



Brief Description

Raft Building is an excellent way to introduce students to problem solving in a fun and exciting way. Students usually work in small groups to build a raft with the equipment provided (barrels and planks) and then test by floating with team members aboard.

PSHE and Wider Learning Outcomes

- Working as a member of a team
- Problem solving
- Use of good communication skills
- Acquisition of a life skill – risk assessment
- Physical and mental health

Session Objectives

By the end of the session, students will

- Understand what the task is
- Understand equipment and use
- Understand the risks associated and how to minimise
- be able to use knots to hold design together
- build a raft using the equipment provided and float with team members on

National Curriculum Outcomes

English: articulate and justify answers, arguments and opinions

Design and technology: evaluate ideas and products against their own design criteria and consider views of others to improve their work

Maths: recognise angles and where they meet

Progression / Differentiation

Within the session progression can be made by restricting the equipment available to focus on specific outcomes or introduce extra equipment to expand the problem solving process. The testing of the raft can be expanded by creating tasks such as swapping places on the raft or swapping rafts.

Vocabulary

Raft building words: barrels, planks, ropes, knots, tension, square lashing

Building/design words: angles, balance, testing, ideas, buoyancy, stability, floatation, creativity

Team working words: problem solving, achievement, communication, co-operation, listening, planning, reviewing, sharing, support, trust,

