

The following document describes the structure and content of the Maryland Integrated Science Assessment (MISA) for elementary school that is administered at the end of fifth grade.

## STANDARDS

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The grade 5 MISA uses all the Performance Expectations from the Maryland Next Generation Science Standards (NGSS) for grades 3 through 5. Not all performance expectations will appear on a single assessment, but they will be rotated over time so that all performance expectations will be assessed in a regular cycle.

## SESSIONS

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The table indicates the structure of the grade 5 MISA by sessions.

Session	Time	Item Sets
1	40 minutes	2
2	40 minutes	2
3	40 minutes	2
4	40 minutes	2

## REPORTING CATEGORIES

The tables indicate the breakdown of items on the Grade 5 MISA by reporting category.

### SCIENCE DOMAINS

Domain	Performance Expectations	Percent of Blueprint
Earth and Space Science	Any of the grade 3, 4, or 5 Earth and Space Science Performance Expectations	30 to 35%
Life Science	Any of the grade 3, 4, or 5 Life Science Performance Expectations	30 to 35%
Physical Science	Any of the grade 3, 4, or 5 Physical Science Performance Expectations	30 to 35%

**SCIENCE AND ENGINEERING PRACTICES (SEP) CATEGORIES**

Science and Engineering Practices	Earth and Space Performance Expectations	Life Science Performance Expectations	Physical Science Performance Expectations	Percent of Blueprint
Investigating Science and Engineering Practices <ul style="list-style-type: none"> <li>Asking questions (for science) and defining problems (for engineering)</li> <li>Planning and carrying out investigations</li> <li>Using mathematics and computational thinking</li> </ul>	4-ESS2-1 5-ESS2-2	None	3-PS2-1 3-PS2-2 3-PS2-3 3-PS2-4 4-PS3-2 4-PS3-3 5-PS1-2 5-PS1-3 5-PS1-4	23 to 40%
Sensemaking Science and Engineering Practices <ul style="list-style-type: none"> <li>Developing and using models</li> <li>Analyzing and interpreting data</li> <li>Constructing explanations (for science) and designing solutions (for engineering)</li> </ul>	3-ESS2-1 4-ESS1-1 4-ESS2-2 4-ESS3-2 5-ESS1-2 5-ESS2-1	3-LS1-1 3-LS3-1 3-LS3-2 3-LS4-1 3-LS4-2 4-LS1-2 5-LS2-1	4-PS3-1 4-PS3-4 4-PS4-1 4-PS4-2 4-PS4-3 5-PS1-1 5-PS3-1	33 to 50%
Critiquing Science and Engineering Practices <ul style="list-style-type: none"> <li>Engaging in argument from evidence</li> <li>Obtaining, evaluating, and communicating information</li> </ul>	3-ESS2-2 3-ESS3-1 4-ESS3-1 5-ESS1-1 5-ESS3-1	3-LS2-1 3-LS4-3 3-LS4-4 4-LS1-1 5-LS1-1	5-PS2-1	23 to 40%