

Varied Fluency

Step 1: Describe Turns

National Curriculum Objectives:

Mathematics Year 1: (1P2) [Describe position, direction and movement, including whole, half, quarter and three-quarter turns](#)

Differentiation:

Developing Questions to support describing turns. Objects and shapes will begin at their expected angle before turning. Some multiple choice questions. Quarter and half turns.

Expected Questions to support describing turns. Objects and shapes will begin at expected, 90° or 180° from expected angle before turning. Mostly quarter and half turns, some 3 quarter turns.





Greater Depth Questions to support describing turns. Objects and shapes will begin at any angle before turning. Any turns included, some question require both possible answers.

[More resources](#) which follow the same small steps as White Rose.

Did you like this resource? Don't forget to [review](#) it on our website.

Varied Fluency – Describe Turns

1a. Look at the pencils below. How have they moved? Use the word bank below.





Before	After	Turn
		
		

Quarter turn Half turn



VF

1b. Look at the pencils below. How have they moved? Use the word bank below.

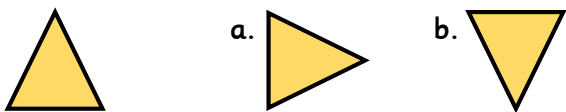
Before	After	Turn
		
		

Quarter turn Half turn



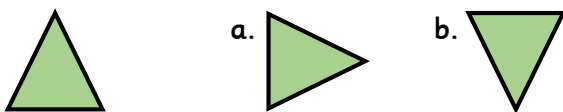
VF

2a. How will this shape look after a quarter turn? Circle your answer.



VF

2b. How will this shape look after a half turn? Circle your answer.



VF

3a. Draw an arrow in the box to show the direction the object has turned.



Describe the turn it has made.

VF

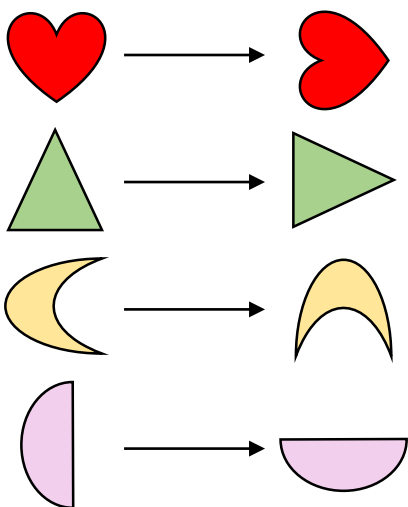
3b. Draw an arrow in the box to show the direction the object has turned.



Describe the turn it has made.

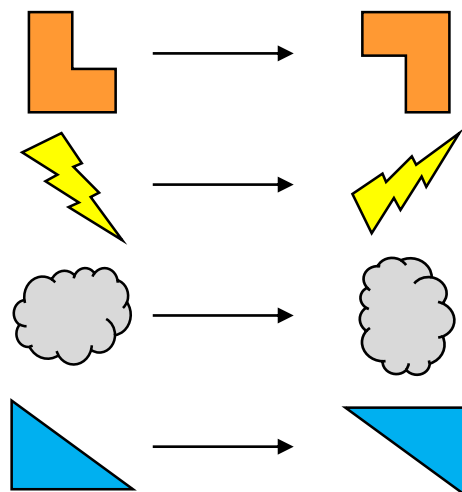
VF

4a. Circle the shapes which have made a quarter turn.



VF





4b. Circle the shapes which have made a half turn.



VF

Varied Fluency – Describe Turns

5a. Look at the insects below. How have they moved?





Before	After	Turn
		
		

Write the correct turn for each insect.



VF

5b. Look at the insects below. How have they moved?

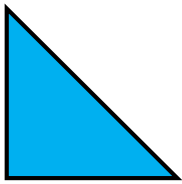
Before	After	Turn
		
		

Write the correct turn for each insect.



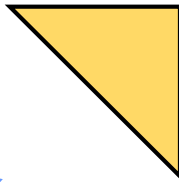
VF

6a. Draw this shape after a quarter turn.



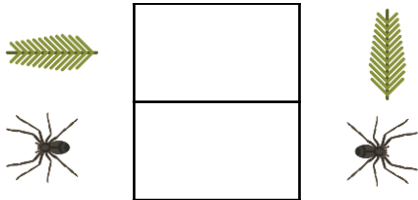
VF

6b. Draw this shape after a half turn.



VF

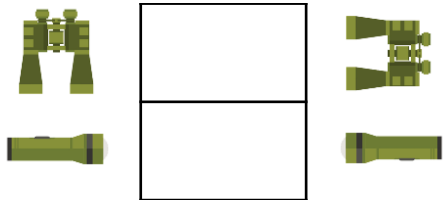
7a. Draw an arrow in the box to show the direction each object has turned.



Describe the turn each has made.

VF

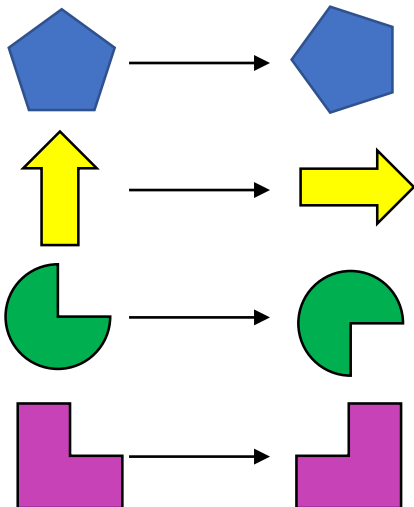
7b. Draw an arrow in the box to show the direction each object has turned.



Describe the turn each has made.

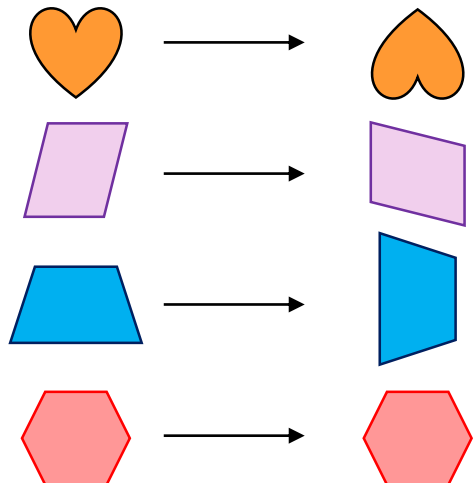
VF

8a. Circle the shapes which have made a three-quarter turn.



VF



8b. Circle the shapes which have made a quarter turn.



VF

Varied Fluency – Describe Turns

9a. Look at the faces below. How have they moved?

Before	After	Turn
		
		

Write the correct turn for each face.



VF

9b. Look at the faces below. How have they moved?

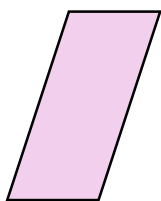
Before	After	Turn
		
		

Write the correct turn for each face.



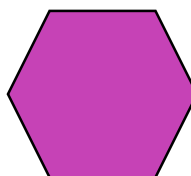
VF

10a. Draw this shape after a half turn.



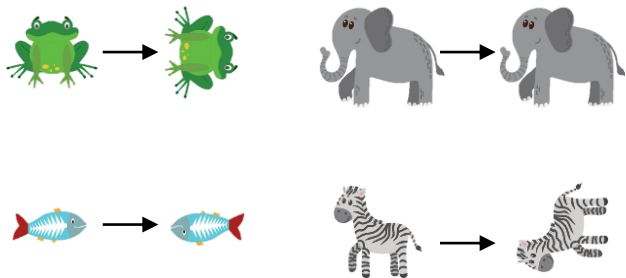
VF

10b. Draw this shape after a three-quarter turn.



VF

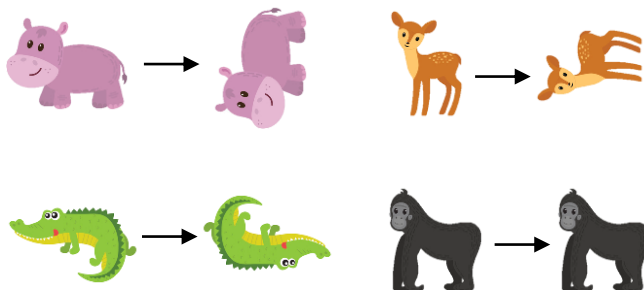
11a. Describe the turn each image has made (there may be more than one answer).



Hint: turn in both directions

VF

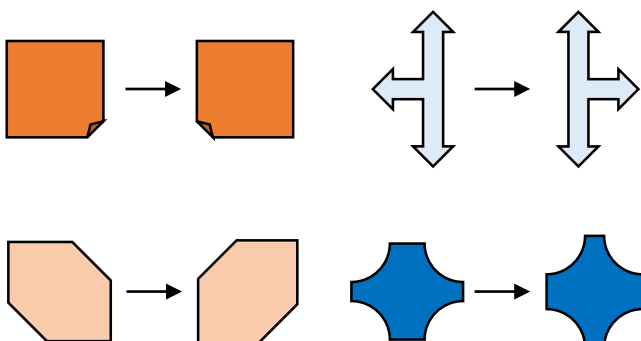
11b. Describe the turn each image has made (there may be more than one answer).



Hint: turn in both directions

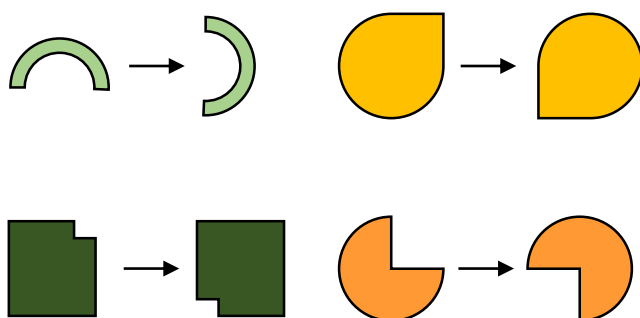
VF

12a. Circle the shapes which have made the same turn, which turn is it?



VF

12b. Circle the shapes which have made the same turn, which turn is it?



VF

Varied Fluency – Describe Turns

The terms 'clockwise' and 'anti-clockwise' have been used in the answers, however this vocabulary is not required for Year 1. Accept answers which indicate the direction of the turn.

Developing

1a. Quarter turn

Half turn

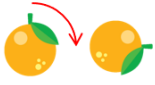
1b. Quarter turn

Half turn

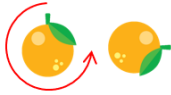
2a. Shape a

2b. Shape b

3a. 2 possible answers:

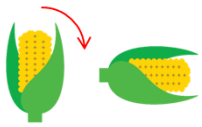


quarter turn

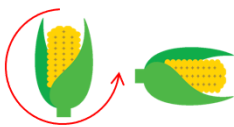


three quarter turn

3b. 2 possible answers:



quarter turn



three quarter turn

4a. All shapes have made a quarter turn: the heart and the semi-circle have made an anti-clockwise quarter turn and the triangle and the moon have made a clockwise quarter turn.

4b. The L-shape and the triangle have made a half turn.

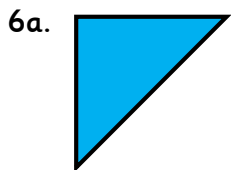
Expected

5a. Half turn

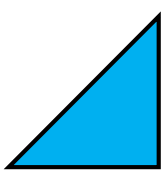
Quarter turn (clockwise)/three-quarter turn (anti-clockwise)

5b. Quarter turn (clockwise)/three-quarter turn (anti-clockwise)

Quarter turn (anti-clockwise)/three-quarter turn (clockwise)

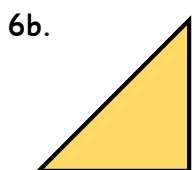


or

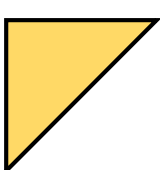


(clockwise)

(anti-clockwise)



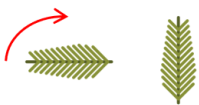
or



(clockwise)

(anti-clockwise)

7a. 2 possible answers for each image:



quarter turn
(clockwise)



three quarter turn
(anti-clockwise)



half turn
(clockwise)

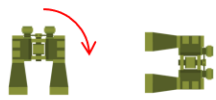


half turn
(anti-clockwise)

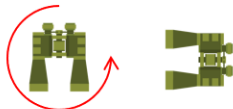
Varied Fluency – Describe Turns

Expected (continued)

7b. 2 possible answers for each image:



quarter turn
(clockwise)



three quarter turn
(anti-clockwise)



half turn
(clockwise)



half turn
(anti-clockwise)

8a. The pentagon and the L-shape have made a three-quarter, clockwise turn. The arrow and the part-circle have made a three-quarter, anti-clockwise turn .

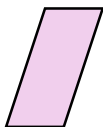
8b. The parallelogram has made a quarter, anti-clockwise turn. The trapezium has made a quarter, clockwise turn.

Greater Depth

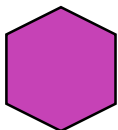
9a. Quarter turn (clockwise)/three-quarter turn (anti-clockwise)
Quarter turn (anti-clockwise)/three-quarter turn (clockwise)

9b. Quarter turn (anti-clockwise)/three-quarter turn (clockwise)
Full turn (clockwise or anti-clockwise)

10a.



10b.



11a. The frog has made a quarter, clockwise turn, or a three-quarter, anti-clockwise turn.
The elephant has made a full, clockwise turn or a full, anti-clockwise turn.

The fish has made a half, clockwise turn or a half, anti-clockwise turn.

The zebra has made a three-quarter, clockwise turn or a quarter, anti-clockwise turn.

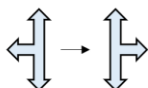
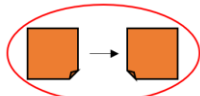
11b. The hippo has made a three-quarter, clockwise turn or a quarter, anti-clockwise turn.

The deer has made a three-quarter, clockwise turn or a quarter, anti-clockwise turn.

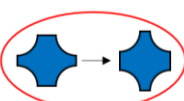
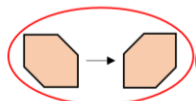
The crocodile has made a half, clockwise turn or a half, anti-clockwise turn.

The gorilla has made a full, clockwise turn or a full, anti-clockwise turn.

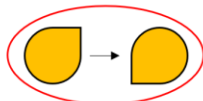
12a.



They make a quarter, anti-clockwise turn, or a three-quarter, clockwise turn.



12b.



They make a half turn, either clockwise or anti-clockwise.

