

OUTSTANDING TEACHING, LEARNING AND ASSESSMENT TECHNICAL SKILLS NATIONAL PROGRAMME

Output 5: Mini Functional Skills Maths PBL Induction Task Examples
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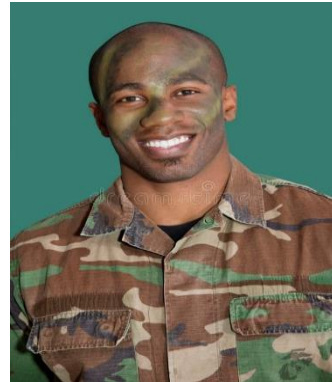
**Shane – Age 39.
Cellular Biologist**



**Tom – Age 41.
Gulf War Veteran**



**Cindy – Age 70.
Retired School Teacher**



**Barry – Late 20's
Mercenary**



**Xavier – Age 18.
Zither Player**



**Fred – Age 40.
Husband and Father of 4**



**Lola - Age 22 year.
Dancer**



**Mary-Anne - Age 45.
Nurse**



**Billy - Age 16.
Student**



**Dr Storch - Age 55.
Doctor**



**Sheena - Age 30.
Fitness Instructor**



**Mickey - Age 45.
Unemployed**

Shane Weight - 70kg	Tom Weight - 78kg
Cindy Weight - 63kg	Barry Weight - 90kg
Xavier Weight - 68kg	Fred Weight - 76kg
Lola Weight - 58kg	Mary-Anne Weight - 65kg
Billy Weight - 50 kg	Dr Storch Weight - 78kg
Sheena Weight - 52kg	Mickey Weight - 85kg

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<p>Shane</p> <p>Is a genius with a degree in cellular biology, making a breakthrough in his work for cancer. He is in a wheelchair. He comes across as selfish and rude.</p>	<p>Lola</p> <p>Go-Go dancer who was on the boat to relax from her recent breast augmentation surgery. She suffers from depression and has attempted suicide twice, but not in the last 12 months.</p>
<p>Mary Anne</p> <p>Experienced nurse and single mother with 2 school aged children. However her children are living with her sister due to a child protection order, because she is an alcoholic.</p>	<p>Billy</p> <p>He is very charming, friendly and helpful when he wants to be. Currently on probation for stealing money from old ladies.</p>
<p>Dr. Storch</p> <p>In good health except he has a prosthetic leg from a car accident. He is very intelligent but likes to throw his knowledge in everyone's face as he is a bit arrogant.</p>	<p>Sheena</p> <p>Ex-fitness instructor with an athletic build. However she is HIV positive from being attacked after working late as a cocktail waitress</p>

<p>Mickey</p> <p>Is a cocaine addict, however he is unusually strong from years of street fighting and working on the docks. His hygiene is not the best</p>	<p>Tom</p> <p>A gulf war hero from both gulf wars, but he hears voices when he isn't medicated.</p>
<p>Cindy</p> <p>Has 4 adult children and 15 grandchildren. She is also an expert chef and homemaker. She is a chronic smoker and is waiting test results as she may have lung cancer.</p>	<p>Barry</p> <p>Has excellent survival and leadership skills, however he angers easily with a short temper. He has admitted to killing someone in a bar fight many years ago, but was never charged.</p>

<p>Xavier</p> <p>Is in good health but barely speaks English. Aspiring musician with a newly signed record contract. He is on the international terrorist watch list, but he swears he is wrongly racially profiled.</p>	<p>Fred</p> <p>Father of 4 and expert in yachting and sea navigation. In good health but very opinionated. Has recently abandoned his sick wife and children and does not plan to see them again</p>

Lost at Sea Ranking Chart

Items	Step 1	Step 2	Step 3	Step 4	Step 5
	Your individual ranking	Your team ranking	Coast Guard ranking	Difference between Step 1 & 3	Difference between Step 2 & 3
A sextant					
A shaving mirror					
A quantity of mosquito netting					
A 25 liter container of water					
A case of army rations					
Maps of the Atlantic Ocean					
A floating seat cushion					
A 10 liter can of oil/petrol mixture					

A small transistor radio					
20 square feet of opaque plastic sheeting					
A can of shark repellent					
One bottle of 160 proof rum					
15 feet of nylon rope					
2 boxes of chocolate bars					
An ocean fishing kit & pole					
			Totals	Your score	Team score





Lost at Sea

Your ship is sinking.

- There is one Lifeboat left that can only hold seven people (You and 6 others).
- As captain you have to choose who out of the twelve remaining passengers gets a place.
- You realise that you may be out to sea for a while as all communication is down.

- The lifeboat can carry a maximum weight of half a tonne.
- You and your friends have managed to save 15 items and a box of matches.



**Shane – Age 39,
Cellular Biologist**

**Shane
70kg**

**Tom
78kg**



**Tom – Age 41,
Gulf War Veteran**



**Cindy – Age 70,
Retired School Teacher**

**Cindy
63kg**

- Your task is to rank the 15 items in terms of their importance for you, as you wait to be rescued.
- Place the number 1 by the most important item, the number 2 by the second most important and so forth until you have ranked all 15 items.
- These items do not count towards the total weight.

Discussion:

- Explain your choices and decisions
- What went well?
- How could we do it better?



Tower Challenge

Aims and Objectives

Aim

- ▶ To solve a problem based around weights measurements and money.

Objectives

- ▶ To create a profit and loss table.
- ▶ To measure heights and work out earning based upon these.
- ▶ To fill in cheques correctly.

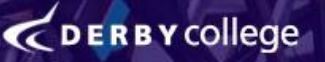
The Challenge

- ▶ Using only paper, paper clips and “Sellotape®” you are tasked with holding a 500ml bottle of water as high off the ground as possible.
- ▶ You need to build a free standing structure (not taped down) that can hold the bottle as high as possible for at least 5 seconds.
- ▶ You will be charged for items including your “tools” and “materials” and will need to fill in a cheque to purchase these items.
- ▶ You will score points for every cm that the bottle is off the ground.
- ▶ You will be in groups of no more than 3 and get 20mins planning time and 1hour build time. Then we will test at the end of the session.
- ▶ The record height last year was 1.35m but your profit is what counts.

Price List and Earnings

Item	Price Per Item
A4 sheet of Paper	£25 (Max 25 sheets)
Roll of Sellotape®	£100
Scissors	£150

Ruler	£50
Tape Measure	£400
Paper clip	£25
Testing Bottle	£400
Achievment	Earnings
Empty bottle height	£10 per cm
Half bottle height	£50 per cm
Full bottle height	£100 per cm
Accurate table of costs	£1000


Date _____

Pay

ACCOUNT PAYEE ONLY

£

For and on Behalf

00012516 0100^222 0123956789 00012516


Date _____

Pay

ACCOUNT PAYEE ONLY

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For and on Behalf

00012516 0100^222 0123956789 00012516

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