Independent Recap

Angles and Shape
Week 9

Year 3

THIRD SPACE LEARNING

Arithmetic

1. 100 + 123

2. 234 + 400

3. 7 x 4

4. 32 ÷ 8

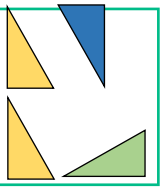
Practice: Turns and Angles

5. Recap: How many right angles make:

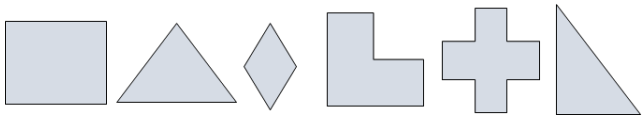
a quarter turn, a half turn, a three quarter turn, a full turn

6. Yellow to blue triangle = ? turn

Yellow to green triangle = ? turn



7. Circle the shapes with right angles.



8. Look at the shapes you've circled in question 7.
How many right angles does each one have inside it?

9. Draw three different right angles.

10. Define a right angle.

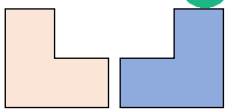
11. Which of these letters has an obtuse angle inside it?

O Y L X F

12. Which of these letters has an acute angle inside it?

E V T Z N

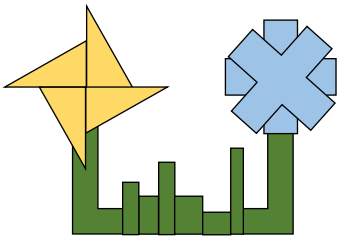
13. Jeremiah says he has made a half turn with the orange shape to make the blue shape. Is he right?



Challenge

14. Look at the image, it has been made using shapes that all contain right angles.

Draw a picture of your own that uses shapes with right angles.



You might want to talk to an adult

Spot the mistake

Answers

Q no.	Question	Answer
1	100 + 123	223
2	234 + 400	634
3	7 x 4	28
4	32 ÷ 8	4
5	How many right angles make: a quarter turn, a half turn, a three quarter turn, a full turn	a quarter turn = one right angle, half turn = two right angles, three quarter turn = three right angles, full turn = four right angles.
6	Yellow to blue triangle = ? turn. Yellow to green triangle = ? turn	Yellow triangle to blue triangle = half turn (or two right angle turns) Yellow to green triangle = three-quarter turn clockwise or quarter turn anti-clockwise
7	Circle the shapes with right angles.	Shapes 1, 4, 5 and 6 circled.
8	Look at the shapes you've circled in question 7. How many right angles does each one have inside it?	Shape 1: 4, shape 4: 5, shape 5: 8, shape 6: 1
9	Draw three different right angles.	Any 3 correctly drawn right angles (could be together in a shape or separate pairs of perpendicular lines)
10	Define a right angle.	A right angle is an angle that measures exactly 90^{o}
11	Which of these letters has an obtuse angle inside it?	Y, X
12	Which of these letters has an acute angle inside it?	V, Z, N
13	Is he right?	Jeremiah has used a three quarter turn clockwise or a quarter turn anti-clockwise to make the blue shape, not a half turn.
14	Look at the image, it has been made using shapes that all contain right angles. Draw a picture of your own that uses shapes with right angles.	Accept any picture that uses shapes with right angles.

Arithmetic

1. 1,034 – 100	**2.** 5,203 – 30	**3.** 2 x 8	**4.** 16 ÷ 4

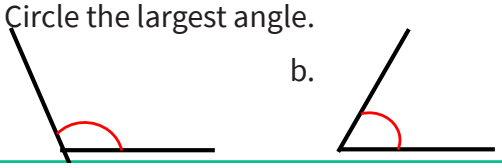
Practice: Comparing Angles

5. Recap: What is an angle?

6. Draw hands on the clock that show an acute angle. What is the time shown?

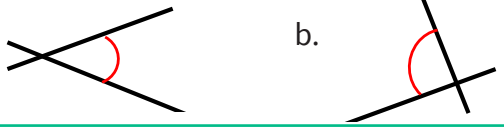
7. Circle the largest angle.

a. b.

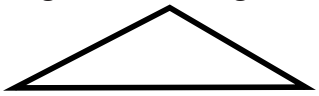


8. Circle the smallest angle.

a. b.



9. Circle the angle in the triangle that is the largest.

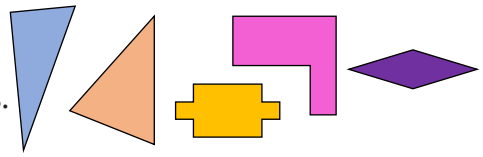


10. Complete the sentences:

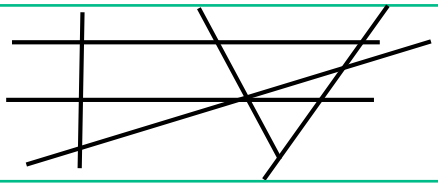
An acute angle is ? than a right angle.

An obtuse angle is ? than a right angle.

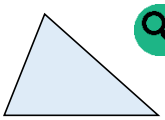
11. Label the acute angles in the shapes.



12. Find 3 acute and 3 obtuse angles in the diagram.



13. Daanish says there are no angles in this shape as angles are only made with two lines. Explain Daanish's mistake.



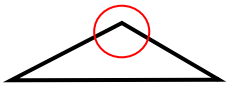
Challenge

14. Draw 6 overlapping lines in the box. Colour right angles in blue, acute angles in red and obtuse angles in green.

You might want to talk to an adult

Spot the mistake

Answers

Q no.	Question	Answer
1	1,034 – 100	934
2	5,203 – 30	5,173
3	2 x 8	16
4	16 ÷ 4	4
5	What is an angle?	An angle is made when two lines meet.
6	Draw hands on the clock that show an acute angle. What is the time shown?	Accept any answer where the hands make an acute angle and the time is accurate.
7	Circle the largest angle.	a is larger
8	Circle the smallest angle.	a is smaller
9	Circle the angle in the triangle that is the largest.	
10	Complete the sentences:	An acute angle is smaller than a right angle. An obtuse angle is larger than a right angle.
11	Label the acute angles in the shapes.	Blue triangle - two acute angles, yellow triangle - all acute, purple rhombus - two acute angles.
12	Find 3 acute and 3 obtuse angles in the diagram.	Correctly identified angles.
13	Explain Daanish's mistake.	Daanish has overgeneralised his understanding of angles. He has previously been presented with images of angles as two lines joining and assumed that angles are only two lines. It is important to understand that angles are when two lines meet, including lines in shapes.
14	Draw 6 overlapping lines in the box. Colour right angles in blue, acute angles in red and obtuse angles in green.	Answers will vary depending on the lines drawn. Accept answers that show the pupils understand acute angles, right angles and obtuse angles.

Arithmetic

1. 976 + 100

2. 408 – 30

3. 5 x 9

4. 21 ÷ 3

Practice: Describing Lines

5. Recap: Explain how to use a ruler accurately to draw and measure a line.

6. Using a ruler, draw a horizontal line and a vertical line.

7. Show a time on the clock face where both hands are vertical.

What is the time?

8. Label the horizontal lines in these images using an 'h'.

9. Label the vertical line in the images using a 'v'.

10. Explain what a horizontal line of symmetry is.

11. Circle the letters with horizontal lines of symmetry.

M E T O H L

12. Circle the letters with vertical lines of symmetry.

A W B V Z U

13. Sean says Z has a vertical and horizontal line of symmetry. Is this right? Explain.

Challenge

14. Write a name in capitals using only straight lines. Colour all the horizontal lines in one colour and vertical lines in another colour, create a key for these colours.

You might want to talk to an adult

Spot the mistake

Answers

Q no.	Question	Answer
1	976 + 100	1,076
2	408 – 30	378
3	5 x 9	45
4	21 ÷ 3	7
5	Explain how to use a ruler accurately to draw and measure a line.	To use a ruler to draw a measured line or measure a line, the pupil must start on 0cm, not 1cm or the end of the ruler (if it does not start on 0cm).
6	Using a ruler, draw a horizontal line and a vertical line.	A horizontal line is a straight line from left to right. A vertical line is a straight line from top to bottom.
7	Show a time on the clock face where both hands are vertical. What is the time?	 The time is 12 o'clock. It cannot be 6:30 as both lines would not be vertical for the time to be accurate.
8	Label the horizontal lines in these images using an 'h'.	Correctly identified horizontal lines.
9	Label the vertical line in the images using a 'v'.	Correctly identified vertical line.
10	Explain what a horizontal line of symmetry is.	A horizontal line of symmetry is a line of symmetry that runs from left to right across the shape.
11	Circle the letters with horizontal lines of symmetry.	E, O, H
12	Circle the letters with vertical lines of symmetry.	A, W, V, U
13	Sean says Z has a vertical and horizontal line of symmetry. Is this right? Explain.	Sean is not right. Z does not have a vertical or horizontal line of symmetry.
14	Write a name in capitals using only straight lines. Colour all the horizontal lines in one colour and vertical lines in another colour, create a key for these colours.	Answers will vary depending on the letters the pupil has selected.

Arithmetic

1. 2,000 + 698

2. 5,382 – 40

3. 6 x 11

4. 21 ÷ 3

Practice: Parallel and Perpendicular Lines

5. Recap: Define parallel and perpendicular lines.

6. Draw a set of parallel lines and a set of perpendicular lines. Label them.

7. Draw a line parallel to a. and draw a line that is perpendicular to b.

a. 

b. 

8. The hands on the clock are

parallel

perpendicular

9. Circle the letters with parallel lines.

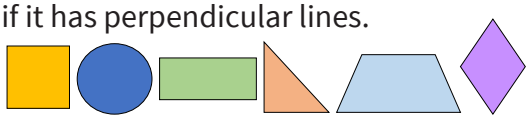
F H Z W D E

10. Is it possible to draw a polygon without parallel or perpendicular lines? Prove it.

11. Circle the letters with perpendicular lines.

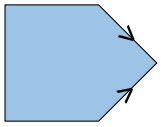
Z Y L F T U

12. Circle the shape if it has parallel lines and tick if it has perpendicular lines.



13. Addison says he has labelled the parallel lines with arrows.

Is Addison right? Explain.

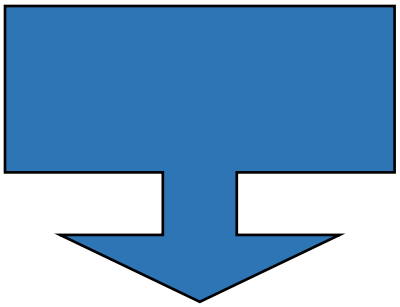


Challenge

14. Write as many statements about the lines in the shape as possible.

Horizontal/ vertical

Parallel/ perpendicular



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Spot the mistake

Answers

Q no.	Question	Answer
1	2,000 + 698	2,698
2	5,382 – 40	5,342
3	6 x 11	66
4	21 ÷ 3	7
5	Define parallel and perpendicular lines.	Parallel lines always stay the same distance apart and will never meet. Perpendicular lines are a pair of lines that meet at a right angle.
6	Draw a set of parallel lines and a set of perpendicular lines. Label them.	Accurately drawn parallel and perpendicular lines.
7	Draw a line parallel to a and draw a line that is perpendicular to b.	Accurate lines draw.
8	The hands on the clock are parallel, perpendicular	Perpendicular
9	Circle the letters with parallel lines.	F, H, Z, E
10	Is it possible to draw a polygon without parallel or perpendicular lines? Prove it.	Polygons are shapes with three or more straight lines that join. It is possible to draw a polygon without parallel and perpendicular lines regular pentagons, for example, do not have parallel or perpendicular lines.
11	Circle the letters with perpendicular lines.	L, F, T
12	Circle the shape if it has parallel lines and tick if it has perpendicular lines.	Circled: square, trapezium, rectangle, rhombus Ticked: square, triangle, rectangle
13	Is Addison right? Explain.	Addison has identified a set of perpendicular lines as they meet at a right angle. This highlights a lack of understanding of parallel and perpendicular lines.
14	Write as many statements about the lines in the shape as possible. Horizontal/ vertical Parallel/ perpendicular	Accept any sentences that are accurate. Example answers: The shape has 5 horizontal lines. The shape has 4 vertical lines.