignment, selection, balancing, pointing, or object manipulation demonstrates about mathematical understanding.

Optional Mathematics Extensions

Use these only when they naturally support classroom learning. They are not required parts of the two-session experience.

SAME OBJECT, NEW ATTRIBUTE

Choose two story objects.

Compare them by length.

Then compare them by weight.

Ask:

- Did the same object "win" both comparisons?
- What changed?

Reinforce that changing the attribute can change the comparison.

ATTRIBUTE SORT

Show familiar classroom objects.

Students sort examples according to an attribute they could reasonably compare:

length

area

weight

capacity

Discuss how some objects could belong in more than one group because they have many measurable attributes.

COMPARISON DETECTIVE

Make an incomplete statement:

> *"The leaf is smaller than the frisbee."*

Ask students to become Comparison Detectives.

- What information is missing?
- How could we rewrite the statement so it is mathematically clear?

STORY OBJECT CHALLENGE

Return to the apple, frisbee, and leaf.

Challenge students to make as many accurate comparison statements as possible without using only “bigger” or “smaller.”

For example:

_____ is longer than _____.

_____ is shorter than _____.

_____ is heavier than _____.

_____ is lighter than _____.

All statements must be supported by direct comparison of the actual objects.

Every adventure begins with a question.
Keep wondering.

THE ADVENTURES WITH FRISBEE ROB

The Long Way Down

Adventure 001: Isaac Newton

KINDERGARTEN

PHYSICAL EDUCATION & WELLNESS

Teacher Guide

Teacher Guide

GRADE	SUBJECT	TIME
Kindergarten	Physical Education & Wellness	2 × 30 minutes

CENTRAL QUESTION

How can our bodies move when we play with a frisbee?

Wonder in Motion

Move It! How Can Our Bodies Move with a Frisbee?

Lesson at a Glance

Story Connection	In *The Long Way Down*, Rob and Newton spend much of the Adventure noticing movement. The apple moves. The leaf moves. The frisbee moves. Physical Education & Wellness shifts the focus from the object to the person moving with it. Instead of watching only where the frisbee goes, students begin noticing what their own bodies do when they walk, step, turn, reach, throw, collect, or move toward a frisbee. The Adventure creates a natural new question: **What is my body doing when I move and play?**
Physical Education & Wellness Focus	Exploring different ways the body can move during frisbee play, recognizing that movement includes changes of position or physical location, and practising movement in different directions from one point to another. The frisbee provides an authentic and motivating context for investigating body movement without requiring students to demonstrate formal throwing or catching technique.
Learning Intention	**We are learning to notice, explore, and show different ways our bodies can move while playing with a frisbee.**
Core Experience	Across two 30-minute sessions, students explore movement through the companion **Kindergarten Adventures FlightPlan in Frisbee Playbook**.

Session 1 — Explore the Movement

Get Curious → Wonder Lab: Model → Wonder Lab: Build → Think It Through

Session 2 — Try, Improve, Share

Reconnect → Wonder Lab: Rehearse → Wonder Lab: Share → Think It Through → Keep Wondering

The companion FlightPlan contains the physical lesson students actually perform.

This Teacher Guide provides the curriculum connection, instructional purpose, assessment lens, learner supports, facilitation prompts, misconceptions, next instructional steps, and Adventure-based inquiry.

Flexible Use

Session 1 is a complete core lesson and can be taught independently.

Session 2 continues the same Wonder Lab by giving students additional time to repeat movements, notice more, communicate what they understand, and observe movement in others.

Teachers with a continuous 60-minute block may teach both sessions together.

Use After Reading

Read Adventure 001: *The Long Way Down* before beginning.

The story reading is separate from the two Physical Education & Wellness sessions.

Story Context

Isaac Newton was a real historical person.

Rob's visit, their conversation, and the events they experience together are imaginative parts of the Adventure.

Important Physical Education & Wellness Distinction

This is not a formal throwing-technique lesson.

Students are not being assessed on producing a technically correct backhand, throwing a particular distance, creating a particular flight path, or catching every frisbee.

The selected curriculum focus is more foundational:

movement of the body.

A student who steps, turns, reaches, changes location, moves with a frisbee, gently sends it into open space, or moves to collect it is demonstrating meaningful movement learning even when the frisbee itself does not travel perfectly.

The frisbee provides the context.
The body is the curriculum focus.

Optional Teacher-Spoken Success Indicators

I can show different ways my body can move.

I can move from one place to another.

I can move in different directions.

I can notice what my body does when I move with a frisbee.

Frisbee Playbook FlightPlan

The FlightPlan Is the Physical Lesson

This Teacher Guide is designed to be used with the companion **Kindergarten Adventures FlightPlan in Frisbee Playbook**.

Open the FlightPlan before teaching these PE sessions.

The FlightPlan is a ready-to-use physical lesson sequence that shows what students will do, in what order, and for how long.

For this Adventure, the Kindergarten FlightPlan contains both 30-minute sessions and organizes the physical experience through:

Session 1
Get Curious → Model → Build → Think It Through

Session 2
Reconnect → Rehearse → Share → Think It Through → Keep Wondering

The FlightPlan provides the practical information needed to deliver the physical lesson, including activity sequence, timing, educator notes, Drill instructions, coaching cues, equipment information, and activity-specific delivery details.

When a Drill appears in the FlightPlan, select **Details** when you need its complete instructions, coaching cues, equipment information, or additional resources.

Kindergarten FlightPlan

Direct access
https://frisbeeplaybook.com/flightplan/newton/kindergarten

Or navigate:
Frisbee Playbook → Build → Adventures with Frisbee Rob → The Long Way Down → Kindergarten

Teachers can keep the FlightPlan open on a phone, tablet, or computer during class or select **Print** before teaching.

Standard and Quick Launch

Use **Standard** to view the complete two-session experience.

When only one short block is available, select **Quick Launch**. For this Adventure, Quick Launch provides the essential Session 1 pathway:

Get Curious → Model → Build → Think It Through

Quick Launch is not an automatically shortened version of every activity. It displays the activities intentionally selected as the essential short-block pathway.

How the Two Resources Work Together

FlightPlan = what students physically do.

Teacher Guide = what the teacher is looking for and why it matters.

The FlightPlan is required to deliver the physical portion of these lessons.

The Teacher Guide is designed to be used alongside the FlightPlan, not instead of it.

The public Adventure FlightPlan focuses primarily on lesson delivery. Curriculum interpretation, assessment evidence, learner supports, misconceptions, and deeper questioning remain here in the Teacher Guide.

How to Use This Guide

THE GUIDE IS A TOOL, NOT A SCRIPT

Before teaching, open the Kindergarten Adventures FlightPlan in Frisbee Playbook and review the physical lesson.

During class, use the FlightPlan to deliver the activities and use this Teacher Guide as your curriculum, observation, assessment, and questioning lens.

Do not attempt to teach the physical lesson from this document alone.

Session 1 is a complete 30-minute Kindergarten Movement Skill Development lesson and can be taught independently.

Session 2 continues the same learning through rehearsal, refinement, sharing, and questioning. It does not introduce additional curriculum.

Follow productive student movement and curiosity while protecting the central question, selected KUSP, meaningful participation, and approximate lesson timing.

Students do not need to perform every movement in the same way.

Avoid turning frisbee attempts into technical corrections. Later grades provide opportunities to refine movement skills, accuracy, control, and efficiency.

For Kindergarten, repeatedly return attention to:

What is your body doing?

The goal of the second session is not to do more. It is to give students enough time to think, try, improve, and communicate what they understand.

Curriculum Alignment

Organizing Idea	**Movement Skill Development:** Developing physical literacy through movement and active living supports well-being across a lifespan.
Guiding Question	**How can an awareness of the body facilitate movement?**
Learning Outcome	**Children investigate movement of the body.**
Assessment Focus	Gather formative evidence of selected Kindergarten Movement Skill Development KUSP through students' physical movement, demonstrations, conversations, gestures, and contributions to reflection. Look for students who: ● recognize more than one way the body can move ● change body position or physical location ● move from one point to another ● explore different directions of movement ● use frisbee play as a context for body movement

	• notice movement in themselves or others • communicate movement understanding through words, actions, gestures, pictures, or supported response choices Session 1 provides sufficient opportunities to gather evidence of the selected KUSP. Session 2 offers additional opportunities for students to demonstrate and communicate their understanding. These lessons do not assess the complete Learning Outcome.

Selected KUSP for These Lessons

KUSP element	Selected curriculum learning	What it looks or sounds like
Knowledge	**Selected Curriculum Learning** Movement of the body can occur in a variety of ways, such as: • walking • running • jumping • throwing • kicking • catching	Students recognize that the body can move in many ways. During the companion FlightPlan, students may move with a frisbee, step, turn, reach, change direction, gently send the frisbee into open space, move toward it, or collect it. Students do not need to demonstrate every movement named in the curriculum. Everyday descriptions such as: • “My arm moved.” • “I stepped.” • “I reached.” • “I turned.” can be connected with formal movement language through teacher conversation.
Understanding	**Selected Curriculum Learning** Movement is any physical activity that includes changes of position or physical location.	Students notice when their whole body changes location or when part of the body changes position. They may show their understanding by: • demonstrating a movement • naming a movement • comparing a start and finish location • pointing to a movement card • showing a body part that changed position Students do not need to recite a

KUSP element	Selected curriculum learning	What it looks or sounds like
		definition. The goal is for students to connect the concept of movement with what their bodies actually do.
Skills & Procedures	**Selected Curriculum Learning** Practise movement in any direction from one point to another.	Students move between locations during the FlightPlan and experiment with different directions. Depending on the physical experience, students may move: ● forward ● backward ● sideways ● toward a frisbee ● away from a starting point ● from one open space to another Students demonstrate that body movement can take them from one point to another in different ways.

Curriculum source: Government of Alberta, Physical Education and Wellness (K–6) Curriculum, Movement Skill Development, p. 6. *View the Alberta program of study*

Teacher Preparation

STANDARD PATHWAY

Use these two 30-minute sessions after students have heard Adventure 001: *The Long Way Down*.

Before teaching, open the Kindergarten Adventures FlightPlan:
https://frisbeeplaybook.com/flightplan/newton/kindergarten

The FlightPlan provides the detailed physical activities.

Session 1 — Explore the Movement

Students shift attention from watching the frisbee to watching their own bodies.

The instructional focus is recognizing variety in body movement and noticing changes of position, location, and direction during frisbee play.

Session 2 — Try, Improve, Share

Students return to movements from Session 1 and become more deliberate about noticing, repeating, and communicating what their bodies do.

If only one 30-minute period is available, use **Quick Launch** or teach Session 1 from the Standard FlightPlan.

If a continuous 60-minute block is available, teach both sessions with a brief transition between them.

Flexible Use of the Guide

Core Pathway | 30 minutes

Open the companion Kindergarten Adventures FlightPlan and teach Session 1:

Get Curious → Model → Build → Think It Through

The FlightPlan provides the live physical experience.

This Teacher Guide provides the curriculum focus, assessment lens, facilitation prompts, and instructional support.

Session 1 is a complete Kindergarten Movement Skill Development lesson and provides sufficient opportunities to gather formative evidence of the selected KUSP.

Full Wonder Lab | 2 × 30 minutes

Teach both sessions through the companion FlightPlan.

Students experience the complete Wonder Lab cycle:

Model → Build → Rehearse → Share

Session 2 deepens the same movement learning rather than adding additional curriculum.

It also provides time for students to reflect on and question movement in the Adventure through:

Puddle → Pond → Lake → Ocean

Continuous Block | ~60 minutes

Teach both FlightPlan sessions consecutively with a brief transition.

Reconnect may be shortened when both sessions occur in one continuous block.

Protect Rehearse and Share rather than adding more activities simply because additional time is available.

Materials

Required

- companion Kindergarten Adventures FlightPlan in Frisbee Playbook
- access to Adventure 001: *The Long Way Down*

The FlightPlan identifies the frisbees, equipment, setup, and physical-delivery information required for the activities.

Optional Teacher Guide Supports

- movement-word or picture cards
- chart paper or whiteboard for a class Movement Menu

Possible movement words:

walk • run • jump • throw • catch • reach • step • turn • forward • backward • sideways

These are instructional supports, not additional FlightPlan activities.

Before Students Begin

Open the Kindergarten FlightPlan.

Review:

- Session 1 and Session 2
- Standard and Quick Launch views
- **Frisbee Movement Explorer** Drill details
- **Movement Detective** Drill details
- activity timings
- equipment information
- coaching cues
- any activity-specific adaptations relevant to your students

Choose a small number of movement words to emphasize. Students do not need a long vocabulary list.

Prepare two recurring prompts:

Watch the person, not only the frisbee.

What is your body doing?

If using a class Movement Menu, decide whether students will contribute words, pictures, movement cards, or demonstrated actions recorded by the teacher.

Avoid beginning with a detailed breakdown of frisbee technique.

The FlightPlan provides the physical directions and coaching cues. This Teacher Guide keeps the instructional lens on body movement.

Access and Participation

Use the adaptations and equipment information provided in the FlightPlan to make the physical experience accessible.

Students do not need a successful flying throw or clean catch to demonstrate the selected Kindergarten learning.

Where a particular frisbee action is difficult, preserve opportunities for students to:

- move between locations

- change direction
- move part of the body
- observe movement
- demonstrate movement
- Use professional judgment to choose the Session 2 grouping—partners, groups of three, or whole group—that best supports student participation. Early in the year, whole-group practice may help students establish the routine, build confidence, and understand what successful participation looks and sounds like.
- describe or indicate what moved

A student may demonstrate understanding by observing and identifying movement when physical participation requires modification.

Change the access pathway—not the learning goal.

Useful Vocabulary

Pre-teach essential vocabulary through an explicit vocabulary routine, providing students with opportunities to build meaning, interact with the words, and use them in context before and throughout the lesson.

Physical Education & Wellness Words

movement • body • position • location • direction • throw • catch • reach • step • turn • forward • backward • sideways

Story Words

Rob • Isaac Newton • frisbee • Adventure • question • movement

Movement is physical activity that includes changes of position or physical location.

Position describes where the body or part of the body is.

Location describes where a person or object is.

Direction describes where movement is going.

To throw is to send an object using the body.

To catch is to receive an object.

To reach is to extend part of the body toward something.

Forward, backward, and sideways describe different directions of movement.

Supporting Our Diverse Learners

Make It Accessible	Use the FlightPlan activity adaptations as the first source for physical modifications. Keep boundaries clear and movement spaces easy to understand. Introduce one movement idea at a time before combining several ideas. Students do not need a successful throw or catch to demonstrate the

	selected learning.
Support Language	Pair movement words with demonstrations. Use sentence frames such as: ● "My body _____." ● "I moved _____." ● "I moved my _____." ● "I stepped _____." ● "I reached _____." ● "I moved from _____ to _____." Use choices when helpful: ● "Did you move forward or backward?" ● "Did you step or reach?" ● "Did your whole body change location?"
Offer Response Choices	Accept speech, physical demonstration, pointing, movement cards, drawing, gesture, partner-supported communication, AAC, or assistive technology. A physical demonstration can be meaningful evidence of understanding.
Support Participation	Students may participate as movers, observers, movement detectives, movement-card choosers, or demonstrators where appropriate. Students who require a lower physical demand can still observe, identify, or demonstrate movements within their own range.
Reduce Memory Load	Keep only a small number of movement words visible. Repeat consistent prompts: ● "Watch the person." ● "What is the body doing?" ● "Where did the body move?" ● "What changed?" Avoid layering several technical frisbee instructions over the movement-learning goal. Use the FlightPlan's coaching cues when physical reminders are needed.
Support Rehearsal	Allow students to repeat familiar movement experiences. Pair words with actions: "Step" while stepping. "Reach" while reaching. "Turn" while turning. Students may rehearse physically before describing what happened.
Preserve the Learning	Change physical access, equipment, pacing, response mode, or participation role when necessary. Do not change the curricular goal. Students still investigate and communicate different ways the body can

	move.

KUSP Assessment: Evidence to Notice

FORMATIVE ASSESSMENT

Gather evidence naturally while students complete the FlightPlan.

Avoid turning the lesson into a formal skills test.

Physical demonstration may provide stronger Kindergarten evidence than extended verbal explanation.

Session 1 provides sufficient opportunities to gather evidence of the selected KUSP.

Session 2 adds further evidence through repetition, observation, and communication.

Evidence source	Listen or look for	Possible teacher note
Observation	Student demonstrates more than one kind of body movement. Student changes body position or physical location. Student moves from one point to another. Student explores different directions. Student participates meaningfully in frisbee-related movement.	"Moves from one open space to another, turns, and reaches to collect the frisbee."
Conversation	Student identifies something their body did. Student describes where or how the body moved. Student connects a movement word with an action.	"Says, 'I stepped forward and moved my arm,' while demonstrating."
Product / Class Product	The optional class Movement Menu can provide supporting evidence. Students may contribute: ● a movement word ● a picture ● a direction arrow ● a movement card ● a demonstrated action recorded by the teacher	"Adds 'turn' to the Movement Menu and demonstrates the action." Physical movement remains the primary assessment source.

The Two-Session Flow

Session 1 — Explore the Movement | 30 minutes

Time	Section	Student experience	Teacher move
~5 min	**Get Curious**	Complete **Get Curious** in the Kindergarten Adventures FlightPlan. Students reconnect with movement in *The Long Way Down* and shift attention from moving objects to their own bodies.	Establish the PE&W lens: **"Today we're going to watch the person, not only the frisbee."** Use the FlightPlan for the activity directions. Use this guide to notice whether students recognize that bodies can move in many ways.
~5 min	**Wonder Lab: Model**	**FlightPlan activity: Frisbee Movement Explorer** Observe the Model experience in the FlightPlan and notice what different parts of the body do.	Model how to notice movement rather than how to produce a technically correct frisbee action. Direct attention toward body position, location, and direction.
~15 min	**Wonder Lab: Build**	**FlightPlan activity: Frisbee Movement Explorer** Complete the Build experience from the FlightPlan. Students explore different body movements and directions while interacting with the frisbee.	Circulate as a movement observer. Ask what the body is doing and gather KUSP evidence while the FlightPlan carries the activity mechanics.
~5 min	**Think It Through**	Reflect on the variety of movements used during the physical experience.	Connect students' physical experiences with the central question and selected movement vocabulary.

Session 2 — Try, Improve, Share | 30 minutes

Time	Section	Student experience	Teacher move
~5 min	**Reconnect**	Complete **Reconnect** in the FlightPlan and physically recall movements explored in Session 1.	Reactivate learning through demonstration rather than a vocabulary quiz.
~8 min	**Wonder Lab: Rehearse**	**FlightPlan activity: Frisbee Movement Explorer**	Use repetition to deepen awareness rather than introducing a new movement

Time	Section	Student experience	Teacher move
		Repeat the familiar physical experience and notice body movement more deliberately.	skill.
~9 min	**Wonder Lab: Share**	**FlightPlan activity: Movement Detective** Students share short movement examples while classmates observe as movement detectives.	Keep observer attention on body movement rather than frisbee performance.
~3 min	**Think It Through**	Identify one movement they noticed, practised, or now understand more clearly.	Return to the central question.
~5 min	**Keep Wondering**	Complete the FlightPlan Keep Wondering transition, then use the Puddle–Pond–Lake–Ocean questions in this Teacher Guide.	Deepen story-based PE&W wondering while keeping inquiry focused on Rob's body movement.

Session 1 — Explore the Movement

Get Curious | ~5 minutes

Open the Kindergarten Adventures FlightPlan and run Get Curious.

Use the FlightPlan for the physical directions.

Use the following prompts as the instructional lens:

- What moved?
- Which body part moved?
- Did your whole body move?
- Did your body change location?
- Which direction did you move?
- Can you show another movement?
- Did everyone move in exactly the same way?

TEACHER MOVE

Treat student demonstrations as thinking.

The purpose is to establish that body movement can occur in many ways, not to standardize everyone into one movement pattern.

Keep returning to:

What is your body doing?

2. Wonder Lab

Model | ~5 minutes

Open the FlightPlan and run Frisbee Movement Explorer — Model.

Before students observe, reinforce:

> ***"Watch the person, not only the frisbee."***

After the Model experience, ask:

- What body movement did you notice?
- Where did the person begin?
- Where did the person finish?
- What did the feet do?
- What did the arms do?
- Did the whole body change location?
- What direction did the body move?
- What movement was easiest to notice?

TEACHER MOVE

The Model phase teaches students **how to notice movement**.

Keep the focus on:

watch → notice → show or describe

Do not duplicate the Drill instructions here.

The FlightPlan carries the physical demonstration and coaching cues.

Build | ~15 minutes

Open the FlightPlan and run Frisbee Movement Explorer — Build.

Use this guide primarily as the observation and questioning lens.

Circulate and ask:

- "What is your body doing?"
- "Where did you start?"
- "Where are you now?"
- "Which direction did you move?"
- "Did you step?"
- "Did you reach?"
- "Did you turn?"
- "Could you move another way?"

When students focus only on whether the frisbee travelled successfully, redirect:

> ***"The frisbee moved. What did your body do?"***

FACILITATION PROMPTS

- Can you move from one point to another?
- Can you try another direction?

- What changes when you turn?
- What happens to your body when you move the frisbee?
- Can the same person use more than one movement?
- What did your body do even when the frisbee did not go where you expected?

TEACHER MOVE

Look for learning before technique.

An imperfect frisbee attempt can still provide excellent evidence of body movement.

The FlightPlan carries the Drill mechanics, repetitions, equipment, and coaching cues.

Your role is to notice the curriculum learning happening through the activity.

Think It Through | ~5 minutes

Run Think It Through from the FlightPlan, then deepen the reflection with the prompts below as appropriate.

Ask:

- "What are some ways our bodies moved?"
- Invite students to demonstrate while answering.
- "Did our bodies always stay in one place?"
- "What did your body do when you moved with the frisbee?"
- "What directions did we move?"
- "Could the same person use more than one movement?"
- "Did everyone move in exactly the same way?"

Return to:

How can our bodies move when we play with a frisbee?

Sample Response Guidance

Possible responses:
• "My arm moved." • "I stepped forward." • "I moved sideways." • "I reached." • "I moved toward the frisbee." • "I turned." Students may also answer through physical demonstration. Look for recognition of movement variety, position, location, and direction rather than sophisticated vocabulary or frisbee performance.

Session 1 Closing

Tell students:

- "Rob and Newton spent time noticing movement."

- "Today we did too—but we watched our bodies."

> *"We discovered that our bodies can move in many different ways while we play with a frisbee."*
>
> *"Next time, we'll try some of those movements again and see what else we can notice."*

If Session 1 is the only lesson being taught, finish by asking:

> ***"Show me one way your body moved while you played with a frisbee today."***

Session 2 — Try, Improve, Share

Reconnect | ~5 minutes

Open the Kindergarten FlightPlan and run Reconnect.

Use the physical experience to reactivate Session 1.

Ask:

- "Last time we watched something besides the frisbee. What were we watching?"
- **Our bodies.**

Invite students to recall or demonstrate movements from Session 1.

TEACHER MOVE

Reconnect through movement rather than verbal recall alone.

A student who can demonstrate a remembered movement has reactivated the learning.

2. Wonder Lab

Rehearse | ~8 minutes

Open the FlightPlan and run Frisbee Movement Explorer — Rehearse.

Before beginning, give the observation challenge:

> ***"Don't only notice where the frisbee goes. Notice one thing your body does."***

Between or after attempts, ask:

- "What did your body do?"
- "What stayed the same?"
- "What changed?"
- "Did you need to move?"
- "Which direction?"
- "Did you step, turn, or reach?"

FACILITATION PROMPTS

- What movement did you notice this time?
- Did you begin and finish in the same place?
- Did your body move in the same direction?
- What changed on your next attempt?
- What did you notice the second time that you missed the first time?

TEACHER MOVE

Improvement at Kindergarten does not need to mean a technically better frisbee action.

Improvement may mean:

greater awareness

clearer movement

more deliberate direction

greater control of the body

or a better ability to communicate what happened

Rehearse deepens the same curriculum learning from Session 1.

Share | ~9 minutes

Open the FlightPlan and run Movement Detective — Share.

Tell observers:

- **"Be movement detectives."**
- **"Watch the person, not only the frisbee."**

After a movement example, ask:

> *"What did you notice?"*

Support increasingly specific observations:

- "They stepped."
- "They turned."
- "Their arm moved."
- "They reached."
- "They moved sideways."

Ask the demonstrator:

> *"Did you notice the same thing?"*

FACILITATION PROMPTS

- Which movement was easiest to see?
- Which movement was small?
- Which movement used the whole body?
- What did the feet do?
- What did the arms or hands do?
- Did the person change location?
- Which direction did the person move?
- Did two people move in exactly the same way?

TEACHER MOVE

Share is not a performance contest.

Students are sharing evidence of movement learning, not competing for the best frisbee performance.

Think It Through | ~3 minutes

Run Think It Through from the FlightPlan.

Ask:

- "What is one movement you understand better now?"
- "What did your body do during the activity?"
- "How did practising help you notice movement?"

Return to:

How can our bodies move when we play with a frisbee?

Accept physical demonstration as a response.

Keep Wondering | ~5 minutes

The FlightPlan brings students into Keep Wondering.

Use the questions below to deepen the inquiry.

Questions can begin with one small movement detail from *The Long Way Down* and become deeper as students connect more of what they notice.

PUDDLE

A small question about one detail.

- What part of Rob's body moves when he throws?
- What does Rob do with his arm?
- Does Rob step when he moves with the frisbee?

POND

A question connecting a few movement details.

- How do Rob's arm and body move together when he throws?
- How is Rob's body different before and after he moves the frisbee?
- What movements from the Adventure could we show with our own bodies?

LAKE

A question connecting several parts of movement.

- How could we describe several movements Rob uses during one frisbee action?
- What would you watch in Rob's whole body if you wanted to learn how he moves?
- How does the Adventure help us notice both the frisbee moving and the person moving?

OCEAN

A deeper movement question with more than one thoughtful response.

- Why might two people move their bodies differently even when both are trying to move a frisbee?
- How might Rob change his body movement if the frisbee were somewhere different?
- Why can watching the whole person tell us something that watching only the frisbee cannot?

The purpose is not for Kindergarten students to classify every question perfectly.

The water language helps students notice that questions can invite different depths of observing, connecting, interpreting, and wondering.

Invite Student Questions

Ask:

- **"What are you still wondering about the way Rob's body moves with the frisbee in the Adventure?"**
- Accept questions connected with Rob, throwing, stepping, reaching, direction, body parts, or other movement visible in the story.

Choose several questions and ask:

> *"Does this feel like a Puddle, Pond, Lake, or Ocean question?"*

There does not need to be one perfect classification.

FACILITATION PROMPTS

- Can we answer this by noticing one movement?
- Does the question connect more than one body movement?
- What part of the Adventure made you wonder?
- Can we make this Puddle a little deeper?
- Could we ask how two movements work together?
- Could two people have different answers?

TEACHER MOVE

A deeper question does not need to move into another subject or introduce information students have not encountered.

Depth comes from noticing, connecting, interpreting, and wondering more deeply about the story itself.

If a student asks why the frisbee flies, preserve the curiosity while returning to the PE&W lens:

"That is a great question about the frisbee. What are you wondering about Rob's body movement when he throws it?"

Close with one student-generated question worth preserving.

Likely Misconceptions and Helpful Responses

- **If students think movement only means running**

Try:

- "Does your arm move when you throw? Do your hands move when you reach?"
- **If students think they did not move because they stayed near the same place**

Try:

- "Show me what your arms, hands, feet, or body did."
- **If students think an unsuccessful frisbee attempt means they failed**

Try:

- "What did your body do while you tried?"
- **If students think throwing harder means doing better**

Try:

- "Our question isn't 'How hard can you throw?' Our question is 'How is your body moving?'"
- **If students think everyone should move exactly the same way**

Try:

- "Did you notice two people moving differently?"
- **If students focus only on the frisbee**

Try:

- "Watch the person. What changed in their body?"
- **If students drift into explaining why the frisbee flies**

Try:

> *"That is an interesting Science question. What can we notice about the person moving the frisbee?"*

If students...	Try this teacher response
If students think the goal is to make the frisbee fly perfectly	Try: ● "Today I'm watching your body movement. What did your body do even when the frisbee didn't go where you planned?"

Use the Evidence Next

If a student demonstrates only one kind of movement

Invite:

- "Can you show another way your body can move?"
- **If a student moves successfully but cannot describe it**

Offer choices:

- "Did you step, reach, turn, or move sideways?"
- Then invite a demonstration.

If a student uses a movement word without connecting it with action

Ask:

- "Show me what that word looks like with your body."
- **If a student notices body-part movement but not change of location**
- Use two visible points.

Ask:

- "Where are you now?"
- "Move to the other point."
- "What changed?"

- **If a student easily moves between points**

Invite a different direction such as forward, backward, or sideways.

Do not automatically increase frisbee difficulty.

If a student notices several movements during one action

Ask:

- "What happened first?"
- "What happened next?"
- **If a student is preoccupied with frisbee success**

Shift the lens:

- "What movement did you use while trying?"
- **If a student generates mainly Puddle questions**

Ask:

- "Can you connect two movements Rob makes?"
- **If a student demonstrates understanding nonverbally**

Document what the movement itself communicates.

Physical demonstration is valid assessment evidence.

Optional Physical Education & Wellness Extensions

Use these only when they naturally support classroom learning.

They are **not required parts of the two-session experience** and should not replace or duplicate the core Adventures FlightPlan.

Movement Mirror

Students work with a partner.

One student slowly demonstrates a frisbee-related movement without releasing the disc.

The partner mirrors the movement.

Possible movements include reaching, turning, stepping, bending, throwing, or catching motions.

Switch roles.

Ask:

- "What did you need to watch carefully in your partner's body?"
- **Same Disc, New Direction**

Return to one familiar movement experience from the FlightPlan.

Change only the direction of body travel.

Students might move: forward, backward, sideways, toward a marker, and away from a marker.

Ask:

- "What stayed the same?"

- "What changed?"

This directly deepens the selected Skill & Procedure:

Practise movement in any direction from one point to another.

Movement Detective Extension

Return to the familiar Movement Detective idea from the FlightPlan.

Invite students to observe a new movement example and identify as many body movements as they can.

Encourage students to notice beyond the frisbee and throwing arm.

Students may name or demonstrate what they noticed.

Story Movement Sequence

Return to an illustration or moment from *The Long Way Down* involving Rob and the frisbee.

Students create a short movement sequence inspired by what they notice.

For example:

stand → step → turn → throwing motion → reach → move

Ask:

- "What movements did you put into your sequence?"
- Keep the focus on body movement connected to the Adventure rather than explaining why the frisbee moves.

Every adventure begins with a question.
Keep wondering.

THE ADVENTURES WITH FRISBEE ROB

The Long Way Down

Adventure 001: Isaac Newton

KINDERGARTEN

SCIENCE

Teacher Guide

Three Journeys: How Did They Move?

GRADE	SUBJECT	TIME
Kindergarten	Science	2 × 30 minutes

CENTRAL QUESTION

How can we observe and describe the different ways the apple, frisbee, and leaf move?

Wonder in Motion

Lesson at a Glance

Story connection	Rob and Newton carefully watch an apple, frisbee, and leaf move through the orchard. All three objects change position, but their movements do not look the same. Scientists can observe these movements closely and describe different ways objects move.
Science focus	Recognizing movement as a change in position or location, identifying moving and non-moving objects, exploring different ways objects can move, and using observable movement language such as straight, curved, up, down, fast, and slow.
Learning intention	We are learning to observe objects carefully, notice when their position changes, and describe different ways they can move.
Core experience	Across two 30-minute sessions, students investigate movement using the story objects and safe classroom models. They collaboratively build a Movement Observation Board, rehearse how to show and describe movements clearly, and share evidence that objects can move in different ways.
Flexible use	Session 1 is a complete core lesson and can be used independently. Session 2 continues the same Wonder Lab by giving students additional time to observe, rehearse, explain, share, and deepen their scientific thinking. Teachers with a continuous 60-minute block may teach both sessions together.
Use after reading	Read Adventure 001: The Long Way Down before beginning. The story reading is separate from the two Science sessions.
Story context	Isaac Newton was a real historical person. Rob's visit, their conversation, and the events they experience together are imaginative parts of the story.
Important scientific distinction	Students are observing and describing how objects move. They are not expected to explain why the apple, frisbee, and leaf move differently in the Adventure. Questions about forces, gravity, lift, drag, and other causes of movement belong to later scientific learning.

Optional Teacher-Spoken Success Indicators

I can notice when an object moves.

I can show different ways an object can move.

I can use words such as straight, curved, up, down, fast, or slow to describe movement.

I can explain how I know an object changed position.

How to Use This Guide

THE GUIDE IS A TOOL, NOT A SCRIPT

This guide is designed to support responsive teaching rather than prescribe every word or action.

Session 1 is a complete 30-minute Kindergarten Energy lesson and can be taught independently.

Session 2 continues the same learning through rehearsal, refinement, sharing, and questioning. It does not introduce additional curriculum.

Follow productive student thinking and conversation while protecting the central question, selected Energy KUSP, meaningful participation, safety, and approximate lesson timing.

Adjust examples, objects, grouping, response modes, and pacing to meet the needs of the learners in front of you.

The exact movement observed may depend on the objects, surfaces, and classroom materials being used. Students should describe what they actually observe rather than memorize predetermined descriptions.

The goal of the second session is not to do more.

It is to give students enough time to observe, think, try, improve, and communicate their scientific understanding.

Curriculum Alignment

Organizing Idea	Energy: Understandings of the physical world are deepened by investigating matter and energy.
Guiding Question	How can objects, humans, and other animals move?
Learning Outcome	Children explore movement of objects, humans, and other animals.
Assessment Focus	Gather formative evidence of selected Kindergarten Energy KUSP through students' recognition of movement, identification of moving and non-moving objects, exploration of different ways objects can move, and descriptions of observable movement. Session 1 provides sufficient opportunities to gather evidence of the selected KUSP. Session 2 offers additional opportunities for students to demonstrate and communicate their understanding. These lessons do not assess the complete learning outcome.

Selected KUSP for These Lessons

KUSP element	Selected curriculum learning	What it looks or sounds like
Knowledge	Movement is a change in position or	Students recognize that an object has

KUSP element	Selected curriculum learning	What it looks or sounds like
	location that happens over time. Objects can be moved in various ways, including straight lines curves circles back and forth zigzags up and down fast and slow	moved when its position or location changes and use observable movement language to communicate how it moved.
Understanding	Objects, humans, and other animals can move or be moved in various ways.	Students recognize that movement does not always look the same and that the same object can be moved in more than one way.
Skills & Procedures	Move objects in a variety of ways. Identify objects that move. Identify objects that do not move.	Students safely move classroom or story objects along different pathways, distinguish between moving and non-moving objects, and communicate what they observe through words, actions, gestures, pictures, or another appropriate response mode.

Curriculum source: Government of Alberta, Science (K–6) Curriculum, Energy, p. 5. *View the Alberta program of study*

Teacher Preparation

STANDARD PATHWAY

Use these two 30-minute sessions after students have heard Adventure 001: The Long Way Down.

Session 1: Observe the Movement is the core lesson. Students investigate what movement means, see different kinds of movement modelled, and collaboratively build a Movement Observation Board using the apple, frisbee, leaf, or suitable substitutes.

Session 2: Show the Movement continues the same Wonder Lab. Students return to the observation board, rehearse movements with a partner, refine their scientific language, share evidence, and explore questions of different depths about the Adventure.

If only one 30-minute period is available, teach Session 1.

If a continuous 60-minute block is available, the two sessions can be taught together with a brief transition or movement break between them.

Flexible Use of the Guide

Core Pathway | 30 minutes

Teach Session 1: Observe the Movement.

Students experience:

Get Curious → Model → Build → Think It Through

This is a complete Kindergarten Energy lesson and provides opportunities to gather formative evidence of the selected KUSP.

Full Wonder Lab | 2 × 30 minutes

Teach both sessions.

Students experience the complete Wonder Lab cycle:

Model → Build → Rehearse → Share

Session 2 deepens the same learning rather than adding additional curriculum.

It also provides time for students to reflect on and question the science of the Adventure through:

Puddle → Pond → Lake → Ocean

Continuous Block | ~60 minutes

If scheduling allows, Sessions 1 and 2 may be taught consecutively.

Take a brief movement or transition break after the first Think It Through before beginning Reconnect.

Materials

A copy of Adventure 001: The Long Way Down

A frisbee

An apple

One or more leaves or paper leaves

Whiteboard, chalkboard, or chart paper and marker

Three cards or headings:

- WHAT MOVED?
- HOW DID IT MOVE?
- WHAT DID WE NOTICE?

Optional movement cards or symbols for:

straight

curved

up

down

fast

slow

Optional masking tape or string for creating simple pathways

Optional lightweight scarf, tissue paper, or paper leaf for slow or drifting movement

Before Students Begin

Create a class Movement Observation Board with three spaces:

Object

Movement

Observation

For example:

leaf | curved + down | The leaf moved down along a curved path.

Have the apple, frisbee, and leaf available where all students can see them.

Choose a safe space for movement demonstrations.

Decide which movement words will be emphasized.

Straight, curved, up, down, fast, and slow provide clear connections to the three story objects.

The complete curriculum list does not need to be taught simply because it appears in the KUSP. A few carefully observed movement types are more useful than trying to demonstrate every possibility.

Prepare at least one example in which an object remains still and then changes position.

- Use professional judgment to choose the Session 2 grouping—partners, groups of three, or whole group—that best supports student participation. Early in the year, whole-group practice may help students establish the routine, build confidence, and understand what successful participation looks and sounds like.

Keep the Movement Observation Board available for Session 2.

Substitutions

Use classroom objects, photographs, drawings, paper shapes, scarves, or other safe materials when the actual story objects are unavailable.

When using pictures instead of physical objects, use them to discuss movement shown in the Adventure rather than pretending that the picture itself is moving.

Useful Vocabulary

Pre-teach essential vocabulary through an explicit vocabulary routine, providing students with opportunities to build meaning, interact with the words, and use them in context before and throughout the lesson.

Science words:

movement • move • position • location • observe • straight • curved • up • down • fast • slow

Story words:

apple • frisbee • leaf • object • path • fall • glide • drift

Movement is a change in position or location that happens over time.

Position tells us where an object is.

To observe means to notice carefully and gather information about what is happening.

A straight movement follows a path without turning.

A curved movement follows a path that bends.

Fast and slow describe different ways movement can happen over time.

Supporting Our Diverse Learners

Use these supports proactively while preparing and teaching the two sessions.

Make it accessible	Use real objects whenever possible. Allow students to touch, move, point to, or trace safe objects and pathways.
Support language	Model sentence frames such as: The _____ moved. The _____ did not move. It moved _____. The path was _____. I noticed _____.
Offer response choices	Accept speaking, pointing, moving an object, selecting movement cards, tracing pathways, drawing, gesture, communication devices, or assistive technology.
Support participation	Offer roles such as object mover, observer, movement-card chooser, pathway tracer, board recorder, or science reporter.
Reduce memory load	Keep the three story objects and movement cards visible throughout both sessions. Introduce one or two movement features at a time.
Support rehearsal	Allow students to observe or repeat the same movement before describing it.

	Let students practise the same observation with a teacher or partner before sharing with the whole group.
Preserve the learning	Change the objects, number of choices, physical demands, language demands, or response mode—not the scientific goal. Students still recognize movement as a change in position and identify different ways objects can move.

KUSP Assessment: Evidence to Notice

FORMATIVE ASSESSMENT

Gather evidence through observations and conversations across both sessions.

Session 1 provides sufficient opportunities to gather evidence of the selected KUSP.

Session 2 gives students additional opportunities to demonstrate and communicate their understanding.

Evidence source	Listen or look for	Possible teacher note
Observation	Student recognizes when an object changes position and intentionally moves an object in a particular way.	"Moves the frisbee first in a straight line and then along a curved path."
Conversation	Student uses observable movement language or identifies whether an object is moving.	"Identifies the leaf as moving down and traces its curved path with a finger."
Product	Contributions to the Movement Observation Board show an object and an appropriate description or representation of its movement.	"Chooses the curved-path card for the frisbee demonstration and identifies where it started and ended."

The Two-Session Flow

Session 1 — Observe the Movement | 30 minutes

Time	Section	Student experience	Teacher move
~5 min	**Get Curious**	Reconnect with the apple, frisbee, and leaf and notice that each object moves in the Adventure.	Welcome remembered observations and focus attention on what the objects did rather than why they moved.
~5 min	**Wonder Lab: Model**	Watch one object remain still and then move in two different ways.	Make the change in position explicit and model careful observation of the pathway.

Time	Section	Student experience	Teacher move
~15 min	**Wonder Lab: Build**	Collaboratively build a Movement Observation Board using different story objects and movement types.	Keep students focused on observable movement and prompt clear movement language.
~5 min	**Think It Through**	Explain how we know an object moved and how the same object can move in different ways.	Connect students' observations to movement as a change in position or location.

Session 2 — Show the Movement | 30 minutes

Time	Section	Student experience	Teacher move
~5 min	**Reconnect**	Revisit the Movement Observation Board and reconstruct what was observed.	Ask students to identify or show the movement rather than simply repeat a memorized word.
~8 min	**Wonder Lab: Rehearse**	Work with a partner to create, observe, and describe one safe movement.	Prompt students to observe carefully and communicate what actually happened.
~9 min	**Wonder Lab: Share**	Present movement demonstrations and communicate evidence from observation.	Focus audience attention on the object's change in position and movement pathway.
~3 min	**Think It Through**	Reflect on what makes a movement observation clear.	Return to the central question and the importance of careful observation.
~5 min	**Keep Wondering**	Generate and explore questions of different depths about movement in the Adventure.	Use Puddle–Pond–Lake–Ocean language to deepen story-based scientific wondering.

Session 1 — Observe the Movement

Get Curious | ~5 minutes

Reconnect students to the Adventure.

Show the apple, frisbee, and leaf.

Ask:

- "What did these three objects do in Rob and Newton's Adventure?"
- Invite several responses.

Students might remember:

The apple fell.

The frisbee flew or glided.

The leaf drifted or twirled.

Follow with:

- Did all three objects move?
- Did they all move in exactly the same way?
- What did you notice about the apple?
- What did you notice about the frisbee?
- What did you notice about the leaf?
- How can we tell if something has moved?

Place one story object somewhere visible.

Ask:

- "Is it moving right now?"
- Move it to a new location.

Ask:

> *"What changed?"*

Then introduce the science challenge:

> *"Scientists look very carefully at what happens. Today we are going to observe how objects move."*

TEACHER MOVE

Do not begin by explaining why the objects moved.

The productive wondering comes from observing what happened first.

If students immediately mention gravity or wind, value the idea and return to:

"What did you actually see the object do?"

Wonder Lab

Model | ~5 minutes

Choose one story object.

For example, place the frisbee on a table or floor.

Ask:

- "Is it moving?"
- Then slide or guide it slowly in a straight line.

Ask:

- "Is it moving now?"
- "Where was it before?"
- "Where is it now?"

Introduce movement as a change in position or location.

Return the frisbee to the starting point.

Guide it along a curved pathway.

Ask:

- "Did it move again?"
- "Did it move in the same way?"

Introduce straight and curved as words that describe the observed pathways.

If appropriate, repeat one pathway at two different speeds.

Ask:

- "What did you notice this time?"
- Introduce fast and slow.

Think aloud:

> *"The object changed position both times."*
>
> *"The first path was straight."*
>
> *"The second path was curved."*
>
> *"I am describing what I observed."*

FACILITATION PROMPTS

- Was the object moving at the beginning?
- How do you know?
- Where did it start?
- Where did it finish?
- What changed?
- Was the path straight or curved?
- Did the object move the same way both times?
- What should we say about what we actually observed?

TEACHER MOVE

Keep the model concrete and short.

The scientific evidence comes from watching the object change position.

Students do not need an explanation of the forces causing the motion.

Build | ~15 minutes

Create a class Movement Observation Board.

Use three headings:

- WHAT MOVED?
- HOW DID IT MOVE?
- WHAT DID WE NOTICE?

Invite students to choose one story object.

Begin with the apple.

Move it safely along a clear pathway.

For example, roll or guide it in a straight line.

Ask:

- What moved?
- How did it move?
- What changed about its position?

Record the observation.

For example:

Object:

apple

Movement:

straight

Observation:

The apple moved from one place to another along a straight path.

Repeat using the frisbee.

Guide it along a curved pathway.

Ask:

- “Did the frisbee move in the same way as the apple?”
- Record the observation.
- Next use a leaf or lightweight paper leaf.
- Allow it to move safely downward.

Ask:

- Which way did it move?
- Was its path exactly straight?
- Which movement words could describe what we saw?

Record the actual classroom observation.

Continue with several short demonstrations.

Depending on the available space and materials, move an object:

straight

curved

up

down

slowly

faster

Invite students to suggest or safely demonstrate different movements.

Return to the same object more than once so students can see that it does not have only one possible movement.

Continue adding observations to the board.

Aim for several clear examples using a few movement ideas rather than many examples with little time for observation.

FACILITATION PROMPTS

- Which object should we observe?
- Is the object moving right now?
- How could we move it safely?
- Where did it begin?
- Where did it end?
- What pathway did it follow?
- Was it straight or curved?
- Did it move up or down?
- Was it moving fast or slow?
- Could the same object move another way?

TEACHER MOVE

Repeatedly ask:

"What did you observe?"

This should become the scientific refrain of the Wonder Lab.

Students should discover that movement can be described through what happens to an object's position and pathway.

If a student asks why the objects move differently, preserve the question without turning the activity into a lesson on forces.

Think It Through | ~5 minutes

Step back from the Movement Observation Board.

Ask:

- What different objects did we observe?
- How could we tell that an object moved?
- What changed when movement happened?
- Did all of the objects follow the same pathway?
- Could the same object move in more than one way?
- Could two different objects move in a similar way?
- What did straight tell us?
- What did curved tell us?
- What did fast and slow tell us?
- Why is careful observation important?

Return to the central question:

How can we observe and describe the different ways the apple, frisbee, and leaf move?

Sample Response Guidance

Possible response:
"We know it moved because it was in one place and then another place."
"An object can move straight."
"An object can move on a curved path."
• "The same thing can move in different ways." • Look for recognition that movement involves a change in position or location and that objects can move in various ways.

Session 1 Closing

Tell students:

> *"Today we discovered that noticing an object move is only the beginning. Scientists look carefully at how its position changes and what its movement looks like."*
>
> *"Next time, you will make or observe a movement and show the class what you noticed."*

If Session 1 is the only lesson being taught, finish by asking:

> *"What is one way an object from Rob and Newton's Adventure moved?"*

Session 2 — Show the Movement

Reconnect | ~5 minutes

Return to the Movement Observation Board.

Point to one observation but cover the movement word.

For example:

frisbee | _____ | The frisbee moved along a path that bent.

Ask:

- "What kind of movement did we observe?"
- Invite students to trace the movement before revealing curved.
- Repeat with a second observation.
- Then place one object on the table without moving it.

Ask:

- "Is it moving?"
- Move it.

Ask:

> *"What changed?"*

Make a deliberately incomplete statement:

> *"The apple moved."*

Ask:

- "Can we observe anything else about how it moved?"
- Invite students to improve the observation based on what they actually see.

TEACHER MOVE

Reactivate the central scientific habit:

Observe first.

Describe what happened.

Avoid turning Reconnect into a vocabulary quiz.

Wonder Lab

Rehearse | ~8 minutes

Students work with partners or small groups.

Give each group access to a safe object or teacher-controlled movement demonstration.

Students complete four steps:

Choose or observe an object.

Move the object safely, or watch it being moved.

Notice how its position changes.

Show or describe how it moved.

Possible sentence frames:

> *"The _____ moved."*
> *"It moved _____."*
> *"The path was _____."*
> *"I noticed _____."*

Students can also trace the pathway with a finger or choose an appropriate movement card.

Partner check:

- Did the object move?
- How do you know?
- Where did it begin?
- Where did it end?
- What did the pathway look like?
- Could your observation be clearer?

After the first attempt, invite students to make one improvement.

They might:

add a movement word

show the starting position

show the ending position

trace the pathway

repeat the movement more slowly

choose a more accurate movement card

FACILITATION PROMPTS

- Which object are you observing?
- What changed about its position?
- Can you show the starting point?
- Can you show the ending point?
- Was the path straight or curved?
- Did it move up or down?
- Was it fast or slow?
- What could you change to make your observation easier to understand?

TEACHER MOVE

The goal is not to create the most exciting movement.

One carefully observed and clearly communicated movement is stronger evidence of scientific understanding than several uncontrolled demonstrations.

Share | ~9 minutes

Bring the class together for a Movement Showcase.

Invite pairs to demonstrate one movement.

Students should communicate:

the object

that movement occurred

one way the object moved

what they observed

For example:

> *"We observed the leaf."*
>
> *"It moved down."*
>
> *"The path curved."*

After each share, ask the audience:

- What object moved?
- How do we know it moved?
- Which movement word did they use?
- Could the same object move another way?
- Did anyone notice something else about the same movement?

Choose one object and deliberately move it in two different ways.

For example:

guide the frisbee straight

then guide the frisbee in a curve

Ask:

- "Is it still the same object?"
- "Did it have to move the same way both times?"

Allow students to respond.

TEACHER MOVE

Recognition that the same object can move in different ways is a major conceptual success.

Students are moving beyond associating one object with one fixed movement pattern.

Think It Through | ~3 minutes

Ask:

- How do we know when an object has moved?
- Why do we look at its starting and ending positions?
- Can the same object move in different ways?
- What science words helped us communicate what we observed?

Return to the central question:

How can we observe and describe the different ways the apple, frisbee, and leaf move?

Accept several responses.

Keep Wondering | ~5 minutes

Questions can begin with something small we noticed and become deeper as we connect more science ideas within the Adventure.

Introduce or revisit the four question depths.

PUDDLE

A small question about one observable movement detail from the Adventure.

Examples:

- Which story object fell?
- Which story object drifted?
- What did the leaf do as it moved?

POND

A question that asks us to connect a few movement ideas about the story objects.

Examples:

- How did the apple and leaf move differently?

- How were the frisbee and leaf movements alike?
- Which movement words could describe more than one of the three journeys?

LAKE

A question that asks us to think across several observations or ideas.

Examples:

- How could we sort the apple, frisbee, and leaf by the ways they moved?
- How could one story object be described using more than one movement word?
- How were all three journeys examples of movement even though they did not look the same?

OCEAN

A deep science question about movement in the Adventure that may have more than one thoughtful answer.

Examples:

- How can the same object move in different ways during one journey?
- What makes the apple, frisbee, and leaf journeys all examples of movement even though their paths look different?
- Why might two careful observers notice different useful things about the same movement?

The purpose is not for Kindergarten students to correctly label every question independently.

The water language gives students a simple way to notice that science questions can invite different depths of observing, comparing, connecting, and explaining.

Invite Student Questions

Return attention to The Long Way Down and the three story objects.

Ask:

- “What are you still wondering about how the apple, frisbee, and leaf moved in the Adventure?”
- Accept questions about movement and observations of the story objects.

Choose several student questions and wonder aloud together:

> *“Does this feel like a Puddle, Pond, Lake, or Ocean question?”*

There does not need to be one perfect classification.

Briefly discuss what makes one question invite more scientific thinking than another.

FACILITATION PROMPTS

- Can we answer your question by observing one movement?
- Would we need to compare more than one story object?
- Could two people notice different useful details?
- What story movement does your question connect?
- Can we make this Puddle question a little deeper?
- What could turn this Pond into a Lake?
- Could we make a question that begins with “How can…” or “How are…”?

TEACHER MOVE

Keep questions anchored to the Adventure and the science students have explored.

A deeper question does not need to introduce forces, gravity, aerodynamics, or content beyond the Kindergarten learning.

Depth comes from observing, comparing, connecting, and reasoning more deeply about movement already present in the Adventure.

If students ask why the apple falls or why the frisbee stays in the air, value the question and return to the observable movement:

"That is a question scientists can investigate as they learn more. What did you observe in the Adventure that made you wonder that?"

Close with one student-generated science question that the class would like to keep wondering about.

"Every adventure begins with a question. Keep wondering."

Likely Misconceptions and Helpful Responses

If students...	Try this teacher response
If students think an object is moving because it is capable of moving:	Try: "Look at the object right now. Is its position changing?"
If students identify the object but do not describe movement:	Try: "You noticed the frisbee. What did you see the frisbee do?"
If students use the same movement word for every demonstration:	Try: "Let's watch again. Does this path look the same as the last one?"
If students think one object can move in only one way:	Try: "Could we safely move the same object along a different pathway?"
If students focus only on where an object ends:	Try: "Where did it begin? What happened between the beginning and the end?"
If students confuse the shape of the object with the shape of its movement:	Try: "Are we describing the object itself or the path the object followed?"
If students try to explain why the apple, frisbee, and leaf moved differently:	Try: "That is an interesting question about why. Our investigation today is helping us describe how the objects

If students...	Try this teacher response
	moved."
If students move completely away from the Adventure when generating questions:	Try: "What happened with the apple, frisbee, or leaf that made you wonder that? Can we turn your idea into a question about their movement?"
If students think an Ocean question must involve a huge distance or fast movement:	Try: "Ocean does not mean physically huge. It means the question asks us to think deeply and connect science ideas."

Use the Evidence Next

If a student identifies an object but does not recognize that movement involves a change in position:

Place the object in two clearly different positions and ask, "What changed?"

If a student recognizes movement but does not distinguish pathways:

Offer two visual choices and ask, "Was the path straight or curved?"

If a student can identify a pathway but lacks movement vocabulary:

Allow them to trace the pathway first, then connect the action with the appropriate word.

If a student uses movement vocabulary without attending to the actual demonstration:

Repeat the movement and ask which word matches what was observed this time.

If a student confidently recognizes one type of movement:

Invite them to move or observe the same object in a different way.

If a student recognizes that one object can move in several ways:

Invite them to explain how the two movements were different.

If a student generates primarily Puddle questions:

Model how one question can be deepened by comparing the movement of two story objects.

If a student generates a thoughtful story-based science question:

Preserve it even when the class cannot settle on one immediate answer. Keep Wondering values worthwhile science questions as well as explanations.

If a student demonstrates understanding nonverbally:

Record what the student's movement, pathway tracing, pointing, gesture, or movement-card selection demonstrates about scientific understanding.

Optional Science Extensions

Use these only when they naturally support classroom learning. They are not required parts of the two-session experience.

SAME OBJECT, NEW MOVEMENT

Choose one safe story or classroom object.

Move it along a straight pathway.

Then move it along a curved pathway.

Ask:

- Is it still the same object?
- Did it move in the same way?
- What changed?

Reinforce that the same object can move in different ways.

MOVEMENT SORT

Show familiar objects, photographs, or short teacher demonstrations.

Students sort examples according to observed movement:

straight

curved

up

down

fast

slow

Discuss how one movement may fit more than one description.

For example, an object may move down along a curved path.

MOVEMENT DETECTIVE

Move one object without describing the movement.

Ask students to become Movement Detectives.

- What moved?
- How do you know?
- Where did it begin?
- Where did it end?
- What did the path look like?
- Which science word best matches the observation?

STORY MOVEMENT CHALLENGE

Return to the apple, frisbee, and leaf.

Challenge students to make as many accurate observation statements about their movement in the Adventure as possible.

For example:

The apple moved down.

The frisbee moved through the air.

The leaf drifted.

The leaf twirled.

The objects did not all move in the same way.

Keep statements focused on what can be observed in the story rather than explanations of why the movements occurred.

Every adventure begins with a question.
Keep wondering.

THE ADVENTURES WITH FRISBEE ROB

The Long Way Down

Adventure 001: Isaac Newton

KINDERGARTEN

SOCIAL STUDIES

Teacher Guide

Long Ago and Today

GRADE	SUBJECT	TIME
Kindergarten	Social Studies	2 × 30 minutes

CENTRAL QUESTION

How can time words help us connect with Isaac Newton, a real person who lived long ago?

Wonder in Motion

Lesson at a Glance

Story connection	Isaac Newton was a real person who lived long ago. In *The Long Way Down*, students encounter him through an imaginative Adventure in which Rob visits Newton and wonders alongside him. The Adventure creates an opportunity for students to begin thinking about the past, the present, and how people today can connect with people who lived long ago.
Social Studies focus	Recognizing that histories are records of events that happened in the past, using time words such as **long ago** and **recently**, sharing experiences with reference to time, and recognizing that learning about the past can help people understand others.
Learning intention	We are learning to use time words to talk about experiences and events from the past.
Core experience	Across two 30-minute sessions, students use Newton, the Adventure, and shared classroom experiences to explore **long ago**, **recently**, and **today**. They collaboratively build a Time Connections Board, rehearse sharing an experience with reference to time, create a simple class record, and explore how people today can learn about people from the past.
Flexible use	Session 1 is a complete core lesson and can be used independently. Session 2 continues the same Wonder Lab by giving students additional time to sequence, rehearse, explain, share, and deepen their Social Studies thinking. Teachers with a continuous 60-minute block may teach both sessions together.
Use after reading	Read Adventure 001: *The Long Way Down* before beginning. The story reading is separate from the two Social Studies sessions.
Story context	Isaac Newton was a real historical person. Rob's visit, their conversation, and the events they experience together are imaginative parts of the Adventure.
Important Social Studies distinction	A real historical person can appear in an imaginative story. Kindergarten students do not need to evaluate historical sources. They simply need to understand that **Newton really lived long ago**, while **Rob meeting Newton belongs to the imaginative Adventure**.

Optional Teacher-Spoken Success Indicators

I can use a time word such as **long ago** or **recently**.

I can tell about something that happened in the past.

I can put a few experiences in time order.

I can explain that Isaac Newton was a real person who lived long ago.

How to Use This Guide

THE GUIDE IS A TOOL, NOT A SCRIPT

This guide is designed to support responsive teaching rather than prescribe every word or action.

Session 1 is a complete 30-minute Kindergarten Time and Place lesson and can be taught independently.

Session 2 continues the same learning through rehearsal, refinement, sharing, and questioning. It does not introduce additional curriculum.

Follow productive student thinking and conversation while protecting the central question, selected Time and Place KUSP, meaningful participation, and approximate lesson timing.

Adjust examples, visual supports, grouping, response modes, and pacing to meet the needs of the learners in front of you.

Students do not need exact dates or a detailed biography of Isaac Newton. The important temporal relationship is that Newton lived **long ago**, while the class encountered the Adventure **recently** and is discussing it **today**.

Students may share personal experiences when comfortable, but personal or family disclosure is not required. Shared classroom experiences provide equally useful evidence.

The goal of the second session is not to do more.

It is to give students enough time to think about time, practise using temporal language, improve their explanations, and communicate their understanding.

Curriculum Alignment

Organizing Idea	Time and Place: Exploring the dynamic relationships between people, place, and time supports understanding of perspectives and events to make meaning of the world.
Guiding Question	How can sharing cultures and histories build connections between people?
Learning Outcome	Children explore expressions of traditions, cultures, and histories.
Assessment Focus	Gather formative evidence of selected Kindergarten Time and Place KUSP through students' recognition that histories concern events in the past, use of temporal language, and sharing of experiences with reference to time. Session 1 provides sufficient opportunities to gather evidence of the selected KUSP. Session 2 offers additional opportunities for students to demonstrate and communicate their understanding. These lessons do not assess the complete learning outcome.

Selected KUSP for These Lessons

KUSP element	Selected curriculum learning	What it looks or sounds like
Knowledge	Histories are records of events that happened in the past (family history, personal history). Events can be described according to sequence in time, for example, recently long ago daily yearly	Students recognize that history refers to events from the past. They use **long ago** and **recently** appropriately when talking about Newton, the Adventure, or familiar classroom experiences. Students do not need to use every temporal example listed in the curriculum during this lesson.
Understanding	Traditions, cultures, and histories can build understanding of self and others.	Students recognize that learning about someone from the past can help people living today understand and connect with that person.
Skills & Procedures	Share experiences with reference to time.	Students communicate a story-connected, classroom, or appropriate personal experience using a time reference such as **long ago**, **recently**, or **today**. Students may communicate through speaking, pictures, sequencing cards, gestures, symbols, or another appropriate response mode.

Curriculum source: Government of Alberta, Social Studies (K–6) Curriculum, Time and Place. *View the Alberta program of study*

Teacher Preparation

STANDARD PATHWAY

Use these two 30-minute sessions after students have heard Adventure 001: *The Long Way Down*.

Session 1: **Connect the Past and Present** is the core lesson. Students reconnect with Isaac Newton as a real person from long ago, see temporal language modelled, and collaboratively build a Time Connections Board.

Session 2: **Tell When It Happened** continues the same Wonder Lab. Students return to the board, rehearse one time-based statement with a partner, refine their temporal language, share experiences, and explore questions of different depths about Newton and the past.

If only one 30-minute period is available, teach Session 1.

If a continuous 60-minute block is available, the two sessions can be taught together with a brief transition or movement break between them.

Flexible Use of the Guide

Core Pathway | 30 minutes

Teach Session 1: **Connect the Past and Present**.

Students experience:

Get Curious → Model → Build → Think It Through

This is a complete Kindergarten Time and Place lesson and provides opportunities to gather formative evidence of the selected KUSP.

Full Wonder Lab | 2 × 30 minutes

Teach both sessions.

Students experience the complete Wonder Lab cycle:

Model → Build → Rehearse → Share

Session 2 deepens the same learning rather than adding additional curriculum.

It also provides time for students to reflect on and question the Social Studies ideas in the Adventure through:

Puddle → Pond → Lake → Ocean

Continuous Block | ~60 minutes

If scheduling allows, Sessions 1 and 2 may be taught consecutively.

Take a brief movement or transition break after the first Think It Through before beginning Reconnect.

Materials

A copy of Adventure 001: *The Long Way Down*

An illustration of Isaac Newton from the Adventure

An illustration showing Rob and Newton together

Whiteboard, chalkboard, or chart paper and marker

Large word cards:

LONG AGO

RECENTLY

TODAY

A class Time Connections Board with:

- WHAT ARE WE TALKING ABOUT?
- WHEN?
- WHAT DOES IT HELP US UNDERSTAND?

Prepared picture or statement cards, such as:

Isaac Newton was a real person.

Isaac Newton lived long ago.

Our class heard *The Long Way Down* recently.

Today we are talking about Newton.

Optional blank cards for student contributions

Optional string or tape for a simple visual timeline

Before Students Begin

Create the Time Connections Board.

Prepare three clear anchor examples:

Isaac Newton lived. → LONG AGO

Our class heard *The Long Way Down*. → RECENTLY

We are discussing Newton. → TODAY

Keep the Rob-and-Newton illustration available to remind students that their meeting belongs to the imaginative Adventure.

Choose one or two recent shared classroom experiences that every student can discuss.

For example:

Recently we read the Adventure.

Recently we came back from recess.

Today we are learning Social Studies.

- Use professional judgment to choose the Session 2 grouping—partners, groups of three, or whole group—that best supports student participation. Early in the year, whole-group practice may help students establish the routine, build confidence, and understand what successful participation looks and sounds like.

Keep the Time Connections Board and time-word cards available for Session 2.

Substitutions

Use photographs, drawings, symbols, or teacher-created cards when Adventure illustrations are unavailable.

If temporal language is unfamiliar, use physical placement:

farther back for **long ago**

closer to now for **recently**

the current position for **today**

Students who do not wish to share a personal experience can use a classroom or Adventure experience instead.

Useful Vocabulary

Pre-teach essential vocabulary through an explicit vocabulary routine, providing students with opportunities to build meaning, interact with the words, and use them in context before and throughout the lesson.

Social Studies words:

history • past • event • record • sequence • long ago • recently • today • time • real • imagined

Story words:

Isaac Newton • Rob • Adventure • apple • frisbee • leaf • orchard • question

Histories are records of events that happened in the past.

The **past** is time that has already happened.

An **event** is something that happens.

A **record** preserves information about something that happened.

Long ago describes something that happened far back in the past.

Recently describes something that happened not very long ago.

Today describes the present day.

A **sequence** places events in an order.

Supporting Our Diverse Learners

Use these supports proactively while preparing and teaching the two sessions.

Make it accessible	Use large visual time-word cards and simple picture events. Represent time physically with a short floor or wall timeline when helpful.
Support language	Model sentence frames such as: Long ago, _____. Recently, _____. Today, _____. This happened before _____. This happened after _____.
Offer response choices	Accept speaking, pointing, placing cards, sequencing pictures, drawing, gesture, eye gaze, communication devices, or assistive technology. Personal or family disclosure is not required.
Support participation	Offer roles such as time-word chooser, event-card placer, sequence

	checker, board recorder, picture matcher, or Social Studies reporter.
Reduce memory load	Keep **LONG AGO**, **RECENTLY**, and **TODAY** visible throughout both sessions. Leave previous examples on the Time Connections Board.
Support rehearsal	Allow students to rearrange event cards and practise one time statement with a teacher or partner before sharing.
Preserve the learning	Change the example, language demand, number of cards, or response mode—not the Social Studies goal. Students still share an experience with reference to time.

KUSP Assessment: Evidence to Notice

FORMATIVE ASSESSMENT

Gather evidence through observations and conversations across both sessions.

Session 1 provides sufficient opportunities to gather evidence of the selected KUSP.

Session 2 gives students additional opportunities to demonstrate and communicate their understanding.

Evidence source	Listen or look for	Possible teacher note
Observation	Student distinguishes between something from long ago and a recent classroom experience.	"Places Newton under LONG AGO and the class reading under RECENTLY."
Conversation	Student uses an appropriate temporal reference when describing an event or experience.	"Says, 'Recently we read the Newton Adventure.'"
Product	Contribution to the Time Connections Board or sequence appropriately links an experience with a time reference.	"Places 'We are talking about Newton' under TODAY and explains that it is happening now."

The Two-Session Flow

Session 1 — Connect the Past and Present | 30 minutes

Time	Section	Student experience	Teacher move
~5 min	**Get Curious**	Reconnect with Isaac Newton and wonder when he lived compared with the class today.	Establish Newton as a real person from long ago and the meeting with Rob as an imaginative story event.

Time	Section	Student experience	Teacher move
~5 min	**Wonder Lab: Model**	See **long ago**, **recently**, and **today** used with familiar examples.	Model temporal language and simple sequencing.
~15 min	**Wonder Lab: Build**	Collaboratively build the Time Connections Board using Newton, the Adventure, and classroom experiences.	Prompt students to choose and explain appropriate time words.
~5 min	**Think It Through**	Reflect on how time words help people talk about past and present experiences.	Connect student examples to histories as records of events from the past.

Session 2 — Tell When It Happened | 30 minutes

Time	Section	Student experience	Teacher move
~5 min	**Reconnect**	Return to the Time Connections Board and reconstruct long ago, recently, and today.	Ask students to reason from when something happened rather than merely remember card placement.
~8 min	**Wonder Lab: Rehearse**	Choose an experience and practise sharing it with reference to time.	Prompt students to select a time word that matches the experience.
~9 min	**Wonder Lab: Share**	Share time statements and contribute to a simple class record.	Focus audience attention on what the temporal language communicates.
~3 min	**Think It Through**	Reflect on how recording and sharing experiences can help people remember the past.	Return to the central question.
~5 min	**Keep Wondering**	Generate and explore questions of different depths about Newton, long ago, and the Adventure.	Use Puddle–Pond–Lake–Ocean language to deepen story-based Social Studies wondering.

Session 1 — Connect the Past and Present

Get Curious | ~5 minutes

Show an illustration of Isaac Newton.

Ask:

- "Who is this?"
- Invite students to recall Newton from the Adventure.

Ask:

- "Was Isaac Newton a real person?"
- Confirm that he was.

Then ask:

- "Does Isaac Newton live today?"
- "Did he live recently?"
- "Or did he live long ago?"

Introduce or reinforce **long ago**.

Show the illustration of Rob with Newton.

Ask:

> *"Did Rob really travel back in time to meet Newton?"*

Clarify briefly:

> *"Newton was real. Rob meeting him is part of our imaginative Adventure."*

Ask:

- "When did our class hear *The Long Way Down*?"
- Accept the accurate classroom response.

Introduce the challenge:

> *"Today we are going to use time words to connect someone from long ago with things happening in our class now."*

TEACHER MOVE

Keep the history/story distinction concise.

The lesson is about temporal understanding, not formal historical-source evaluation.

2. Wonder Lab

Model | ~5 minutes

Display:

LONG AGO

RECENTLY

TODAY

Place the Newton card under LONG AGO.

Say:

> *"Isaac Newton lived long ago."*

Place the Adventure-reading card under RECENTLY.

Say:

> *"Our class read The Long Way Down recently."*

Place the lesson card under TODAY.

Say:

> *"Today we are talking about Newton."*

Read the sequence together.

Think aloud:

> *"These do not all belong to the same time."*
>
> *"Time words help us explain when something happened."*

Write or draw:

> *"Recently, we read The Long Way Down."*

Explain that this is a simple record of something that happened in the class.

FACILITATION PROMPTS

- Which event belongs farthest back in time?
- Which happened recently?
- What is happening today?
- What does **long ago** tell us?
- What does **recently** tell us?
- Can two things both be in the past but happen at very different times?
- Why might people record something that happened?

TEACHER MOVE

Students do not need exact dates.

The key relationship is:

Newton → long ago

class encounter with the Adventure → recently

current lesson → today

Build | ~15 minutes

Create the Time Connections Board.

Begin with:

Isaac Newton was a real person.

Ask:

> *"When did he live?"*

Record:

LONG AGO

Next add:

Our class heard *The Long Way Down*.

Ask:

- "When?"
- Record the accurate classroom answer.

Next:

We are talking about Newton.

Record:

TODAY

Add one or two shared classroom experiences.

For example:

Recently we came back from recess.

Today we are learning Social Studies.

Invite students to place prepared cards under the time words.

Ask them to explain their choices.

Then show the Rob-and-Newton illustration.

Ask:

- "Should we put 'Rob really visited Newton' on our history record?"
- Clarify that this belongs to the imaginative Adventure.
- Return immediately to the temporal task.

FACILITATION PROMPTS

- When did this happen?
- Which time word fits?
- How do you know?
- Which happened first?
- Which happened later?
- Could two events both be recent?
- What does this time word help us understand?
- Why might we make a record of an experience?

TEACHER MOVE

Repeatedly return to:

"When did it happen?"

This is the temporal refrain of the Wonder Lab.

Think It Through | ~5 minutes

Step back from the Time Connections Board.

Ask:

- What does **long ago** mean?
- What does **recently** mean?
- What is happening **today**?
- Who in our Adventure is a real person from long ago?
- What is a history?
- Why might people record things that happened?
- How can we learn about someone who lived long ago even though we live today?

Return to the central question:

How can time words help us connect with Isaac Newton, a real person who lived long ago?

Sample Response Guidance

Possible response:
"Newton lived long ago."
"We read the Adventure recently."
"History tells us about things that happened in the past."
• "We can learn about someone from long ago today." • Look for temporal understanding rather than exact historical knowledge.

Session 1 Closing

Tell students:

> *"Isaac Newton lived long ago, but people are still learning about him today."*
>
> *"Time words help us connect events from different parts of the past and present."*
>
> *"Next time, you will use a time word to share an experience and help us create a simple class record."*

If Session 1 is the only lesson being taught, finish by asking:

> *"What is one thing you can say about Isaac Newton using the words **long ago**?"*

Session 2 — Tell When It Happened

Reconnect | ~5 minutes

Return to the Time Connections Board.

Remove the three time-word headings.

Leave the events visible.

Ask students to rebuild:

- LONG AGO
- RECENTLY

- TODAY
- Point to Newton.

Ask:

- "Which time word fits?"
- Point to the class reading.

Ask:

- "When did this happen?"
- Point to the current lesson.

Ask:

- "When?"
- Briefly show the Rob-and-Newton illustration.

Ask:

> *"What do we remember about this part?"*

Accept:

It belongs to the Adventure.

TEACHER MOVE
Reconnection should reactivate temporal reasoning, not become a vocabulary quiz.

2. Wonder Lab

Rehearse | ~8 minutes

Students work with partners.

Offer three possible statement starters:

> *"Long ago, _____."*
> *"Recently, _____."*
> *"Today, _____."*

Students choose an Adventure connection, shared classroom experience, or appropriate personal experience.

Partner A shares.

Partner B asks:

- When did that happen?
- Which time word helped me know?
- Does the time word fit?
- Could you make the timing clearer?

Partner A improves the statement.

Switch roles.

Students may communicate through speech, pictures, pointing, card placement, or another appropriate mode.

FACILITATION PROMPTS

- Which time word fits your experience?
- Did it happen long ago?
- Did it happen recently?
- Is it happening today?
- What event are you sharing?
- Could you put your time word first?
- What happened before?
- What happened after?
- How does the time word help your listener?

TEACHER MOVE

One clear experience with an appropriate temporal reference provides enough evidence.

Students do not need to produce detailed autobiographical stories.

Share | ~9 minutes

Bring the class together.

Create three sections:

LONG AGO

RECENTLY

TODAY

Invite selected student statements.

Possible examples:

Long ago, Isaac Newton lived.

Recently, we heard *The Long Way Down*.

Today, we are sharing what we learned.

Record the contributions.

After several examples, ask:

> *"What have we created?"*
>
> *"A record of some things we talked about or experienced."*

Ask:

- "If someone saw our record later, what could they learn?"
- Connect briefly to histories as records of events that happened in the past.

FACILITATION PROMPTS

- Which time word did we hear?

- What does it tell us?
- Which event happened farthest back?
- Which happened most recently?
- Why did we record these experiences?
- How could this record help someone later?

TEACHER MOVE

Keep the connection to histories simple.

Students are experiencing the idea that records preserve information about what happened.

Think It Through | ~3 minutes

Ask:

- How do time words help us share experiences?
- Why might people record things that happened?
- How can histories help us learn about others?
- How can we connect with Newton even though he lived long ago?

Return to the central question.

Keep Wondering | ~5 minutes

Questions can begin with one simple detail and become deeper as students connect the past, present, and Adventure.

PUDDLE

A small question about one detail.

Examples:

- Did Isaac Newton live long ago or recently?
- Who is the real person from history in the Adventure?
- When did our class hear *The Long Way Down*?

POND

A question that connects a few ideas.

Examples:

- How does knowing Newton lived long ago change how we think about the Adventure?
- How are “Newton was a real person” and “Rob visits Newton” different?
- How do time words help connect Newton with our class?

LAKE

A question that connects several parts of the learning.

Examples:

- How can an imaginative story make us curious about a real person from history?
- How can people today learn about someone who lived long ago?
- Why might people make records of events they want others to remember?

OCEAN

A deep Social Studies question that may have more than one thoughtful response.

Examples:

- How can we enjoy an imaginative Adventure while still thinking carefully about the past?
- What would we want to learn if we wanted to know more about the real Isaac Newton?
- Why might people continue telling stories about people who lived long ago?

The purpose is not for Kindergarten students to classify every question independently.

The water language helps students notice that questions can invite different depths of remembering, connecting, and wondering.

Invite Student Questions

Ask:

- "What are you still wondering about Isaac Newton, long ago, or this Adventure?"
- Accept story-anchored questions.

Choose several and wonder aloud:

> *"Does this feel like a Puddle, Pond, Lake, or Ocean question?"*

There does not need to be one perfect classification.

FACILITATION PROMPTS

- Can we answer this with one detail?
- Would we need to connect more than one idea?
- Are you wondering about Newton or about the imaginative Adventure?
- What part of the story made you wonder?
- Can we make this Puddle a little deeper?
- What could turn this Pond into a Lake?

TEACHER MOVE

Keep questions anchored to the Adventure.

A deeper question does not need more advanced historical content.

Depth comes from noticing, connecting, distinguishing, and wondering more deeply about the story and the person from history.

Close with one student-generated question worth preserving.

"Every adventure begins with a question. Keep wondering."

Likely Misconceptions and Helpful Responses

- **If students think every part of the Adventure really happened because Newton was real**

Try:

- "Newton was real. What did we say about Rob meeting him?"
- **If students use long ago for every event in the past**

Try:

- "Did recess happen long ago, or did it happen recently?"
- **If students think recently means only today**

Try:

- "Could something from yesterday or a few days ago also be recent?"
- **If students think they need an exact date**

Try:

- "Do we need Newton's exact birthday to know he lived long ago?"
- **If students are uncomfortable sharing personal experiences**

Try:

- "Choose something that happened in our class instead."
- **If students move away from the Adventure during Keep Wondering**

Try:

- "What about Newton or the Adventure made you wonder that?"
- **If students think an Ocean question must concern the oldest event**

Try:

> *"Ocean means deeper thinking, not farther back in time."*

If students...	Try this teacher response
If students think long ago means imaginary	Try: ● "Long ago tells us **when** something happened. Was Isaac Newton a real person?"

Use the Evidence Next

If a student recognizes Newton as being from the past but does not use temporal language

Offer **long ago** and **recently** and ask which communicates the idea better.

If a student uses long ago for every past event

Compare Newton with a recent classroom experience.

If a student uses temporal language but struggles with sequence

Provide two or three picture cards and arrange first → next → now.

If a student understands the sequence nonverbally

Allow pointing, card placement, or picture sequencing as evidence.

If a student treats the imaginative Adventure as historical fact

Return briefly to:

> *"Newton was real."*
>
> *"Rob meeting Newton is imagined."*

If a student confidently uses one time word

Invite them to connect two times:

> *"Long ago Newton lived. Recently we read about him."*

If a student shares an experience without reference to time

Ask:

- "When did that happen?"
- Then provide the appropriate sentence starter.
- **If a student generates primarily Puddle questions**

Deepen one together:

> *"Did Newton live long ago?"*

becomes

> *"How can people today learn about someone who lived long ago?"*

If a student generates a thoughtful story-based question

Preserve it even if the lesson does not provide enough information to answer it.

Optional Social Studies Extensions

Use these only when they naturally support classroom learning. They are not required parts of the two-session experience.

OUR CLASS HISTORY

Choose three or four shared classroom events.

Students draw or represent each one and place them in sequence.

Ask:

- What happened first?
- What happened recently?
- What is happening today?

Keep the finished sequence as a simple class record.

TIME WORD SORT

Prepare familiar event cards.

Students sort them using temporal language such as:

long ago

recently

daily

yearly

Include at least one Adventure connection.

Ask students to explain their choices.

REAL PERSON, IMAGINATIVE ADVENTURE

Display:

REAL PERSON

IMAGINATIVE ADVENTURE

Use only information students already know.

For example:

Isaac Newton was a real person.

Rob meeting Newton is imaginative.

Discuss how a story can use a real person while imagining new events.

QUESTIONS FOR NEWTON

Ask:

- "If you could learn more about the real Isaac Newton, what would you want to know?"
- Record several questions.
- Choose one or two and ask whether they feel like Puddle, Pond, Lake, or Ocean questions.
- Preserve the questions for future inquiry.

Every adventure begins with a question.
Keep wondering.