

teacher overview

Science Education Program



Science Education Program

Teacher: _____

School: _____

Welcome to the WhiteWater World Junior Science Education Program.

The Student Activities

This series consists of six student activity booklets:

- *Blue Ringed Octopus*
- *Pure Water*
- *Renewable Environment*
- *Super Tubes Hydrocoaster*
- *The Cave of Waves*
- *The Rip*

The questions are targeted toward students in years 6, 7, 8, 9 and 10.

Questions are designated according to syllabus outcomes at levels 4, 5 and 6. It is intended that students in years 6 and 7 should attempt level 4 outcomes only. Students in years 8 and 9 should complete level 4 and level 5 outcomes, while students in year 10 should complete all questions at levels 4, 5 and 6. Some optional and extension questions are included with each activity.

The Teacher Guides

Each activity has an accompanying Teacher Guide which contains introductory notes and full worked solutions to the student activities.

The front two pages of each teacher guide contain:

- Syllabus outcomes – The outcomes addressed by the activities in the student booklet.
- Equipment – A full list of the materials that students require to complete each activity.
- Standard achieved – Outcomes which the student has demonstrated.
- Focus – The key syllabus topic addressed by the activity.
- Overview of student activities – A quick-reference list for you to identify activities that are relevant to your course.

- Background knowledge and skills – To enable you to prepare your students with the necessary background before they attempt the activities.

Planning your Activities

It is expected that a Junior Science student would be able to complete three full activity booklets in a whole day at WhiteWater World. Prior to the excursion, you should select the booklets that your students are to attempt and photocopy sufficient copies for them. We recommend three activities per student per day. *Super Tubes HydroCoaster* and *Pure Water* are a little more involved and will take longer than the other activities.

It will be of value for students to be familiar with the questions they are to answer and should be given some time to read over the booklets before they arrive at WhiteWater World.

Students should work in groups of 2, 3 or 4 with each activity. There is no reason why different groups could not do different activities.

None of the activities are mutually exclusive. However, there is some overlap in the energy calculations in *Super Tubes HydroCoaster* and *The Rip* so it is not recommended that students complete both of these activities.

Waterproofing Calculators

None of the activities in this program require students to use calculators or other electronic equipment in or very near the rides at WhiteWater World. However, students will be students and there is a risk of calculators getting splashed. In order to avoid damage, we recommend that you supply students with a clear plastic ziplock bag (such as a sandwich bag, readily available from supermarkets). They can ziplock their calculator away in the waterproof bag for the day and still have full use of its functions.

Clear plastic A4 sheet protectors are recommended for each activity in order to keep the pages dry.

Feedback

We have worked hard to put together a program which will be of benefit to you and your students. Please pass on your comments to WhiteWater World education staff if there is any way that we can improve the activities in this program.

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