2 Patterns and algebra

Step 1

My strategies

1	Each pentagon requires 5 matchsticks. How many matchsticks would be needed to make 19 pentagons?	
2	Ben buys a newspaper every day. How much would he spend in two weeks if the newspapers are £1.20 each?	
3	Each hexagon requires 6 matchsticks. How many hexagons can be made with 108 matchsticks?	
4	It takes a machine 3 minutes to fold a flat piece of cardboard into a box shape. How many boxes can it produce in 4 hours?	

Step 2



My strategies

1	Each octagon requires 8 matchsticks. How many complete octagons can be made with 124 matchsticks?	
2	A car travels 9.5 km per litre of petrol. How many kilometres would it travel on 60 litres?	
3	Aya estimates that each person will have three drinks. Hpw many 1 litre bottles will she need for 20 people if each cup holds 250 ml?	
4	Noah receives twice as much pocket money as Emily. If they received £24 between them, how much did Noah receive?	

Investigation

Hand shakes

At the end of the Under 12's game, each of the 11 players shook hands with the 11 opposition players. How many hand shakes took place?



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