The Space Waka has travelled back to the South Pacific 150 years ago. We’ll be travelling around a number of Pacific Islands, including Aotearoa.

**Activity One**

Check out these beautiful kōwhaiwhai patterns found on the rafters of wharenui (meeting houses) in Aotearoa.

Do any of these designs have reflectional symmetry? Use a mirror to help you.

1. If you find any designs with reflectional symmetry, draw the lines of reflectional symmetry on your copy of the designs.
**Activity Two**

In Niue, the *Space Waka*’s computer takes pictures of some patterns with reflectional symmetry. Unfortunately, a computer malfunction means that the pictures are incomplete. Complete your copy of the patterns, using a mirror or the dotted lines to help you.

![Patterns](image)

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**Activity Three**

Tongan tapa, called ngatu, is made of strips of barkcloth. The same pattern is used on each strip of barkcloth.

1. On your copy of the ngatu, translate each shape onto the other three strips to complete the barkcloth pattern.

![Pattern](image)

2. This ngatu is for a special wedding and will be made of 50 strips. If each strip is 20 centimetres deep, how long will the ngatu be?