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A bag contains 4 white, 4 red and 4 black marbles. Kim takes some marbles out of the bag without looking at them and places them on the table.

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What is the smallest number of marbles that must be taken from the bag in order that at least three marble of the same colour are on the table?

A. 3

B. 5

C. 7

D. 9

 C

It is possible to draw 6 marbles and still not have 3 matching marbles: 2 white, 2 red and 2 black. Another marble needs to be drawn to ensure 3 of the same colour.

As 2 + 2 + 2 + 1 = 7, there needs to be 7 marbles taken.

^{*} These solutions have been provided by projectmaths and are not supplied or endorsed by NESA.