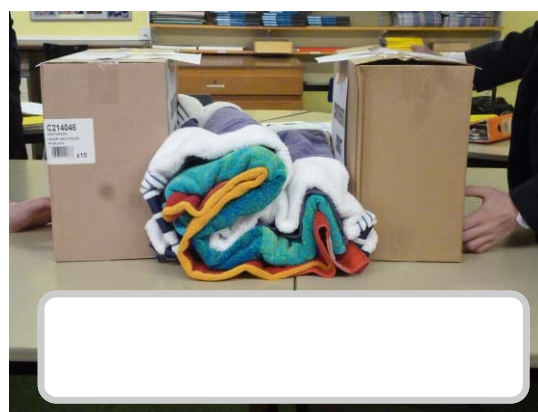
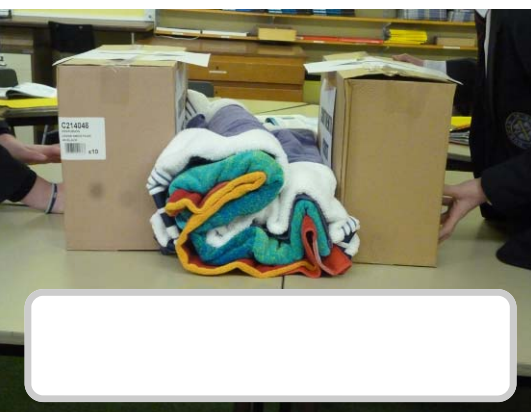
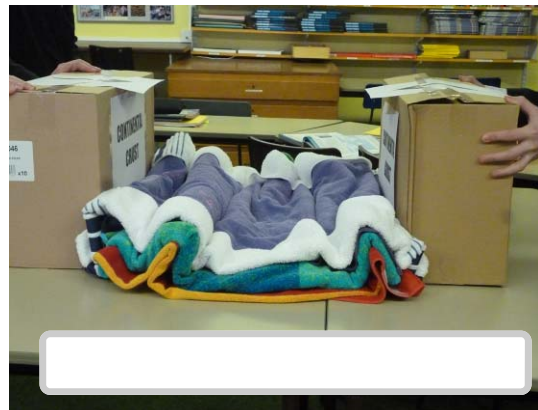
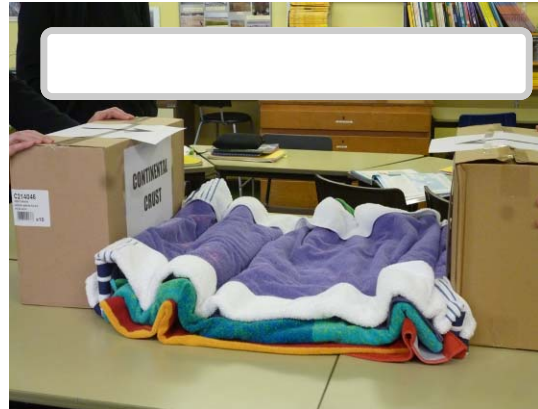


Student tasks

1. Label the eight diagrams.
2. Write a short paragraph to explain the formation of fold mountains.



The formation of Fold Mountains



Folded rock strata on Sichelkamm, a mountain in Switzerland
© ancasa 2011
<https://www.flickr.com/photos/ancasa/5894491531>

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1

The formation of Fold Mountains

You will need:

- a) Several towels – preferably all different colours and of a similar size
- a) Two (reasonably heavy) boxes



Folding in the Zagros Mountains, Iran
Photo courtesy of J. T. Daniel
http://dsc.gsfc.nasa.gov/geomorphology/GEO_2/GEO_PLATE_T_42.shtml

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- Create a large area of desk space
- Lay the towels flat over the top of each other
- If some towels are too large, fold them in half



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- Add labels to the two boxes: CONTINENTAL CRUST and arrows showing the direction of plate movement
- The towels represent individual sedimentary rock strata within an ocean basin, e.g. the Tethys Sea
- The boxes represent two plates moving towards each other at a collision margin, e.g. the Eurasian and the Indo-Australian plates



❖ It may be effective to tuck in any 'excess towel' at the two sides. This will make the rock strata more visible.

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- Get two pupils to **slowly** push the boxes towards each other
- Observe what happens to the rock strata within the ocean basin



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- Observe what happens to the rock strata within the ocean basin



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- Observe what happens to the rock strata within the ocean basin



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7

- Observe what happens to the rock strata within the ocean basin



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- Observe what happens to the rock strata within the ocean basin



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- Observe what happens to the rock strata within the ocean basin



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From a different angle



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- Observe what happens to the rock strata within the ocean basin



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12

➤ Observe what happens to the rock strata within the ocean basin



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13

➤ Observe what happens to the rock strata within the ocean basin



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➤ Observe what happens to the rock strata within the ocean basin



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➤ Observe what happens to the rock strata within the ocean basin



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➤ Observe what happens to the rock strata within the ocean basin



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17

➤ Observe what happens to the rock strata within the ocean basin



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18

And you have created ... Fold Mountains!



Note for teachers: it may be more effective to lay the boxes flat so that the mountains formed rise above the plates

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➤ Using brightly coloured towels is particularly helpful for showing how individual strata bend and are thrust upwards



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The formation of Fold Mountains



Folded rocks in Widemouth Bay, Cornwall
©Kevin Walsh 2009
www.flickr.com/photos/86624586@N00/3436985891

An excellent summary video clip to use as a plenary is
<http://www.bbc.co.uk/learningzone/clips/fold-mountain-formation/12924.html>
(especially if your experiment didn't work that well!)

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