



Science Grade 9 Physical Science: Atoms and Elements (AE)				
Outcome	1 – Little Evidence With help, I understand parts of the simpler ideas and do a few of the simpler skills.	2 – Partial Evidence I understand the simpler ideas and can do the simpler skills. I am working on the more complex ideas and skills.	3 – Sufficient Evidence I understand the more complex ideas and can master the complex skills that are taught in class. I achieve the outcome.	4- Extensive Evidence I have a deep understanding of the complex ideas, and I can use the skills I have learned in situations that were not taught in class.
AE9.1 Distinguish between physical and chemical properties of common substances, including those found in household, commercial, industrial, and agricultural applications.	<ul style="list-style-type: none">I can identify some physical and chemical properties of common substances that are typically used for A FEW of the following applications: household, commercial, industrial, and agricultural.	<ul style="list-style-type: none">I can identify some physical and chemical properties of common substances that are typically used for MANY of the following applications: household, commercial, industrial, and agricultural.	<ul style="list-style-type: none">I can differentiate the physical and chemical properties of common substances that are typically used for ALL of the following applications: household, commercial, industrial, and agricultural.	<ul style="list-style-type: none">I can classify common substances typically used for ALL of the following applications: household, commercial, industrial, and agricultural, according to their physical and/or chemical properties.
Comments				



Science Grade 9 Physical Science: Atoms and Elements (AE)				
Outcome	1 – Little Evidence With help, I understand parts of the simpler ideas and do a few of the simpler skills.	2 – Partial Evidence I understand the simpler ideas and can do the simpler skills. I am working on the more complex ideas and skills.	3 – Sufficient Evidence I understand the more complex ideas and can master the complex skills that are taught in class. I achieve the outcome.	4- Extensive Evidence I have a deep understanding of the complex ideas, and I can use the skills I have learned in situations that were not taught in class.
AE9.2 Analyze historical explanations of the structure of matter up to and including: <ul style="list-style-type: none"> ○ Dalton model ○ Thomson model ○ Rutherford model ○ Bohr model of the atom. 	<ul style="list-style-type: none"> • With help, I can represent some of the major historical atomic models of the atom, including Dalton model, Thomson model, Rutherford model, AND Bohr model. • With help, I can describe historical explanations for the structure of matter up to and including: Dalton model, Thomson model, Rutherford model, OR Bohr model. 	<ul style="list-style-type: none"> • I can represent some of the major historical atomic models of the atom, including Dalton model, Thomson model, Rutherford model, AND Bohr model. • I can describe historical explanations for the structure of matter up to and including: Dalton model, Thomson model, Rutherford model, OR Bohr model. 	<ul style="list-style-type: none"> • I can represent the major historical atomic models of the atom, including Dalton model, Thomson model, Rutherford model, AND Bohr model. • I can compare historical explanations for the structure of matter up to and including: Dalton model, Thomson model, Rutherford model, AND Bohr model. 	<ul style="list-style-type: none"> • I can compare the major historical atomic models of the atom, including Dalton model, Thomson model, Rutherford model, AND Bohr model. • I can propose the strengths and limitations of models in science using historical and contemporary examples of atomic models.
Comments				



Science Grade 9 Physical Science: Atoms and Elements (AE)				
Outcome	1 – Little Evidence With help, I understand parts of the simpler ideas and do a few of the simpler skills.	2 – Partial Evidence I understand the simpler ideas and can do the simpler skills. I am working on the more complex ideas and skills.	3 – Sufficient Evidence I understand the more complex ideas and can master the complex skills that are taught in class. I achieve the outcome.	4- Extensive Evidence I have a deep understanding of the complex ideas, and I can use the skills I have learned in situations that were not taught in class.
AE9.3 Demonstrate an understanding of the classification of pure substances (elements and compounds), including the development and nature of the Periodic Table.	<ul style="list-style-type: none"> • With help, I can classify pure substances as being either elements or compounds. 	<ul style="list-style-type: none"> • I can classify pure substances as either elements or compounds. 	<ul style="list-style-type: none"> • I can justify my reasons for classifying pure substances as either elements or compounds. 	<ul style="list-style-type: none"> • I can develop methods for classifying pure substances as either elements or compounds, and explain my reasoning.
	<ul style="list-style-type: none"> • With help, I can describe the different structures and patterns in the Periodic Table. • With help, I can use the Periodic Table to find information on an element. 	<ul style="list-style-type: none"> • I can describe the different structures and patterns in the Periodic Table. • I can use the Periodic Table to find information on an element. 	<ul style="list-style-type: none"> • I can describe the development of the Periodic Table, including its structures and patterns. • I can use the Periodic Table to differentiate information on the elements. 	<ul style="list-style-type: none"> • I can compare the modern periodic table to alternative arrangements that convey information about the classification of elements. • I can use the different structures and patterns in the Periodic Table to predict the properties of an element or family of elements.
Comments				