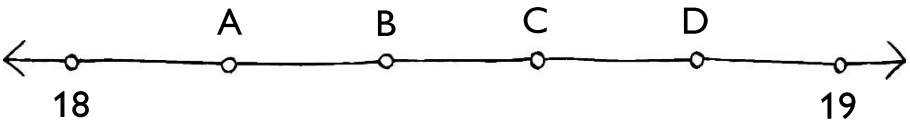
Name:_____ Class:_____

- Complete all answers on this question paper.
- Calculators may not be used.

1. Study the number line.



a) Which position best indicates $18\frac{3}{5}$ on the number line? *Tick the correct option.*

☐ A ☐ B ☐ C ☐ D (1)

b) Which position best indicates 18,2 on the number line? *Tick the correct option.*

☐ A ☐ B ☐ C ☐ D (1)

2. Complete. *Fill in the answer only.*

a) Half of 11 500 = _____ (1)

b) _____ = 6 800 – 3 900 (1)

c) 8,6 + 4,7 = _____ (1)

d) 64 = 16,5 + _____ (1)

e) R_____ = R7,99 + R14,95 (1)

f) R20 – R14,48 = R_____ (1)

g) 80 × 60 = _____ (1)

Assessment developed by: Brombacher and Associates©

h) _____ = 2,47 + $\frac{9}{100}$. *Write your answer as a decimal fraction.* (1)

3. Calculate. *Show your working.*

a) 43 × 8

(2)

b) $\frac{1}{5} + \frac{3}{10}$

(2)

c) $4\frac{1}{2} \times 3$

(2)

4. If $\frac{7}{12}$ of a number = 21, what is the number? *Show your working.*

(2)

5. Tick the number which is NOT a factor of 64.

☐ 2 ☐ 6 ☐ 16 ☐ 32 (1)

6. Which fraction is larger: $\frac{3}{5}$ or $\frac{9}{20}$? *Explain your answer.*

(2)

Assessment developed by: Brombacher and Associates©

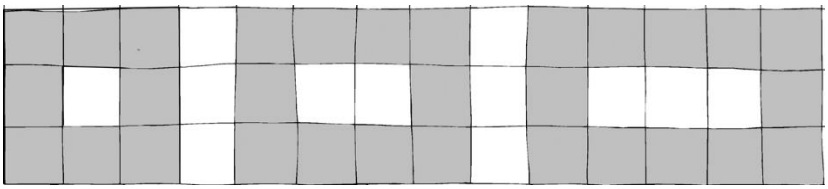
7. A learner had a $2\frac{1}{2}$ kg bag of peanuts. Everyday, she went to the park to feed the squirrels $\frac{1}{4}$ kg. How many days did she feed the squirrels ? *Show your working.*

_____days. (2)

8. Ryan wants to share his sweets amongst himself and his 6 friends. If each person gets 71 sweets and there are 25 sweets left over, how many sweets did Ryan start with?

_____sweets (2)

9. Michael makes pictures with grey and white tiles like this. The first three pictures make a pattern.



Picture 1 Picture 2 Picture 3

Picture number	1	2	3	4	5
Grey tiles	8	10	12	A	16
White tiles	1	2	3	4	5
Total tiles	9	12	15	18	B

Assessment developed by: Brombacher and Associates©

a) Determine the missing values for A and B in the table.

A:_____

B:_____ (2)

b) Which picture number will have 30 grey tiles? *Show your working.*

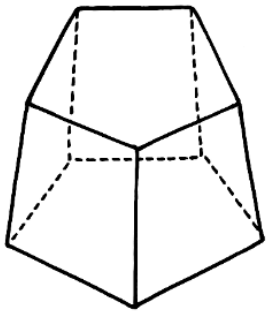
Picture_____ (2)

c) Which formulae could be used to calculate the total number of tiles for Picture 20? *Tick all the correct options.*

☐ 20 × 2 + 6 ☐ 3 × (20 + 2)

☐ 20 × 3 + 6 ☐ 20 + 3 (1)

10. What is the name of this polyhedron? *Tick the correct option.*



☐ Pentagon

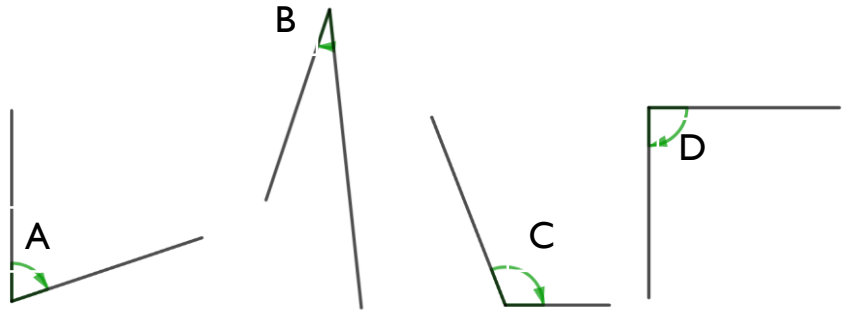
☐ Pentagonal pyramid

☐ Pentagonal prism

☐ Rectangular prism (1)

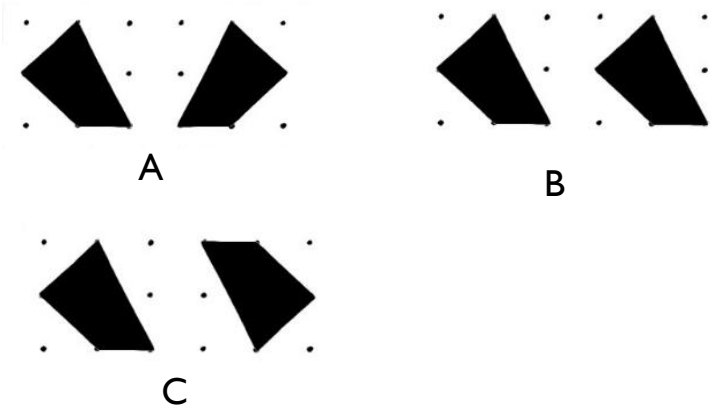
Assessment developed by: Brombacher and Associates©

11. Which diagram represents an obtuse angle? *Tick the correct option.*



☐ A ☐ B ☐ C ☐ D (1)

12. Which image shows an example of reflection? *Tick the correct option.*

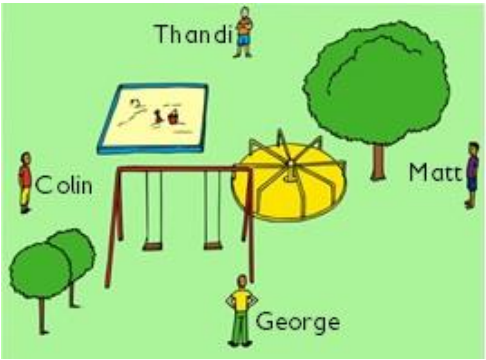


☐ A ☐ B ☐ C (1)

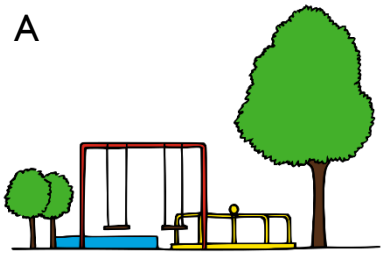
Assessment developed by: Brombacher and Associates©

13. The picture shows four children looking at a playground.

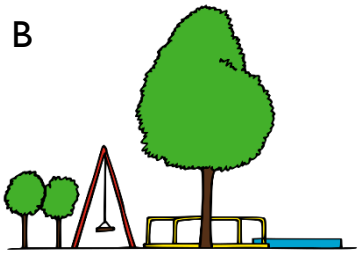
Which view of the playground is seen by child Colin? *Tick the correct option.*



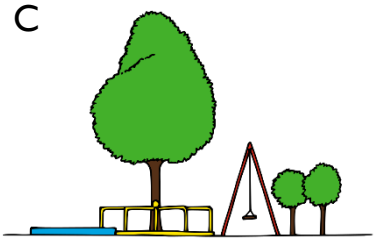
A



B

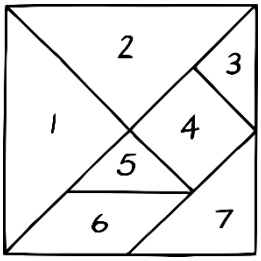


C



☐ A ☐ B ☐ C (1)

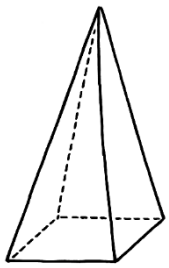
14. The picture shows seven pieces of a Tangram puzzle. If you join piece 3 and piece 5 in different ways, which other pieces will have the same shape? *List all the possibilities.*

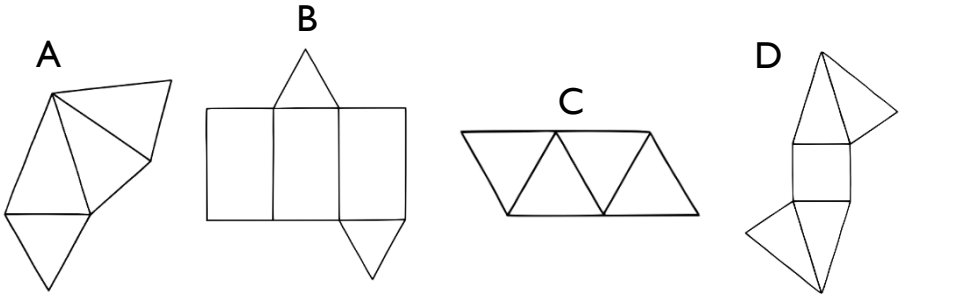


(2)

Assessment developed by: Brombacher and Associates©

15. Which figure shows the correct net of this polyhedron? *Tick the correct option.*





☐ A ☐ B ☐ C ☐ D (1)

16. What properties are the same in <u>both</u> a rectangle and a square? *Tick all that apply.*

☐ All sides are equal in length.

☐ The angles are right angles.

☐ The shape has only 2 lines of symmetry.

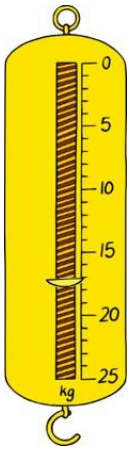
☐ They have four edges. (1)

17. Make the sides equal.

4 550 kg = _____ tons (1)

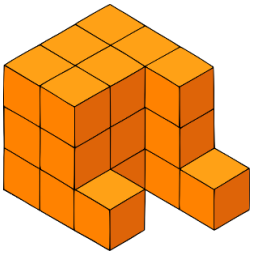
Assessment developed by: Brombacher and Associates©

18. What weight is shown on the scale?



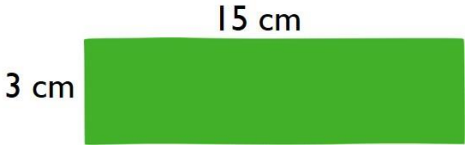
_____kg (1)

19. Determine the volume of the object.



_____cubes (1)

20. Determine the perimeter of the rectangle.

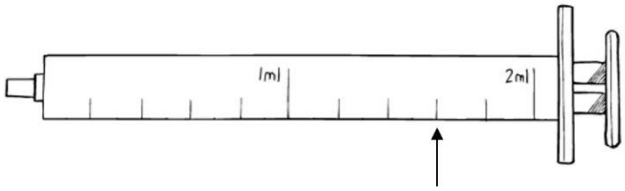


_____cm (1)

21. Determine the area of the triangle.

_____square units (1)

22. Write the volume indicated by the arrow.



_____ml (1)

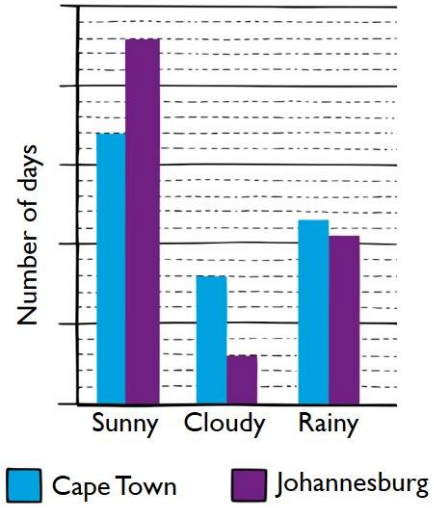
Assessment developed by: Brombacher and Associates©

23. The total length (in minutes and seconds) of the first five songs on a CD is 12 minutes and 37 seconds. Three of the songs' lengths are: 1:50; 2:37 and 3:04

    If the last two songs are the same length, calculate the time of the fourth and fifth song. *Show your working.*

_____ (2)

24. Karabo kept a record of the weather each day in Cape Town and Johannesburg for a year. He drew a graph of his results.



a) Which city has more rainy days? *Tick the best option.*

- ☐ Cape Town
- ☐ Johannesburg
- ☐ We cannot tell from the graph. (1)

Assessment developed by: Brombacher and Associates©

b) Which city has more sunny days? *Tick the best option.*

- ☐ Cape Town
- ☐ Johannesburg
- ☐ We cannot tell from the graph. (1)

c) If there were 80 cloudy days in Cape Town, how many sunny days were there in Johannesburg?

_____sunny days (1)

d) Tick the statement that correctly describes the data.

- ☐ The sun shines more than half the year in Cape Town
- ☐ The sun shines more than half the year in Johannesburg
- ☐ Johannesburg receives more cloudy and rainy days than Cape Town
- ☐ None of these (1)

Assessment developed by: Brombacher and Associates©