

bpchallenge

encouraging hands-on learning



Hello from Debbie and Alik!



WHAT IS A BP CHALLENGE?

The BP Challenge is a fun event between teams, challenging them to design and develop 'solutions' to problems using easily resourced materials, **eg** paper, string, sticky tape. It taps into all 5 key competencies, and every challenge can be easily adapted to suit your year level or unit of work. Term 2 is shaping up to be busy with events around NZ starting soon - see our calendar of events and contact us if you have any questions about them. We are pleased to offer support for your BP Challenge. Please contact us about sponsorship and support if you are planning to run a class, school or district BP Challenge.



UPDATED WEBSITE

Did you know there are over 130 BP Challenges on our website to download and print out? We have just completed updating and simplifying our website to make it easier to navigate, locate and print out BP Challenges. Visit our website today at: www.royalsociety.org.nz/bp_challenge

OUR CONTACT DETAILS

Ph: (04) 471-8991 email: debbie.woodhall@royalsociety.org.nz email: aliki.weststrate@royalsociety.org.nz

BP CHALLENGE REGIONAL & DISTRICT CALENDAR FOR 2010

REGION	DATE	CO-ORDINATOR	CONTACT
East Coast (Gisborne)	21 May	Roanne Poi	tikitiki@tiki.school.nz
North Otago (Oamaru)	28 May	Julie French	jfrench@ardgowan.school.nz
Taranaki	Mid June	Richard Thompson	richard.thompson@devonint.school.nz
Central King Country	15 June	Jenny Gawith	jennyckcreap@xtra.co.nz
West Auckland	16 June	Leanne Chartrand	lchartrand@sunderland.school.nz
Hawkes Bay Primary	17 June	Sonia Bauerfeind	sbauerfeind@napiercentral.school.nz
Kaikoura	30 June	Mike Judd	mike@kaikoura.school.nz
Nelson	17 August	Madeleine Fee	madeleine.fee@canterbury.ac.nz
Dannevirke	18 August	Vanessa Pitt	Principal@ruahine.school.nz
Lower Hutt	19 August	Kathy Anso	ao@naenae-college.school.nz
North Shore	Mid August TBC	Karin Jacobsen	K.Jacobsen@oc.school.nz
Motueka	Mid August TBC	Brian Barton	motec@parklands.school.nz
Wairarapa	23 August	Ruth Kelly	Ruth@martinborough.school.nz
Marlborough	27 August	Paul Sainsbury	paul@mtc.school.nz
Mt Roskill	TBC	Charissa Towers	charissat@marshall.school.nz
Wairoa (Nth Hawkes Bay)	September	Nick Chapman	tumuaki@nuhaka.school.nz
Timaru	7 September	Madeleine Fee	madeleine.fee@canterbury.ac.nz
Manawatu/Wanganui	15 September	Bill Macintyre	W.R.MacIntyre@massey.ac.nz
Canterbury	19 October	Madeleine Fee	madeleine.fee@canterbury.ac.nz
Southland	28 October	Janice Boyle	room1@waianiwa.school.nz
South Westland	26th November	Jim Costello	jimcostello@southwestlandarea.school.nz
Wellington	TBC November	Alik Weststrate	aliki.weststrate@royalsociety.org.nz
Hamilton	TBC	Mike Rogers	mrogers@waikato.ac.nz

bpchallenge

encouraging hands-on learning



DROPPING THE GOODS BP CHALLENGE

Learning Areas:

Planet Earth & beyond; Arts; Social Sciences

Key Competencies:

Thinking; Participating and contributing; Relating to others

Years:

2 – 10

SCENARIO:

Some people are injured at the bottom of a sheer rock face. They need medicine, some of which is fragile and has to be packaged so that it will not break. You do not have a cord to lower it gently; it will have to be dropped. As is always the case in these Challenges you have some common materials handy. No wind is blowing on this occasion.

TASK:

To design packaging allowing you to safely drop a raw egg at least 5m on to a solid surface. The egg represents the fragile medical items.

MATERIALS:

- 3 sheets of A4 photocopy paper
- a plastic bag about 17 × 25cm
- 1m of string
- 1 sheet of A5 size thin card
- some sticky tape and scissors
- You have 10 minutes to construct your device.

JUDGING:

The winning team's egg will be unharmed. If several groups have intact eggs they may have to drop them again (after rebuilding to the same specs). The height may be increased for each drop. Continue until the best design is found!



THE BUILDING BUSTER BP CHALLENGE

Learning Areas:

Physical World/Material World

Key Competencies:

Thinking; Participating and Contributing.

Years:

4 - 10

TASK:

In a team you have 1 hour to plan and build a device that can 'bust' down a building (in this case an empty soft drink can standing upright on its base) as far as possible.

MATERIALS:

- 1 roll of sticky tape
- 10 ice-block sticks
- 2m string
- 10 sheets of A4 paper
- 3 rubber bands
- 1 pair of pliers/side-cutters
- 1 sand-filled film canister (from camera shop)
- One 20cm x 20cm piece of corrugated cardboard
- 1 pen (The pen, pliers and scissors aren't to be used in the device. Be careful with sharp scissors and BBQ skewers)
- 10 straws
- 10 BBQ skewers
- 2 lengths of tie wire
- 1 pair scissors

CONDITIONS:

The building buster is to knock over the can and project it along the ground as far as possible. The building buster must be built on and attached to the corrugated cardboard. It will be set behind a line drawn on the floor and must remain behind the line after knocking over the can, without moving from the spot.

JUDGING:

The score will be the distance from the nearest point of the can back to the line. You'll be given 3 attempts at knocking down the 'building'. The longest measurement will count as the final mark. Adjustments but no additional construction may be made between attempts.

