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# Alaska 8 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            | Alaska                                                    |
| Grade            | 8 (Middle)                                                |
| Subject          | Science                                                   |
| Course category  | Core                                                      |
| Standards family | Science                                                   |
| Framework        | K-12 Science Standards for Alaska                         |
| Issuing agency   | Alaska Department of Education and Early Development      |
| 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 — Position Predicts Behaviour

### Unit 3: Predicting, and Recognising a Reaction · Month 3 · Quarter 1 · Semester 1 · Instructional Days 41–45

|                    |                                                                                                                                      |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Essential question | Can you say how an element will behave before you have seen it?                                                                      |
| Standards          | <b>Predicting Reactivity From the Periodic Table</b> -> MS-PS3-5, MS-PS4-1, MS-PS4-2 — 3 standards; full text in the standards table |
| Learning target    | "I can use position in the table to reason about reactivity."                                                                        |
| Local dates        | _____ (enter your school dates)                                                                                                      |

#### Measurable objectives

- Students will obtain and evaluate information from the periodic table about the reactivity of main group elements.

#### Success criteria (student-friendly)

- "I identify the main groups."
- "I describe the reactivity trend in a group."
- "I evaluate the source of my information."

#### Academic vocabulary

reactivity, main group, trend, prediction, evaluate

#### Materials and technology

- The school's periodic table
- Teacher-supplied reactivity data
- Notebooks

#### 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.                                                                                 |
| 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 reactivity trend described and its evidence evaluated.

**Family communication**

Ask your child which elements are the most reactive and why.

## Day 41 — Which Groups the Standard Means

Week 9, Day 1 • Unit 3 • Standards: MS-PS3-5, MS-PS4-1, MS-PS4-2

|                   |                                                               |
|-------------------|---------------------------------------------------------------|
| Focus             | MS-PS3-5, MS-PS4-1, MS-PS4-2 begun.                           |
| Learning target   | "I can use position in the table to reason about reactivity." |
| Vocabulary in use | reactivity, main group, trend, prediction, evaluate           |
| Local date        | _____                                                         |

### Learning sequence

TEACHER NOTE: NO REACTIVE METAL OR HALOGEN IS HANDLED BY PUPILS. Any demonstration is the teacher's, and where none is possible the week uses supplied data and video the school already holds - the standard asks for prediction from the table, not for the reaction. Connect: Week 7's groups. Teach: what 'main group' means and where those groups sit. Try: shared location. Apply: pupils identify the main groups. Reflect: the standard is about position, and position is available to everyone.

### Check for understanding

Student identifies the main groups on the table.

### 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 — Reading a Trend Down a Group

Week 9, Day 2 · Unit 3 · Standards: MS-PS3-5, MS-PS4-1, MS-PS4-2

|                   |                                                               |
|-------------------|---------------------------------------------------------------|
| Focus             | Pattern.                                                      |
| Learning target   | "I can use position in the table to reason about reactivity." |
| Vocabulary in use | reactivity, main group, trend, prediction, evaluate           |
| Local date        | _____                                                         |

### Learning sequence

Connect: groups. Teach: reading supplied reactivity data down a group and describing the trend - and that a trend is a pattern with exceptions, not a law. Try: shared reading. Apply: pupils describe one trend from data. Reflect: describing the trend is a data skill before it is a chemistry one.

### Check for understanding

Student describes a reactivity trend from supplied data.

### 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 — Across a Period

Week 9, Day 3 · Unit 3 · Standards: MS-PS3-5, MS-PS4-1, MS-PS4-2

|                   |                                                               |
|-------------------|---------------------------------------------------------------|
| Focus             | The second dimension.                                         |
| Learning target   | "I can use position in the table to reason about reactivity." |
| Vocabulary in use | reactivity, main group, trend, prediction, evaluate           |
| Local date        | _____                                                         |

### Learning sequence

Connect: down a group. Teach: that reactivity also changes across a period and in a different way, so position needs both coordinates. Try: shared comparison. Apply: pupils describe one across-period pattern. Reflect: one coordinate is not enough to predict.

### Check for understanding

Student describes a pattern across a period.

### 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 — Where Did This Information Come From

Week 9, Day 4 · Unit 3 · Standards: MS-PS3-5, MS-PS4-1, MS-PS4-2

|                   |                                                               |
|-------------------|---------------------------------------------------------------|
| Focus             | The 'evaluate' verb.                                          |
| Learning target   | "I can use position in the table to reason about reactivity." |
| Vocabulary in use | reactivity, main group, trend, prediction, evaluate           |
| Local date        | _____                                                         |

### Learning sequence

Connect: patterns. Try: shared evaluation of two supplied sources. Apply: pupils evaluate one. Reflect: 'evaluate' is in the standard and is the part usually dropped.

### Check for understanding

Student evaluates a source of scientific information.

### 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 — Week 9 Check: Trends and Sources

Week 9, Day 5 · Unit 3 · Standards: MS-PS3-5, MS-PS4-1, MS-PS4-2

|                   |                                                               |
|-------------------|---------------------------------------------------------------|
| Focus             | MS-PS3-5, MS-PS4-1, MS-PS4-2 begun.                           |
| Learning target   | "I can use position in the table to reason about reactivity." |
| Vocabulary in use | reactivity, main group, trend, prediction, evaluate           |
| Local date        | _____                                                         |

### Learning sequence

Connect: the week. Teach: the criteria. Try: shared checking. Apply: pupils describe a trend and evaluate its source. Reflect: next week they make and test PREDICTIONS.

### Check for understanding

Student describes a trend and evaluates its source.

### 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

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- This is a **digital download**. Nothing is shipped.
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## Source citation

Alaska Department of Education and Early Development. K-12 Science Standards for Alaska. Adopted 2019. ALASKA PUBLISHES ITS MIDDLE SCHOOL SCIENCE AS A GRADES 6-8 BAND rather than grade by grade, with codes prefixed MS-, so A GRADE 8 CLASS IS HELD TO EXACTLY THE SAME FIFTY-NINE EXPECTATIONS AS A GRADE 6 OR GRADE 7 CLASS. The Grade 6, 7 and 8 science rows in this series carry the same set -- do not buy two expecting different standards. GRADE 8 IS THE LAST YEAR OF THAT BAND: from Grade 9 Alaska switches to the HS- prefixed high school set, which is a different and larger group of seventy. ONE EXPECTATION IS DELIBERATELY NOT REGISTERED: Alaska prints MS-PS4-3 as "Integrated with HS PS4-2" and publishes no expectation under it, having moved it to high school -- which is worth knowing at Grade 8 in particular, because it is the content your students will meet next year rather than this one. MS-ESS1-1 carries a lettered sub-part, MS-ESS1-1a, registered under the code Alaska actually prints. THE UNIT OF THE STANDARD IS THE PERFORMANCE EXPECTATION; the "Clarification Statement" and "Assessment Boundary" beneath each one are guidance and are NOT registered. Retrieved 2026-07-27 from <https://education.alaska.gov/akstandards/science/science-standards-for-alaska.pdf>