Shapes in the real world

Annotation

Scarlett is able to group like shapes based on their features and can explain why they are the same or different.

Problem: Shapes in the real world

The teacher provides the student with this laminated photograph and some coloured whiteboard markers and poses this problem:

Can you outline, name and group the geometric shapes you see in this view of Wellington? Say why you have grouped them together.

Student response

Scarlett outlines these shapes on the photograph.

Teacher: Tell me about the shapes you have grouped.

Scarlett: I have used red to show triangles. These belong together because they have three sides and three angles. I've used blue for quadrilaterals, which are shapes with 4 straight sides but actually there's kind of two groups here. There are the ones that have four right angle corners – that's the rectangles including the squares, and there's the others which have all different angles like those ones on the light blue roof. The black ones are the shapes with more than four sides. These are all irregular shapes, like, there's no regular pentagon with all the sides the same length and the angles the same.