

Particles yr9

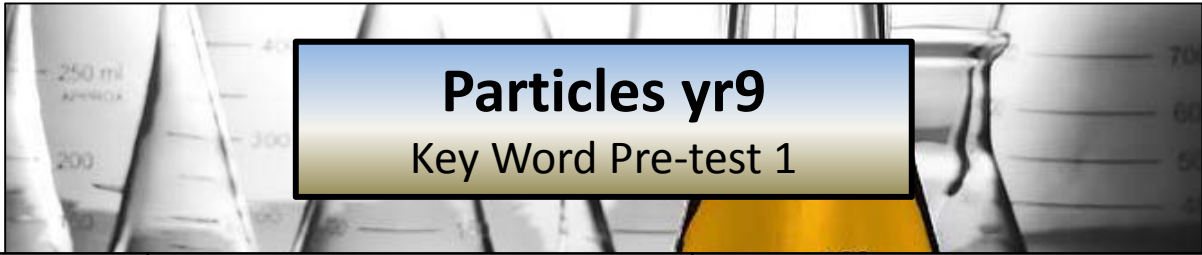
Pre-test 1

Science ideas I need to know Success Criteria	Start of Unit			End of Unit		
	I know this	I know some of this	I need to learn this	I know this	I know some of this	I need to learn this
1a. Distinguish between various "Science" and "Non-Science" situations						
2a. Identify situations that are dangerous in a lab and co-construct rules						
2b. Recognize common safety sign symbols used in the laboratory						
2c. Identify common laboratory equipment including Bunsen burner, tripod, gauze mat, beaker, test tube, boiling tube, conical flask, measuring cylinder, funnel						
2d. Draw common laboratory equipment using a standard scientific format						
2e. Label parts of a Bunsen burner diagram and explain their functions						
2f. Use a Bunsen burner safely and independently						
3a. Identify units and names used in Scientific measurement						
3b. Convert between different measurement scales						
3c. Measure the volume, length, weight and temperature accurately of supplied objects						
4a. Define a Scientific investigation and identify the main variables						
4b. Construct graphs using tables of data						
4c. Carry out a Scientific Investigation in the Laboratory and write up an investigation under the following headings: Aim, hypothesis, equipment, method, results, conclusion, discussion						
5a. List key milestones in the history of the Atomic Theory that have occurred over the past few thousand years						
5b. Draw or create a model of the "Bohr Model" and name each of the three sub atomic particles in an atom						
5c. Know the relative charge on each of the sub atomic particles and which sub-atomic particles contribute to the overall charge						

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Pre-test 2

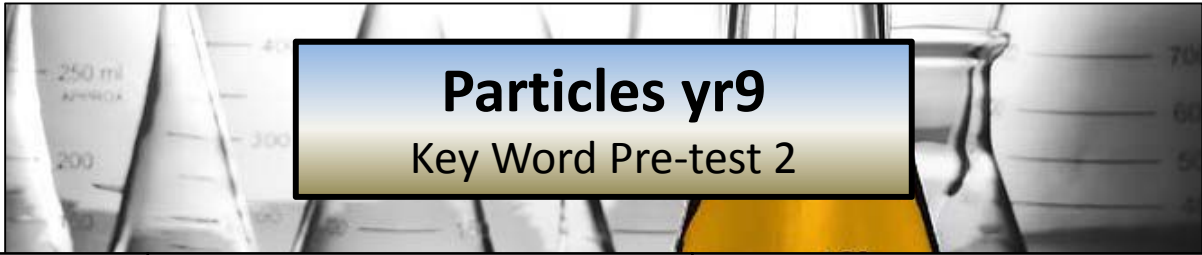
Science ideas I need to know Success Criteria	Start of Unit			End of Unit		
	I know this	I know some of this	I need to learn this	I know this	I know some of this	I need to learn this
6a. Label the main areas of elements in a periodic table and define Groups and Periods						
6b. Name and give symbols for the first 20 elements						
7a. Classify various matter into solid, liquid or gas categories and give reasons						
7b. Draw and label a diagram to show how particles in the 3 states of matter might look.						
7c. Label a Solid, Liquid and Gas triangle correctly						
8a. Link Brownian motion to diffusion						
8b. Investigate and Identify diffusion occurring in everyday situations						
9a. Identify from a diagram the solvent, solute and solution						
9b. Investigate the dissolving of sugar/salt in water to create a solution						
9c. Define the terms dilution, concentration and saturation						
10a. Investigate the processes of expansion and contraction in matter						
10b. Observe the process of heat transfer by conduction in solids						
10c. Observe the process of heat transfer by convection in liquids and gases						
11a. Identify substances as mixtures, compounds or elements						
11b. Distinguish between elements, compounds and mixtures using particle diagrams						
11c. Determine the number of atoms in a compound given its chemical formula						
11d. Distinguish between physical changes and chemical changes in everyday situations						
12a. Identify the components of common mixtures						
12b. Carry out investigations to separate various mixtures using laboratory techniques						



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Key Word Pre-test 1

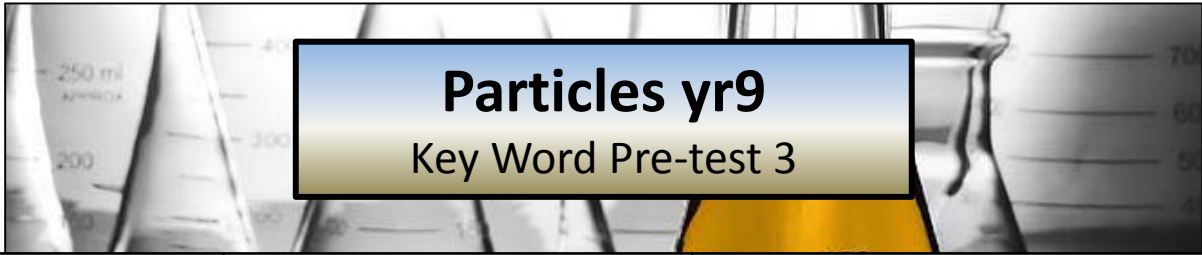
Word	Your definition of the word: Start of unit	Your definition of the word: End of unit
safety		
hazardous		
meniscus		
tripod		
measuring cylinder		
test tube		
Bunsen burner		
conical flask		
funnel		
beaker		
matter		
solid		



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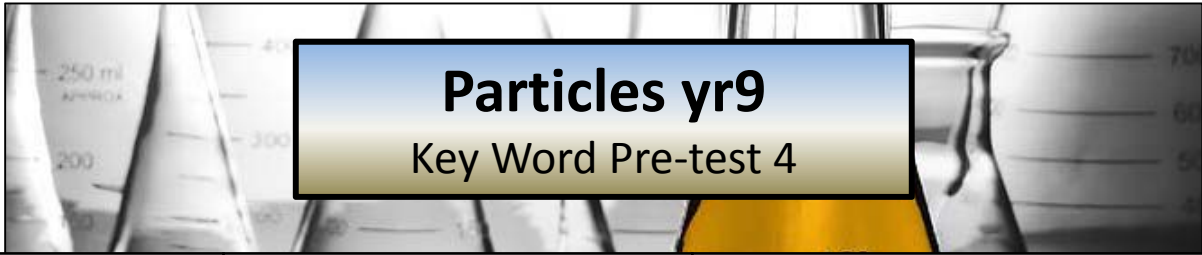
Key Word Pre-test 2

Word	Your definition of the word: Start of unit	Your definition of the word: End of unit
liquid		
gas		
evaporating		
condensing		
sublimation		
conduction		
convection		
mixture		
separate		
solute		
solvent		



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Key Word Pre-test 3

Word	Your definition of the word: Start of unit	Your definition of the word: End of unit
solution		
filtration		
distillation		
dilute		
concentration		
saturated		
chromatography		
atom		
electron		
proton		
neutron		



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Key Word Pre-test 4

Word	Your definition of the word: Start of unit	Your definition of the word: End of unit
nucleus		
magnetism		
element		
compound		
chemical change		
physical change		