

Rhinebeck Central Schools Grade 5-8 Science Process Skills

Codes: I = Instruction and Practice A = Assessment

Assessed in Grade ...

5	6	7	8	General Skills
I	I	I	I	1. Follow safety procedures in the classroom and laboratory
A	I	A	A	2. Make and communicate observations
I	I	I		3. Formulate, refine and clarify questions
I	I	I		4. Formulate, refine and clarify hypotheses
A	I	A	A	5. Collect and record data
I	A	I	A	6a. Safely and accurately use a metric ruler
	A	I	A	6b. balance
		I		6c. stopwatch
I	A	I	A	6d. graduated cylinder
I	A	I		6e. thermometer
	I		A	6f. spring scale
				6g. voltmeter
A	A	I	A	7. Use appropriate tool, scale and units to measure or calculate values
	A	I	A	8. Measure precisely with significant figures only
	I	I	A	9. Error analysis of data
A	I	A	I	10. Interpret organized data to answer original question or assess hypothesis
	I	A	A	11. Recognize and analyze patterns and trends
I	I	A	I	12. Compare, contrast and classify
		A		13. Develop and use a dichotomous key
	I	I		14. Sequence events
	I	I	I	15. Identify cause-and-effect relationships
	I	I		16. Use indicators and interpret results
	I	A	A	17. Select and use models to study processes that can not be studied directly
				Living Environment Skills
		A		1. Manipulate a compound microscope to view microscopic objects
		A		2. Determine the size of a microscopic object, using a compound microscope
		A		3. Prepare a wet mount slide
		A		4. Use appropriate staining techniques
		A		5. Design and use a Punnett square or a pedigree chart to predict the probability of certain traits
		A		6. Classify living things according to a student-generated scheme and an established scheme
I		A		7. Interpret and/or illustrate the energy flow in a food chain, energy pyramid or food web
I		I		8. Identify pulse points and pulse rates
I		I		9. Identify structure and function relationships in organisms
				Physical Setting Skills
I				1. Use latitude and longitude to find or communicate a location on a map
A	A			2. Using identification tests and a flow chart, identify mineral samples
I				3. Use a diagram of the rock cycle to determine how the rock was formed
				4. Plot the location of recent earthquake and volcanic activity on a map and identify patterns
			I	5. Use a magnetic compass to find cardinal directions
				6. Measure the angular elevation of an object, using appropriate instruments
I				7. Generate and interpret field maps including topographic and weather maps
A				8. Predict the characteristics of an air mass based on the origin of the air mass
I				9. Measure weather variables such as wind speed and direction, relative humidity, pressure, etc.
	A		A	10. Determine the density of liquids, and regular- and irregular-shaped solids
	A		A	11. Determine the volume of a regular- and an irregular-shaped solid, using water displacement
	A		A	12. Using the periodic table, identify an element as a metal, nonmetal or noble gas
	I		I	13. Determine the identity of an unknown element, using physical and chemical properties
			I	14. Using appropriate resources, separate the parts of a mixture
			I	15. Determine the electrical conductivity of a material, using a simple circuit
			A	16. Determine the speed and acceleration of a moving object