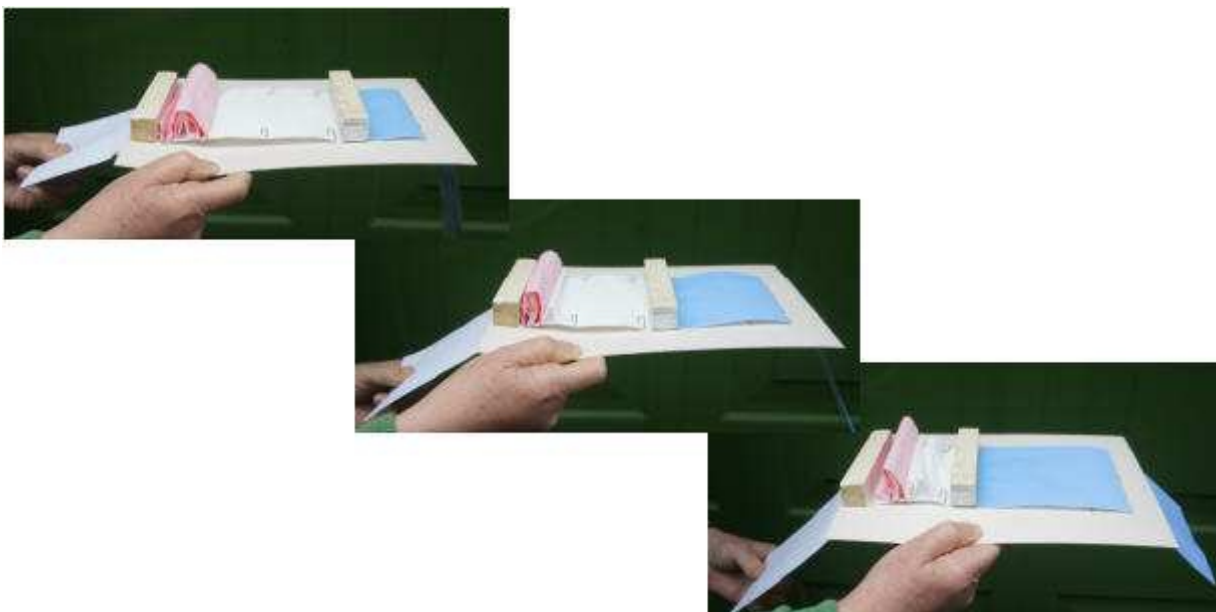
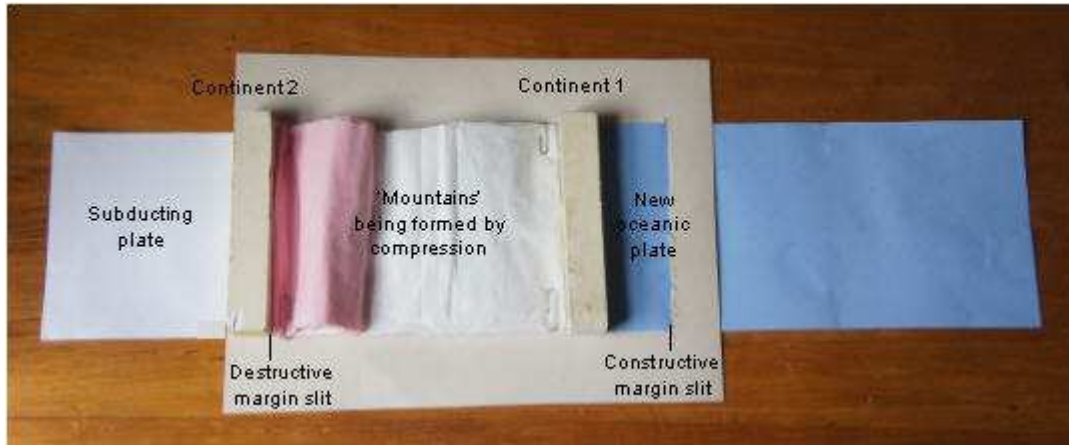


Extension

Continents in collision – and new plate formation

You can add a literal extension to this model by attaching an 'oceanic plate' to the moving 'continent' that rises out of a slit on the far side of the model – as shown in the photos.

As one plate is subducted, causing 'mountains' to develop as the 'sediments' (paper serviettes) are compressed, new plate material is seen forming on the far side of the moving continent. You could colour this blue, to denote the new oceanic plate.



The back up

Title: Continents in collision – and new plate formation

Topic: Adding new 'oceanic plate' to the 'continents in collision' model.

Age range of pupils: 14 - 18 years

Time needed to complete activity: A few minutes to cut a new slit in the model and add the new 'oceanic plate'.

Pupil learning outcomes: Pupils can:

- explain how new plate material is generated as older plate material is subducted;
- describe how the model relates to reality.

Context: The activity can be used during the course of both science and geography lessons to illustrate the principles of destructive and constructive plate margin activity.

Underlying principles:

- As one plate subducts, new plate material must be being formed elsewhere (if the Earth is not becoming smaller).

- thin cardboard to make new 'oceanic plate' – coloured blue
- scissors
- sticky tape or staples

Thinking skill development:

Relating the model to the real world is a bridging activity.

Source: The 'oceanic plate' extension was devised by Royanne Wilding. See the Earthlearningidea activity, 'Continents in collision' for further acknowledgements.

Resource list:

- model of destructive plate margin made as in the 'Continents in collision' Earthlearningidea activity

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