<u>Curriculum Map – Science Alternative curriculum Year</u>

| Term 1a | Term 1b | Term 2a | Term 2b | Term 3a | Term 3b |
|---|--|--|--|--|---|
| Topic Title: | Topic Title: | Topic Title: | Topic Title: | Topic Title: | Topic Title: |
| Cells. Tissues and organs. The human digestive system. | Atoms, elements, mixtures and compounds. Solids liquids and gases. Changes of state. Metals and alloys. Allotropes of carbon. Polymers | Respiration. Health and exercise. Communicable diseases. Immunity. Vaccines. Medicinal drugs | Automatic control systems of the human body. Hormones. Use of hormones in controlling fertility. | Changes in energy stores. Energy transfers and efficiency. Energy resources. Types of forces. Effects of forces. | Speed. Stopping distances. Reaction time and stopping distances. Radioactivity |
| Big questions: | Big questions: | Big questions: | Big questions: | Big questions: | Big questions: |
| What is the human body made of and how is it organised? | What are elements compounds and mixtures? How does their structure relate to their function? | How does the human body work? How does the human body fight diseases? | How is the human body co-ordinated? | What is energy and how can it be transferred by forces or stored? | What is energy and how can it be transferred by forces or stored? |
| Assessment: | Assessment: | Assessment: | Assessment: | Assessment: | Assessment: |
| TDA – Using a microscope. | TDA – Compare the time needed to filter mixtures of water, and calcium carbonate that have different particle sizes. Chromatography – different colours of inks. Electrolysis. Preparing a salt sample. | TDA – The effect of exercise on heart rate. | TDA - Investigating a factor that affects reaction time. | Explaining the surfaces cooling on a Leslie cube. TDA – How does a lid affect the cooling of a drink. | TDA Investigating a factor that affects the rate of cooling of a container of water. |
| | Cells. Tissues and organs. The human digestive system. Big questions: What is the human body made of and how is it organised? Assessment: | Topic Title: Cells. Tissues and organs. The human digestive system. Big questions: What is the human body made of and how is it organised? Assessment: TDA – Using a microscope. Topic Title: Atoms, elements, mixtures and compounds. Solids liquids and gases. Changes of state. Metals and alloys. Allotropes of carbon. Polymers Big questions: What are elements compounds and mixtures? How does their structure relate to their function? Assessment: TDA – Compare the time needed to filter mixtures of water, and calcium carbonate that have different particle sizes. Chromatography – different colours of inks. Electrolysis. | Topic Title: Cells. Tissues and organs. The human digestive system. Big questions: What is the human body made of and how is it organised? Assessment: Topic Title: Atoms, elements, mixtures and compounds. Solids liquids and gases. Changes of state. Metals and alloys. Allotropes of carbon. Polymers Big questions: What is the human body made of and how is it organised? What are elements compounds and mixtures? How does their structure relate to their function? How does the human body fight diseases? Assessment: TDA – Using a microscope. TDA – Compare the time needed to filter mixtures of water, and calcium carbonate that have different particle sizes. Chromatography – different colours of inks. Electrolysis. | Topic Title: Cells. Cells. Tissues and organs. The human digestive system. Big questions: What is the human body made of and how is it organised? Assessment: Topic Title: Atoms, elements, mixtures and compounds. Solids liquids and gases. Changes of state. Metals and alloys. Allotropes of carbon. Polymers Big questions: What is the human body made of and how is it organised? Assessment: TDA – Using a microscope. Topic Title: Automatic control systems of the human body. Medicinal drugs Divot. What are elements compounds and mixtures? How does the human body fight diseases? How does the human body fight diseases? Assessment: TDA – Using a microscope. Communicable diseases. Immunity. Vaccines. Medicinal drugs Big questions: How does the human body work? How does the human body fight diseases? Assessment: TDA – The effect of exercise on heart rate. Fight in the human body co-ordinated? TDA – Investigating a factor that affects reaction time. Fight in the human body co-ordinated? TDA – Investigating a factor that affects reaction time. Electrolysis. | Topic Title: Cells. Atoms, elements, mixtures and compounds. Solids liquids and gases. Changes of state. Metals and alloys. Allotropes of carbon. Polymers Big questions: What is the human body made of and how is it organised? Assessment: TDA – Using a microscope. Chromatography – different colours of inks. Electrolysis. Topic Title: Topic Title: Atoms, elements, mixtures and compounds. Solids liquids and gases. Communicable diseases. Immunity. Vaccines. Medicinal drugs Vaccines. Medicinal drugs Big questions: Big questions: What is the human body made of and how is it organised? Assessment: TDA – Using a microscope. Communicable diseases. Immunity. Vaccines. Medicinal drugs Medicinal drugs Big questions: Big questions: What are elements compounds and mixtures? How does the human body work? How does the human body work? How does the human body fight diseases? Assessment: TDA – Using a microscope. Chromatography – different colours of inks. Electrolysis. Topic Title: Atoms, elements, mixtures and exercise. Communicable diseases. Immunity. Hormones. Use of hormones. Use of hormones in controlling fertility. Energy transfers and efficiency. Energy transfers and efficiency. Energy transfers and efficiency. Big questions: How does the human body co-ordinated? What is energy and how can be human body work? How does the human body co-ordinated? Assessment: TDA – Investigating a factor that affects reaction time. TDA – How does a lid affect the cooling of a drink. |