

North Dakota 5 Science

FREE PREVIEW

Full-Year Teacher Planner, Blank Editable Planner & School-Submission Binder

This preview shows the real structure and a genuine sample of the completed planner. The full product contains 9 units, 36 weekly plans and 180 daily plans, plus blank editable versions of every form.

State	North Dakota
Grade	5 (Elementary)
Subject	Science
Course category	Core
Standards family	Science
Framework	North Dakota Science Content Standards K-12 (2019), adopting the Next Generation Science Standards
Issuing agency	North Dakota Department of Public Instruction
Scope	36 instructional weeks · 180 instructional days · 9 units

This is a statewide standards index, not a local course catalog. Course names, grade placement, electives, and graduation sequences vary by district.

What you get

Folder	Contents
01 START HERE	Read-me, contents, printing and digital instructions, standards verification guide, this preview
02 FILLED FULL YEAR	Completed planner in colour and ink-friendly PDF, plus editable DOCX
03 BLANK EDITABLE	Blank planner in colour, ink-friendly and fillable PDF, plus editable DOCX
04 ASSESSMENTS AND DATA	Baseline observation, quarterly rubrics, anecdotal forms, portfolio checklist
05 SCHOOL SUBMISSION	Submission covers, alignment summary, evidence checklist, observation, reflection, signature page
06 LICENSE AND CREDITS	Terms of use, credits and licences, copyright notice

The pages that follow are reproduced **exactly** as they appear in the full completed planner.

Week 9 — Which Way Is Down

Unit 3: Gravity · Month 3 · Quarter 1 · Semester 1 · Instructional Days 41–45

Essential question	Why does everything fall the same way?
Standards	Gravity Pulls Toward Earth — <i>Official state standard verification required before school submission.</i>
Learning target	"I can claim and support that Earth's gravity pulls objects toward its centre."
Local dates	_____ (enter your school dates)

Measurable objectives

- Students will make a claim, supported by evidence, that the gravitational force exerted by Earth pulls objects towards the centre of Earth.
- Students will explain what 'down' means on a sphere.

Success criteria (student-friendly)

- "I state the claim."
- "I give evidence."
- "I explain what down means on a round Earth."

Academic vocabulary

gravity, force, centre, sphere, claim

Materials and technology

- Balls and globes
- String and small weights
- Notebooks
- Chart paper
- Torches

Differentiation and supports

Support area	This week's plan
Special education / IEP	Reduce group size; pair visual cue cards with all verbal directions; allow gesture or picture response in place of speech; pre-teach the week's target in a 1:1 warm-up.
Section 504	Provide the child's documented accommodations throughout; permit movement breaks and alternative seating at any point in the sequence.
Multilingual learners	Introduce each vocabulary word with an object or image; accept home-language responses; send the vocabulary list home where a translation is available; pair with a peer who shares the home language.
Advanced / extension	Ask the learner to teach the skill to a peer, extend the task, or record a demonstration for the class reference wall.

Support area	This week's plan
Intervention / reteach	Reteach the target in a short small group using the same materials; split the day's check for understanding into two smaller steps.
Enrichment	Extend into an open-ended centre or project connected to the essential question.

Assessment and evidence

A supported claim about the direction of gravitational force.

Family communication

Ask your child which way is down in Australia.

Day 41 — Everything Falls Down

Week 9, Day 1 · Unit 3 · Standards: Gravity Pulls Toward Earth

Focus	The observation.
Learning target	"I can claim and support that Earth's gravity pulls objects toward its centre."
Vocabulary in use	gravity, force, centre
Local date	_____

Learning sequence

Connect: things we have dropped. Teach: whatever we drop, wherever we stand, it goes the same way - and that sameness is the thing to explain. Try: shared observation of several objects released. Apply: pupils describe the direction. Reflect: the observation is trivial and the explanation is not, which is why the week starts here.

Check for understanding

Student describes the direction objects fall.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Day 42 — Down Is Not One Direction

Week 9, Day 2 · Unit 3 · Standards: Gravity Pulls Toward Earth

Focus	The key idea.
Learning target	"I can claim and support that Earth's gravity pulls objects toward its centre."
Vocabulary in use	gravity, force, centre
Local date	_____

Learning sequence

Connect: falling. Teach: on a round Earth, 'down' points to a different place in space depending where you stand - but always toward the centre. Try: shared modelling with a globe and weighted strings. Apply: pupils model. Reflect: THE STANDARD'S OWN CLAIM, and the globe model is what makes it thinkable.

Check for understanding

Student explains that down points toward Earth's centre.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Day 43 — What About the Other Side

Week 9, Day 3 · Unit 3 · Standards: Gravity Pulls Toward Earth

Focus	The obvious objection.
Learning target	"I can claim and support that Earth's gravity pulls objects toward its centre."
Vocabulary in use	gravity, force, centre
Local date	_____

Learning sequence

Connect: the model. Teach: people on the far side are not upside down; their 'down' is toward the centre too. Try: shared discussion. Apply: pupils explain. Reflect: THE QUESTION EVERY CLASS ASKS, addressed rather than deflected.

Check for understanding

Student explains why people on the far side of Earth do not fall off.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Day 44 — Gathering the Evidence

Week 9, Day 4 · Unit 3 · Standards: Gravity Pulls Toward Earth

Focus	Evidence.
Learning target	"I can claim and support that Earth's gravity pulls objects toward its centre."
Vocabulary in use	gravity, force, centre
Local date	_____

Learning sequence

Connect: our model. Teach: plumb lines at different places, and the fact that the model predicts what we observe. Try: shared evidence gathering. Apply: pupils record evidence.

Check for understanding

Student gathers evidence supporting the claim.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Day 45 — Writing the Claim

Week 9, Day 5 · Unit 3 · Standards: Gravity Pulls Toward Earth

Focus	Claim, evidence, reasoning.
Learning target	"I can claim and support that Earth's gravity pulls objects toward its centre."
Vocabulary in use	gravity, force, centre
Local date	_____

Learning sequence

Connect: our evidence. Teach: writing it in the Week 3 structure. Try: shared writing. Apply: pupils write.

Check for understanding

Student writes a supported claim about gravity.

Differentiation in the moment

If the learner...	Then...
needs more support	Model the step again with guided support, then fade to a gesture cue.
is ready for more	Invite the learner to demonstrate for a peer or add a second example.
is dysregulated	Pause instruction, move to co-regulation, and return to the target later.

Closure and reflection

Gather the group. Restate the learning target. Ask one learner to demonstrate. Name one specific thing the group did well, then preview tomorrow.

Teacher reflection (fictional example)

Fictional Example — Customize and Verify Before School Submission.

Most learners met the target. Two needed the visual cue repeated during guided practice; I will pre-teach with them tomorrow. The extension held attention longer than planned, so I shortened closure.

Important before you buy

- This is a **digital download**. Nothing is shipped.
- The planner is **calendar-neutral**: Month 1–9, Week 1–36, Day 1–180, so it fits any school calendar. You add your own dates.
- Standards were transcribed from the official source.
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This is a statewide standards index, not a local course catalog. Course names, grade placement, electives, and graduation sequences vary by district.

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Source citation

North Dakota Department of Public Instruction. North Dakota Science Content Standards K-12 (2019), adopting the Next Generation Science Standards. North Dakota adopted the Next Generation Science Standards. The codes here are NGSS performance expectations (K-PS2-1, MS-LS1-3, HS-ESS1-2) carrying their NGSS numbering, not a North Dakota renumbering. NGSS is a registered trademark of Achieve, Inc. North Dakota writes K-5 by grade and bands middle school (MS) and high school (HS). Retrieved 2026-07-27 from <https://www.nd.gov/dpi/districtsschools/north-dakota-education-content-standards/science>