Mrs. Gregory & Mrs. Postlethwaite's group – Reasoning and problem solving answers

Bronze

1a. Area of mats: grey = 4 squares; white = 5 squares

2a. Max doesn't have enough tiles because he needs 8 to make the pattern.

3a. Aisha is incorrect because 2 rows of 4 tiles are missing which is 8 tiles not 7.

1b. Area of panels: grey = 8 squares; white= 10 squares

2b. Amy has enough because she only needs 9 slabs to make the pattern and she has 10.

3b. Jenny is incorrect. 2 rows of 5 turf pieces are missing, which is 10 pieces not 12.

Silver

4a. Area of sponges: grey = 10 squares; white = 10 squares

5a. John has enough because he only needs 10 panes to make the pattern and he has 15.

6a. Jack is incorrect. He needs 6 more patterned tils and 6 more plain tiles.

4b. Area of patches: grey tiles = 12 squares; white = 24 squares

5b. Molly does not have enough because she needs 18 and she only has 16.

6b. Jude is incorrect. He does need 4 more spotted tiles but he needs 5 more plain tiles.

Gold

7a. Area of bricks: grey – 15 squares; white tiles – 15 squares

8a. Tim does not have enough because the area of the pattern is 18 squares and he only has enough fabric pieces for 16 squares.

9a. Charlie is incorrect because he needs 3 half plain and 3 half patterned tiles to complete his pattern.

7b. Area of squares: grey = 9 squares; white tiles = 18 squares

8b. Jilly has enough turf tiles. The area of her pattern is 15 squares and she has enough grass for 24 squares.

9b. Emma is incorrect because she needs 4 full lined tiles, 3 full plain tiles and 2 full lined tiles. She needs the same number of each half tile.