

Rubric for Water Chemistry Analysis

Skills	Level 1	Level 2	Level 3	Level 4
Initiating and Planning: <ul style="list-style-type: none"> • understanding of basic concepts of water quality and how substances affect it • follows the steps in a teacher-prepared procedure for a pH, nitrate, bacteria, and fluoride test • makes predictions about possible outcomes of the water chemistry investigation 	<ul style="list-style-type: none"> • demonstrates limited knowledge and understanding of water quality and how substances affect it • follows the steps in a teacher-prepared procedure for a pH, nitrate, bacteria, and fluoride test with limited effectiveness • makes predictions about possible outcomes of the water chemistry investigation with limited effectiveness 	<ul style="list-style-type: none"> • demonstrates some knowledge and understanding of water quality and how substances affect it • follows the steps in a teacher-prepared procedure for a pH, nitrate, bacteria, and fluoride test with some effectiveness • makes predictions about possible outcomes of the water chemistry investigation with some effectiveness 	<ul style="list-style-type: none"> • demonstrates considerable knowledge and understanding of water quality and how substances affect it • follows the steps in a teacher-prepared procedure for a pH, nitrate, bacteria, and fluoride test with considerable effectiveness • makes predictions about possible outcomes of the water chemistry investigation with considerable effectiveness 	<ul style="list-style-type: none"> • demonstrates thorough knowledge and understanding of water quality and how substances affect it • follows the steps in a teacher-prepared procedure for a pH, nitrate, bacteria, and fluoride test with a high degree of effectiveness • makes predictions about possible outcomes of the water chemistry investigation with a high degree of effectiveness
Performing and Recording: <ul style="list-style-type: none"> • selects and safely uses tools/ equipment to observe and measure • records and organizes data using standard measurements, sentences, tables, and/or diagrams 	<ul style="list-style-type: none"> • selects and safely uses tools/ equipment to observe and measure with assistance • records and organizes data using standard measurements, sentences, tables, and/or diagrams with limited effectiveness 	<ul style="list-style-type: none"> • selects and safely uses tools/ equipment to observe and measure with limited assistance • records and organizes data using standard measurements, sentences, tables, and/or diagrams with some effectiveness 	<ul style="list-style-type: none"> • selects and safely uses tools/ equipment to observe and measure independently • records and organizes data using standard measurements, sentences, tables, and/or diagrams with considerable effectiveness 	<ul style="list-style-type: none"> • selects and safely uses tools/ equipment to observe and measure independently and confidently • records and organizes data using standard measurements, sentences, tables, and/or diagrams with a high degree of effectiveness
Analysing and Interpreting: <ul style="list-style-type: none"> • discusses and summarizes data • evaluates the experimental procedure and explains changes that could be made to improve it 	<ul style="list-style-type: none"> • discusses and summarizes data with limited effectiveness • evaluates the experimental procedure and explain changes that could be made to improve it with limited effectiveness 	<ul style="list-style-type: none"> • discusses and summarizes data with some effectiveness • evaluates the experimental procedure and explain changes that could be made to improve it with some effectiveness 	<ul style="list-style-type: none"> • discusses and summarizes data with considerable effectiveness • evaluates the experimental procedure and explain changes that could be made to improve it with considerable effectiveness 	<ul style="list-style-type: none"> • discusses and summarizes data with a high degree of effectiveness • evaluates the experimental procedure and explain changes that could be made to improve it with a high degree of effectiveness
Communicating: <ul style="list-style-type: none"> • presents steps in and results of an experimental procedure using numeric, symbolic, graphical, and/or linguistic methods 	<ul style="list-style-type: none"> • presents steps in and results of an experimental procedure using numeric, symbolic, graphical, and/or linguistic methods with limited effectiveness 	<ul style="list-style-type: none"> • presents steps in and results of an experimental procedure using numeric, symbolic, graphical, and/or linguistic methods with some effectiveness 	<ul style="list-style-type: none"> • presents steps in and results of an experimental procedure using numeric, symbolic, graphical, and/or linguistic methods with considerable effectiveness 	<ul style="list-style-type: none"> • presents steps in and results of an experimental procedure using numeric, symbolic, graphical, and/or linguistic methods with a high degree of effectiveness