Interim Blueprint
Science

Spring 2024

TABLE OF CONTENTS

ABOUT KAP SCIENCE INTERIM ASSESSMENTS

The Kansas Assessment Program (KAP) interim assessments allow educators to evaluate students' knowledge and skills in a subject area and are designed to inform decisions at the classroom level and beyond (e.g., at the school and district level).

Science interim assessments are given twice during the school year for grades 5 and 8. Each interim assessment covers a subset of content standards. This document describes how the Next Generation Science Standards (NGSS), adopted by Kansas in 2013, are measured by each interim assessment.

SUGGESTED USES

Educators can use this document to

- better understand each assessment and the standards measured by each assessment.
- ensure that the sequence of instructional plans matches the major emphases of the standards across the year on both interim assessments.
- check the alignment of curriculum and learning activities.
- develop learning goals for students to achieve proficiency.
- build a greater understanding of student, grade-level, school, and district results, and plan for future learning activities accordingly.

ASSESSMENT BLUEPRINTS

The assessment blueprints provide general information related to the development and frequency of items on the interim assessments. The content emphases of the interim assessments reflect the instructional emphases outlined in the Kansas State Department of Education Standards documents.

The NGSS, adopted by Kansas in 2013 as the state's science standards, serve as the foundation of the assessments. These science standards are also called performance expectations (PEs). There are three dimensions incorporated in the standards: disciplinary core ideas (DCIs), science and engineering practices (SEPs), and crosscutting concepts (CCCs).

- DCIs occur in four domains: physical sciences, life sciences, earth and space sciences, and engineering design.
- SEPs have eight domains that are grouped into three groups for reporting purposes.
    - Engaging in Inquiry
        - Asking Questions and Defining Problems
        - Planning and Carrying Out Investigations
        - Analyzing and Interpreting Data
        - Obtaining, Evaluating, and Communicating Information
    - Developing and Using Models
        - Developing and Using Models
    - Using Evidence for Explanations and Argumentation
        - Using Mathematical and Computational Thinking
        - Constructing Explanations and Designing Solutions
        - Engaging in Argument from Evidence

Items on the assessments align to PEs that follow the same groupings. To reflect the three dimensions of NGSS, the following blueprints provide details about the assessments, organized by DCI domains and SEP reporting groups.

GRADE 5 SCIENCE INTERIM ASSESSMENT BLUEPRINT							
DCI Domain	**SEP Reporting Group**	**PEs Included**		**SEP Reporting Group Point Range**			
				Interim 1		**Interim 2**	
		Interim 1	**Interim 2**	**Min**	**Max**	**Min**	**Max**
Physical Science	Developing and Using Models	5.PS1.1		5	6	—	—
	Using Evidence for Explanations and Argumentation	5.PS1.2		5	6	—	—
	Engaging in Inquiry	5.PS1.3, 5.PS1.4, 3-5.ETS1.1, 3-5.ETS1.3		10	13	—	—
Life Science	Developing and Using Models		5.PS3.1, 5.LS2.1	—	—	5	7
	Using Evidence for Explanations and Argumentation		5.LS1.1, 3-5.ETS1.2	—	—	10	14
Earth and Space Science	Using Evidence for Explanations and Argumentation	5.ESS1.1, 3-5.ETS1.2		1	5	—	—
	Engaging in Inquiry	5.ESS1.2	5.ESS3.1, 3-5.ETS1.1	5	6	10	14
			Total Points	**26**	**36**	**25**	**35**

GRADE 8 SCIENCE INTERIM ASSESSMENT BLUEPRINT							
DCI Domain	**SEP Reporting Group**	**PEs Included**		**SEP Reporting Group Point Range**			
				Interim 1		**Interim 2**	
		Interim 1	**Interim 2**	**Min**	**Max**	**Min**	**Max**
Physical Science	Developing and Using Models	MS-PS1-1, MS-PS1-4, MS-PS1-5, MS-ETS1-4	MS-PS3-2	6	8	2	3
	Engaging in Inquiry	MS-PS1-3, MS-PS1-2, MS-PS2-3, MS-PS2-5, MS-ETS1-3	MS-PS3-4, MS-PS4-3, MS-ETS1-1	5	7	6	7
	Using Evidence for Explanations and Argumentation	MS-PS1-6, MS-PS2-4	MS-PS3-3, MS-ETS1-2	5	6	5	6
Life Science	Developing and Using Models		MS-LS1-2, MS-LS1-7, MS-LS2-3, MS-LS3-1, MS-LS3-2	—	—	6	7
	Engaging in Inquiry	MS-LS2-1	MS-LS1-1	1	3	2	3
	Using Evidence for Explanations and Argumentation	MS-LS2-2	MS-LS1-3, MS-LS1-6, MS-LS1-4, MS-LS1-5	0	1	5	6
Earth and Space Science	Developing and Using Models	MS-ESS1-1, MS-ESS1-2, MS-ESS2-4	MS-ESS2-1	5	6	2	3
	Engaging in Inquiry	MS-ESS1-3, MS-ESS2-3	MS-ESS3-2	5	6	0	2
	Using Evidence for Explanations and Argumentation	MS-ESS3-1	MS-ESS2-2	0	3	2	3
			Total Points	**27**	**40**	**30**	**40**