Independent Recap

Angles, Shape and Time Week 10

Year 3

Arithmetic

1. 42 + 1,000	**2.** 891 − 200	**3.** 6 x 10	**4.** 12 ÷ 2

Practice: Drawing Lines and Shapes Accurately

5. Recap: Explain how to use a ruler accurately to draw a line 2cm in length.

6. Measure the lines.

a. ─────────────

b. ──────────────

7. Use a ruler to draw lines of these lengths.

a. 6cm   b. 10cm 7mm   c. 8cm 5mm

8. Draw a square with sides measuring:

a. 4cm   b. 7cm   c. 1cm 5mm

9. Draw a rectangle with sides measuring:

a. 3cm x 2cm 4mm   b. 3cm 3mm x 7cm

10. 1.5cm is the same as ___cm and ___ mm. Explain your answer.

11. Draw a triangle with at least one side measuring:

a. 6cm   b. 7cm 1mm   c. 10cm 4mm

12. Draw a pentagon with at least one acute angle and a side measuring 5cm.

13. ─────────────
Gwen says the line is 5cm long.
Measure the line yourself. If Gwen is wrong, what mistake do you think she has made?

Challenge

14. Always, sometimes, never.

Sides of a pentagon always measure the same.

Prove your answer.

You might want to talk to an adult

Spot the mistake

Answers

Q no.	Question	Answer
1	42 + 1,000	1,042
2	891 – 200	691
3	6 x 10	60
4	12 ÷ 2	6
5	Explain how to use a ruler accurately to draw a line 2cm in length.	Answers will vary but should explain that lines need to be measured from 0cm (not 1cm or the end of the ruler). They may also describe how they hold the ruler to ensure they draw a straight line (for example, pupils may describe putting pressure on the ruler to stop it moving).
6	Measure the lines.	a. 3cm, b. 4cm 5mm
7	Use a ruler to draw lines of these lengths.	Accept answers that show the lines accurately drawn and straight.
8	Draw a square with sides measuring.	Accept answers where all the sides of the shape are the given lengths.
9	Draw a rectangle with sides measuring:	Accept answers where the sides of the rectangles are accurate.
10	1.5cm is the same as ___cm and ___mm. Explain your answer.	1.5cm is the same as 1cm and 5mm. Pupils have not been introduced to this notation so may struggle with this question. They should be encouraged to think about how many mm are in a cm and consider how this may link decimals.
11	Draw a triangle with at least one side measuring:	Accept answers that show triangles with at least one side in the given measure.
12	Draw a pentagon with at least one acute angle and a side measuring 5cm.	Accept answers that show a five sided shape with one side 5cm and at least one acute angle.
13	If Gwen is wrong, what mistake do you think she has made?	Gwen has not accurately measured the line. If pupils measure the line, they will find it is 4cm long. This would indicate Gwen has started measuring from 1cm, not 0cm.
14	Always, sometimes, never. Sides of a pentagon always measure the same. Prove your answer.	This is sometimes true. Regular pentagons have the same length sides and internal angles. Irregular pentagons have sides of different lengths.

Arithmetic

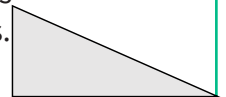**1.** 1,578 + 400

2. 4,371 – 1,000

3. 3 x 7

4. 45 ÷ 5

Practice: Recognise and Describe 2D Shapes

5. Recap: A shape has four right angles and four equal sides. What is the shape? Explain how you know.

6. The shape has ? angles. It has ? sides. It has ? obtuse angles. It has ? right angle. It has ? acute angles. It has ? lines of symmetry.

7. The shape has ? sides. It has ? obtuse angles. It has ? right angles. It has ? acute angles. It has ? pairs of perpendicular lines. It has ? pairs of parallel lines.

8. Which shape is this?
It has 5 sides and 5 angles. None of the sides are parallel or perpendicular. All the angles are obtuse

9. Which shape is this?
It has 3 acute angles and 3 lines of symmetry. None of the sides are parallel or perpendicular.

10. Write your own description for a shape. Include angles (acute, obtuse, right), sides, lines of symmetry and lines.

11. Draw this shape.
A hexagon with one side measuring 3cm and a right angle.

12. Draw this shape.
A triangle with one right-angle.

13. Rico says a triangle cannot have an obtuse angle as an internal angle.

Is Rico correct? Prove it.

Challenge

14. Draw three different 2D shapes.

Write two similarities and two differences between the shapes.

You might want to talk to an adult

Spot the mistake

Answers

Q no.	Question	Answer
1	1,578 + 400	1,978
2	4,371 – 1,000	3,371
3	3 x 7	21
4	45 ÷ 5	9
5	A shape has four right angles and four equal sides. What is the shape? Explain how you know.	The shape is a square. Squares are the only 2D shape to have four right angles and four equal sides. Rectangles have four right angles but two pairs of equal sides, not four equal sides.
6	Fill in the gaps to describe the triangle.	3, 3, 0, 1, 2, 0
7	Fill in the gaps to describe the quadrilateral.	4, 0, 4, 0, 2 (or 4, depending on how you interpret them), 2
8	Which shape is this?	Regular pentagon
9	Which shape is this?	(Equilateral) triangle
10	Write your own description for a shape. Include angles (acute, obtuse, right), sides, lines of symmetry and lines.	Answers will vary. Accept answers that describe a shape. Pupils may wish to draw their shape so they can visualise its features.
11	Draw this shape.	Correctly drawn
12	Draw this shape.	Correctly drawn
13	Is Rico correct? Prove it.	Rico is incorrect. Triangles have an internal angle of 180 degrees. With this in mind, one angle of a triangle could be 100 degrees (an obtuse angle) with the remaining 80 degrees being split between the remaining angles.
14	Draw three different 2D shapes. Write two similarities and two differences between the shapes.	Answers will vary depending on the shapes drawn. Example answers: square, rectangle, right angle triangle similarities - all shapes have straight sides. All shapes have at least one right angle Differences - square has all equal sides, right angle triangle has three sides, not four.

Arithmetic

1. 92 + 60

2. 3,281 – 600

3. 4 x 6

4. 90 ÷ 9

Practice: Recognise and Describe 3D Shapes

5. Recap: What is the difference between a 3D shape and 2D shape?
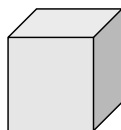
6. Describe the shape.
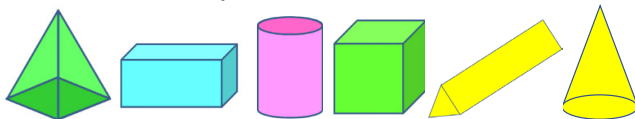This shape is a ?. It has ? faces, ? edges and ? vertices. 2 of its faces are ?.
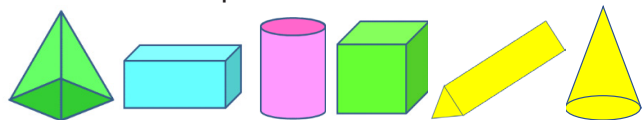
7. Describe the shape.
This shape is a ?. It has ? faces, ? edges and ? vertices. All its faces are ?.

8. Circle the shapes that have 6 or more vertices.

9. Circle the shapes that have 5 faces.

10. Define these terms to describe 3D shapes

faces, edges, vertices

11. Circle the shapes with quadrilateral faces.
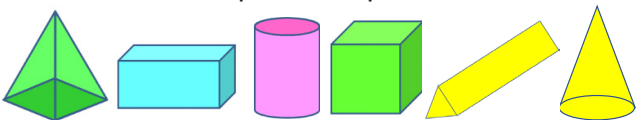
12. Circle the shapes with 9 or more edges.
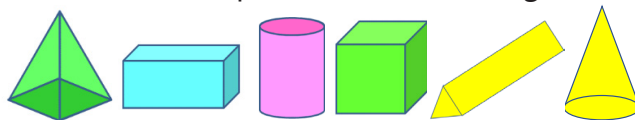
13. Frida says the cube has 3 faces. Explain her mistake.
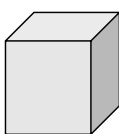
Challenge

14. A shape has a rectangular face.

What could the shape be (give more than one answer)?

What are the properties of the shapes you have named?

💬 **You might want to talk to an adult**

🔍 **Spot the mistake**

Answers

Q no.	Question	Answer
1	92 + 60	152
2	3,281 – 600	2.681
3	4 x 6	24
4	90 ÷ 9	10
5	What is the difference between a 3D shape and 2D shape?	A 3D shape has three dimensions (width, length, height) but a 2D shape only has two dimensions (length and height).
6	Describe the shape.	cylinder, 3, 2, 0, circles
7	Describe the shape.	cube, 6, 12, 8, square
8	Circle the shapes that have 6 or more vertices.	Shapes 2, 4, 5
9	Circle the shapes that have 5 faces.	Shapes 1 and 5
10	Define these terms to describe 3D shapes	Faces - a face is the surface area that can be described using 2D shapes. Edges - an edge is where faces meet Vertices - a vertex is where three or more faces meet
11	Circle the shapes with quadrilateral faces.	Shapes 1, 2, 3, 4, 5
12	Circle the shapes with 9 or more edges.	Shapes 2, 4, 5
13	Frida says the cube has 3 faces. Explain her mistake.	Frida has only counted the faces she can see in the picture. She has not been able to visualise the shape and identify its properties. A cube has 6 faces.
14	A shape has a rectangular face. What could the shape be (give more than one answer)? What are the properties of the shapes you have named?	Cuboid, cylinder and any prism with rectangular faces (e.g. triangular prism, pentagonal prism, hexagonal prism). Properties should reflect the shapes named.

Arithmetic

1. 774 + 10	**2.** 263 – 30	**3.** 12 x 5	**4.** 32 ÷ 8

Practice: Telling the Time to 5 Minutes
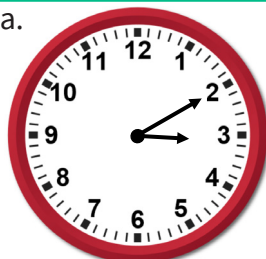
5. Recap: Explain how to tell the time on an analogue clock.

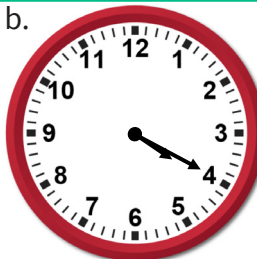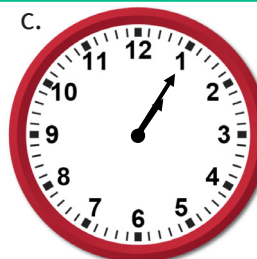**6.** What time is shown on each clock?
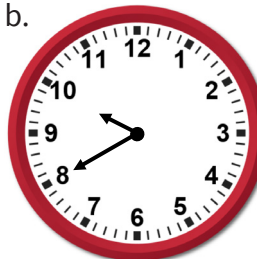
a.

b.

c.

a.   b.   c.
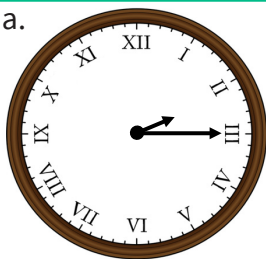
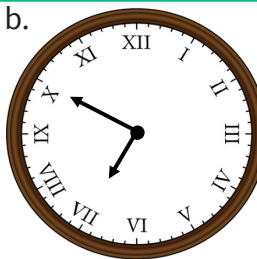**7.** What time is shown on each clock?

a.

b.

c.

a.   b.   c.

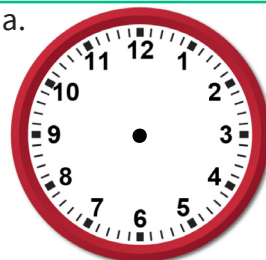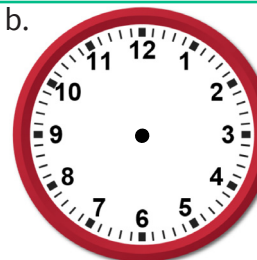**8.** What time is shown on each clock?

a.

b.

c.

a.   b.   c.
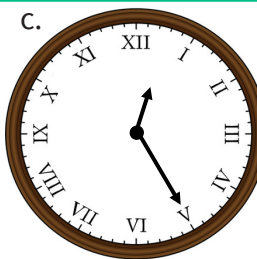
9. Draw the hands on the clock to show the time.

a. 10 minutes to 7
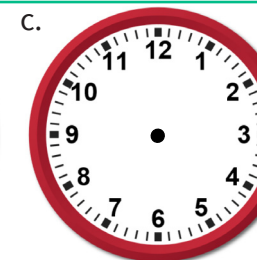b. 25 minutes to 3
c. quarter to 1

a.   b.   c.

You might want to talk to an adult

Spot the mistake
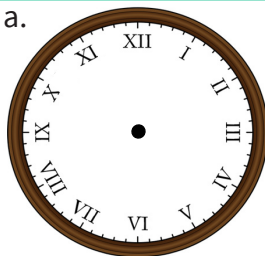
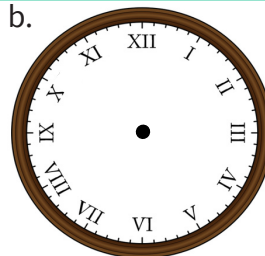**10.** Explain how you know when to use 'past' and when to use 'to'.

11. Draw the hands on the clock to show the time.

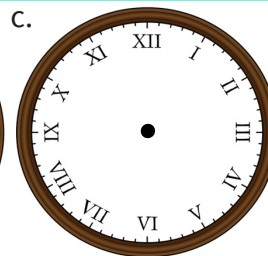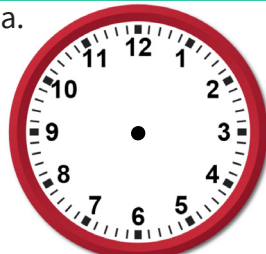a. quarter past 6
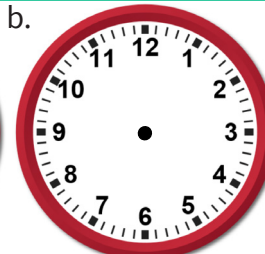b. 5 minutes past 9
c. 20 minutes past 11

a.

b.

c.

12. Draw the hands on the clock to show the time.

a. 25 past 12
b. 5 minutes to 4
c. quarter to 9
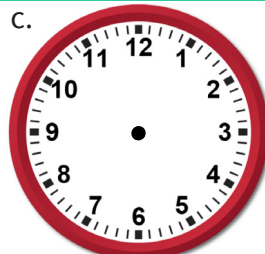
a.

b.

c.

13. Jax says 11:40 can be read as 25 minutes to 12.

Is Jax correct? Explain.

14. How many different ways can you represent:

a. 12:30

b. 7:10

c. 4:55

Challenge

💬 **You might want to talk to an adult**

🔍 **Spot the mistake**

Answers

Q no.	Question	Answer
1	774 + 10	784
2	263 – 30	233
3	12 x 5	60
4	32 ÷ 8	4
5	Explain how to tell the time on an analogue clock.	Answers will vary but should include a description of the different hands and identify that there are 60 minutes in an hour.
6	What time is shown on each clock?	a. 10 minutes past 3, b. 20 minutes past 4, c. 5 minutes past 1.
7	What time is shown on each clock?	a. 5 minutes to 6, b. 20 minutes to 10, c. 25 minutes to 9.
8	What time is shown on each clock?	a. 15 minutes (or quarter) past 2, b. 10 minutes to 7, c. 25 minutes past 12.
9	Draw the hands on the clock to show the time.	Correctly drawn times.
10	Explain how you know when to use 'past' and when to use 'to'.	If the minute hand is on the right hand side of the clock, the time is past the hour. If the minute hand is on the left hand side of the clock, the time is to the hour.
11	Draw the hands on the clock to show the time.	Correctly drawn times.
12	Draw the hands on the clock to show the time.	Correctly drawn times.
13	Jax says 11:40 can be read as 25 minutes to 12. Is Jax correct? Explain.	Jax is incorrect. He has understood that he should use 'to 12' for this time but has not calculated how many minutes to 12 11:40 is. The correct answer is 20 minutes to 12.
14	How many different ways can you represent: a. 12:30 b. 7:10 c. 4:55	Pupils can represent times in many different ways: on an analogue clock with Arabic numbers on an analogue clock with Roman numerals In words Using a.m. and p.m. On a digital clock