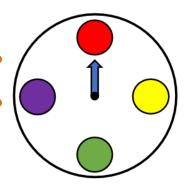
- 1. Which direction will I face if...
- a) I start facing north and turn  $\frac{1}{4}$  clockwise?
- b) I start facing west and turn 1 right angle anti-clockwise?
- c) I start facing east and turn three quarters anti-clockwise?
- d) I start facing south and turn 2 right angles clockwise?
- 2. Look at the image and describe the turn.
- a) What turn is needed to get from red to purple?
- b) What turn is needed to get from red to yellow?
- c) How could I get from green to red?

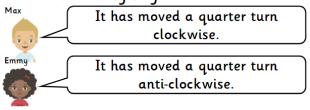


## 3. Answer and EXPLAIN!

a) A compass needle has moved from South to West.

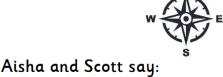
w . E

Max and Emmy say:

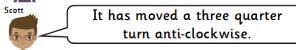


Who is correct? Explain how you know.

b) A compass needle has moved from West to North.



It has moved a quarter turn clockwise.



Who is correct? Explain how you know.

- 4) I am facing east and I turn 90° clockwise. Which direction am I now facing?
- 5) Before turning 180° clockwise I was facing north. Which direction am I facing now?

