8E Combustion

Draw a ring around a number of stars for each statement. If you are very confident about a statement, draw your ring around all the stars. If you do not know anything about a statement do not draw a ring.

| Topic | At the end of the unit: |  |
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| 8Ea | | |
|  | State the meaning of fuel and combustion. | \* \* \* \* \* |
|  | Describe the reactants and products in the combustion of hydrocarbons. | \* \* \* \* \* |
|  | Name the fuel used in a fuel cell. | \* \* \* \* \* |
|  | Describe the tests for carbon dioxide and water. | \* \* \* \* \* |
|  | Write word equations to model reactions. | \* \* \* \* \* |
| 8Eb | | |
|  | State the meaning of oxidation. | \* \* \* \* \* |
|  | Describe the reactions of metals with oxygen. | \* \* \* \* \* |
|  | Identify reactants and products of oxidation using word equations. | \* \* \* \* \* |
|  | State what happens to mass in a chemical reaction. | \* \* \* \* \* |
|  | Explain changes in mass seen in reactions. | \* \* \* \* \* |
|  | Compare and contrast the oxygen and phlogiston theories. | \* \* \* \* \* |
| 8Ec | | |
|  | Name the three sides of a fire triangle and recognise hazard symbols. | \* \* \* \* \* |
|  | Describe what is meant by an exothermic change. | \* \* \* \* \* |
|  | Explain why different types of fire need to be put out in different ways. | \* \* \* \* \* |
|  | Evaluate data on burning fuels. | \* \* \* \* \* |
| 8Ec Working Scientifically | | |
|  | Identify variables that need to be controlled in an experiment. | \* \* \* \* \* |
|  | Plan ways in which to control variables in an experiment. | \* \* \* \* \* |
| 8Ed | | |
|  | Recall examples of pollutants formed by burning fossil fuels. | \* \* \* \* \* |
|  | Describe the reactions of non-metals with oxygen. | \* \* \* \* \* |
|  | Explain the products of complete and incomplete combustion of fossil fuels. | \* \* \* \* \* |
|  | Explain how sulfur dioxide and nitrogen can cause acid rain. | \* \* \* \* \* |
|  | Explain how pollution from fossil fuel combustion can be reduced. | \* \* \* \* \* |
|  | Evaluate measures for reducing pollution from fossil fuel combustion. | \* \* \* \* \* |
| 8Ee | | |
|  | State the meaning of greenhouse effect, global warming and climate change. | \* \* \* \* \* |
|  | Explain how human activities are affecting global warming. | \* \* \* \* \* |
|  | Explain how methods of controlling carbon dioxide emissions work. | \* \* \* \* \* |