## Science Late Primary Teachers Notes

## **Calculating Average Speed at Surf Hill**

Exercise 1: Record the time it takes for a person to ride surf hill

Exercise 2: Calculate average speed per second using formula distance/time = speed Follow up by calculating how many kilometers per hour this is.

Optional: Repeat exercise for other Jamberoo rides using information provided

## **Energy Transformation at the Taipan**

Question 1: how do the different types of energy work on the Taipan? Write on diagram:

Launch Point: Energy is stored in the raft as potential energy before launch

Conveyor Belts: Electrical energy from the mechanisms pulls the rafts up the belts

Flumes: Kinetic Energy propels the rafts down the tubes.

Question 2 – At home exercise: What are some other mechanisms you can think of which use different types of energy? Draw diagrams similar to the one shown for the other Jamberoo rides or mechanisms you are familiar with.

## **Chemicals at Jamberoo**

Question 1: Using the information provided, complete the flow chart to show the life cycle of chlorine.

Step 1: Salt water is being electrolyzed to create chlorine, sodium hydroxide and hydrogen.

Step 2: Chlorine is being added to water to product hypochlorous acid and hydrochloric acid.

Question 2: How does Chlorine kill microorganisms?

The molecule or ion slashes through the cell walls of microorganisms and destroys their inner enzymes, structures and processes. When this occurs the cell is deactivated or oxidized.