Maryland
STATE DEPARTMENT OF EDUCATION

Maryland Integrated Science Assessment

Life Science High Level Blueprint

The following document describes the structure and content of the Maryland Integrated Science Assessment (MISA) for high school that is administered at the end of the student's life science (Biology) course.

STANDARDS

The Life Science (LS) MISA uses the 24 identified life science performance expectations from the Maryland Next Generation Science Standards (NGSS) found in the high school grade band. Not all performance expectations may appear on a single assessment, but they will be rotated over time so that all life science performance expectations will be assessed in a regular cycle.

SESSIONS

The table indicates the structure of the LS MISA by sessions.

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

REPORTING CATEGORY

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

Life Science Topics	Percentage Range
Structure and Function	12 to 17%
Matter and Energy in Organisms Ecosystem	20 to 25%
Interdependent Relationships in Ecosystems	20 to 25%
Inheritance and Variation of Traits	18 to 22%
Natural Selection and Evolution	18 to 22%

Science and Engineering Practices	Percentage Range
Investigating Science and Engineering Practices • Asking questions (for science) and defining problems (for engineering) • Planning and carrying out investigations • Using mathematics and computational thinking	25 to 35%
Sensemaking Science and Engineering Practices • Developing and using models • Analyzing and interpreting data • Constructing explanations (for science) and designing solutions (for engineering)	35 to 45%
Critiquing Science and Engineering Practices • Engaging in argument from evidence • Obtaining, evaluating, and communicating information	25 to 35%