8+ Entrance Examination

Numeracy / Maths

Paper 8

Total marks: 74

Time allowed: 40 minutes

Full name: ……

1. Circle the number with the highest amount of 100s:

   6509 6059 6590 9650 5960 5096

   (1 mark)

2. Write the following numbers in words: (2 marks)

   9090 _____

   7002 _____

3. What is the value of the underlined digit in the following: (2 marks)

   <u>7</u>934 _____

   30<u>4</u>5 _____

4. Work out the following. You can show your working on the right-hand side. (6 marks)

a) 334 + 89 =

b) 1025 + 352 =

c) 9587 - 465 =

d) 854 - _____ = 654

e) 32 + 25 + 41 + 12 =

f) 78 + _____ = 75 + 75

5. A baker bakes 12 batches of cupcakes. Each batch contains 9 cupcakes. How many cupcakes does the baker bake altogether? (1 mark)

6. Janie plants 7 rows of sunflowers with 6 sunflowers in each row. Each sunflower has 20 petals. How many petals are there altogether? (2 marks)

7. There are 640 children in a school. In each class there are 32 children. Work out:

a) How many classes are there? (2 marks)

b) How many children are there in 4 classes? (1 mark)

c) If 2 classes leave to go on a school trip, how many children are left in the school? (2 marks)

8. A tennis coach has 589 tennis balls at the beginning of the tennis season. 155 are lost in the park and 218 roll away. How many tennis balls is the coach left with? (2 marks)

9. Fill in the answers to the following questions: (8 marks)

a) 8 x 9 = _____

b) 132 ÷ 12 = _____

c) 7 x _____ = 56

d) 81 ÷ 9 = _____

e) 810 ÷ 10 = _____

f) 72 x 100 = _____

g) 8100 ÷ 200 = _____

h) 50 x 30 = _____

10. Complete the sequences below: (5 marks)

a) 32, 35, 38, _____, _____, 47, 50

b) 125ml, 150ml ,_____, 200ml, _____, 250ml

c) £132, £121, _____, £99, _____

d) 17, 18, 20, 23, _____, 32, _____, 45, 53

11. Hussein has £32 and gives ¼ of his money away. How much does he have left? (2 marks)

12. Use the formal method of short division to work out the following: (2 marks)

192 ÷ 6

13. Round 2567:

To the nearest 10 _____ (1 mark)

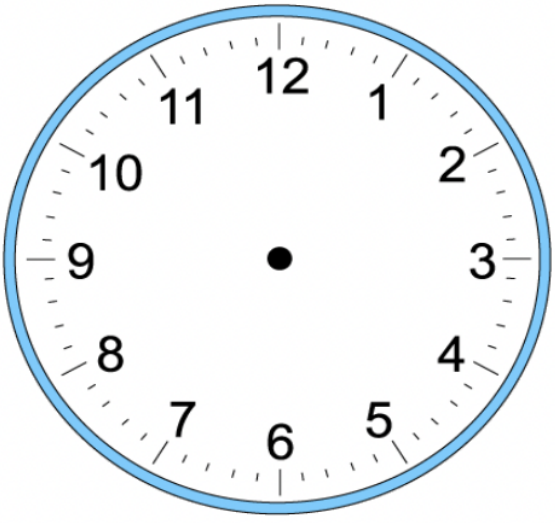
To the nearest 100 _____ (1 mark)

To the nearest 1000 _____ (1 mark)

14. In May, the sun rises at 5.15am and sets at 8.45pm. How many hours of daylight are there between sunrise and sunset? Give your answer in hours and minutes. (2 marks)

_____

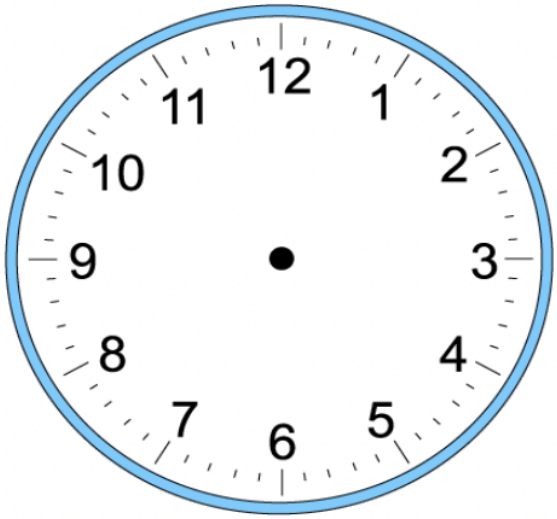
15. The time is 3.55pm. Draw the hands on the clock below to show this. (1 mark)



16. Alisha's school starts at 8.15am. It takes her 25 minutes to walk to school.

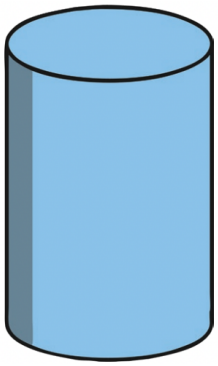
a) What time does she need to leave home to be on time for school? (1 mark)

b) Draw the hands on the clock below to show this time. (1 mark)

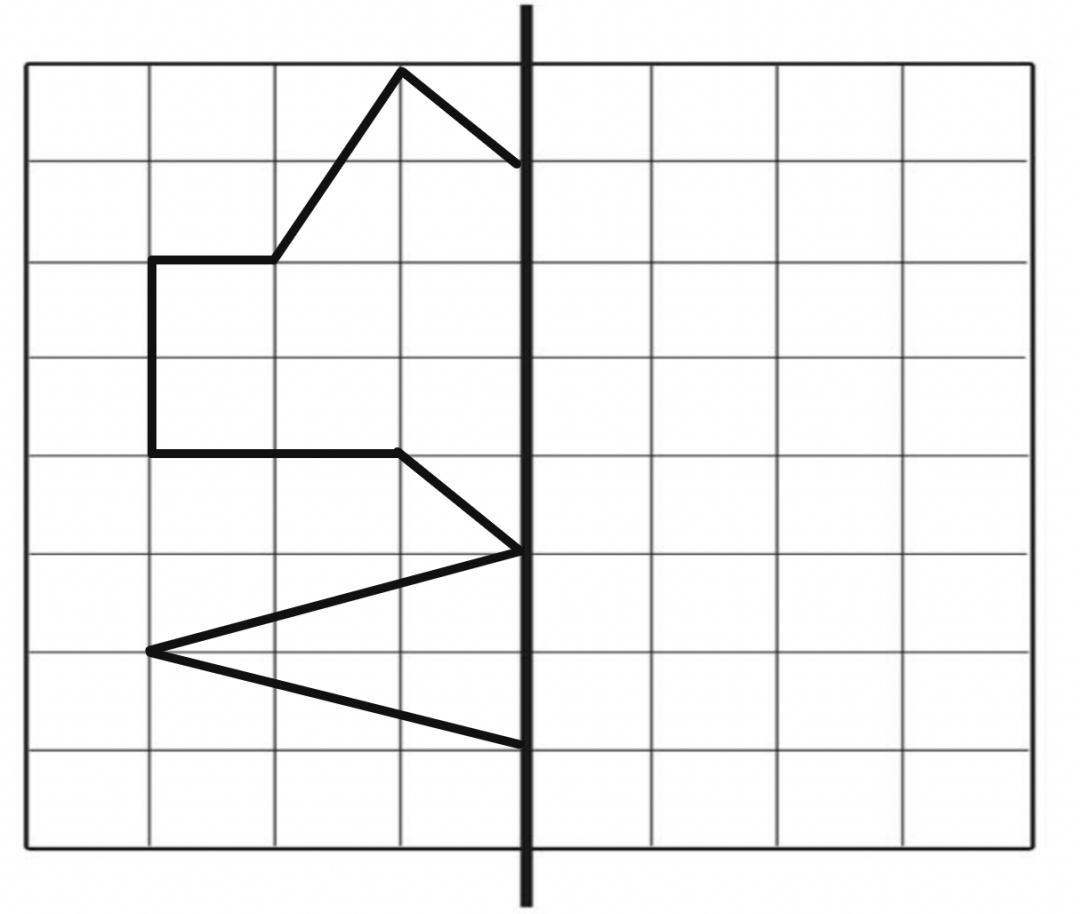


17. Ben goes to the supermarket and buys some ice-cream for £3.65. If he pays with a £10 note how much change will he receive? (2 marks)

18. A teacher has 32 glue sticks for the students in his class. How many faces will all the glue sticks have in total? (2 marks)



19. Draw the mirror image of the shape on the grid below: (2 marks)



20. A candlemaker can fit 8 candles into each box. He makes 42 in one day. How many boxes will he fill? (1 mark)

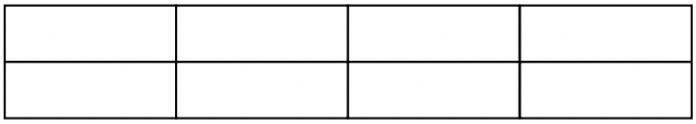
21. Convert the following: (3 marks)

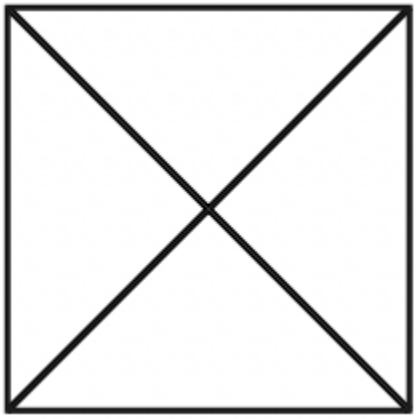
How many cm are there in 2.5m?

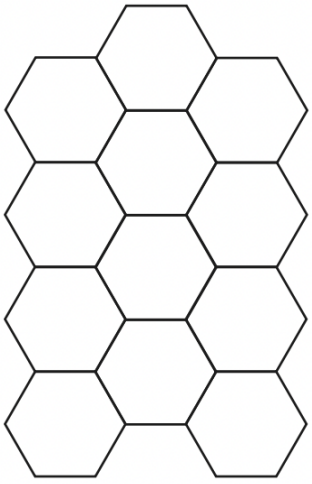
How many mm are there in 4.5cm?

How many m are there in 5.3km?

22. Shade one quarter of the shapes below: (3 marks)







23. Write the correct symbols < , = , or > into the boxes below to make the statement correct (4 marks)

a) $\frac{1}{4}$ ☐ $\frac{1}{2}$

b) $\frac{3}{5}$ ☐ $\frac{2}{5}$

c) $\frac{1}{3}$ ☐ $\frac{3}{4}$

d) $\frac{5}{10}$ ☐ $\frac{1}{2}$

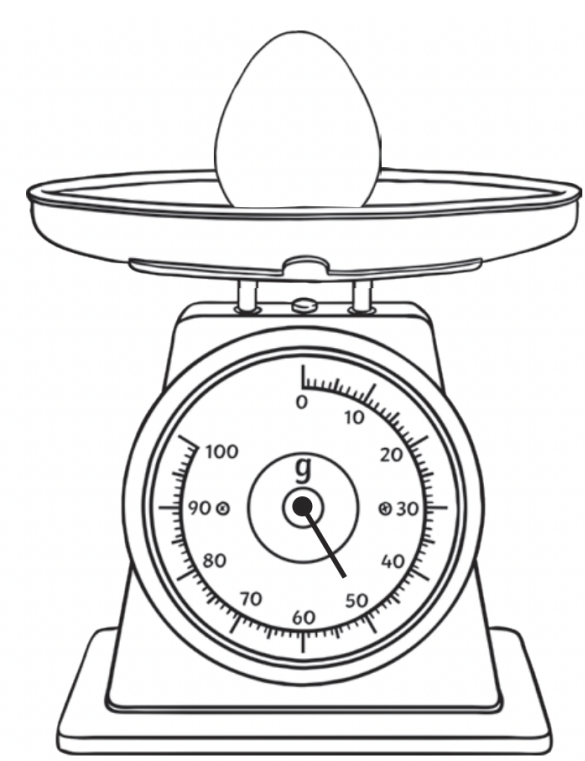
24. Order these fractions from the smallest: (1 mark)

$$\frac{7}{9} \quad \frac{3}{9} \quad \frac{9}{9} \quad \frac{1}{9} \quad \frac{4}{9}$$

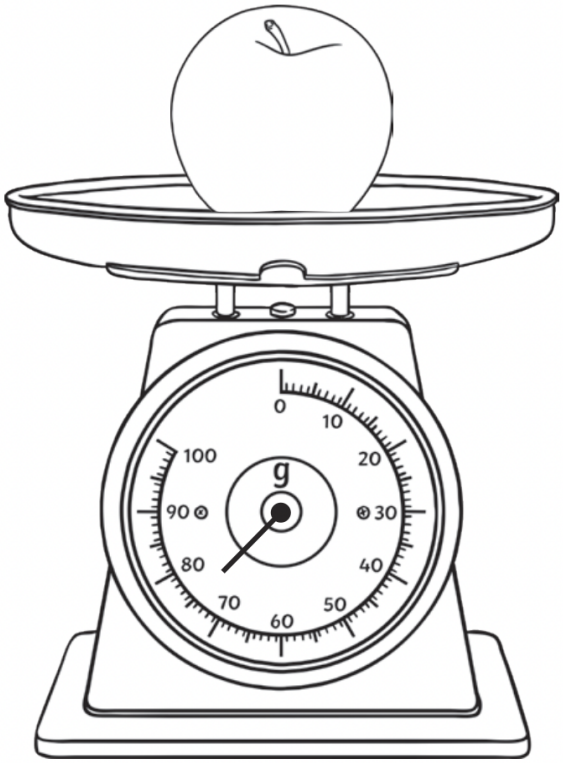
25. Order these fractions from the biggest: (1 mark)

$$\frac{4}{4} \quad \frac{1}{2} \quad \frac{2}{3} \quad \frac{2}{4}$$

26. How much do the items on the scales below weigh? (2 marks)



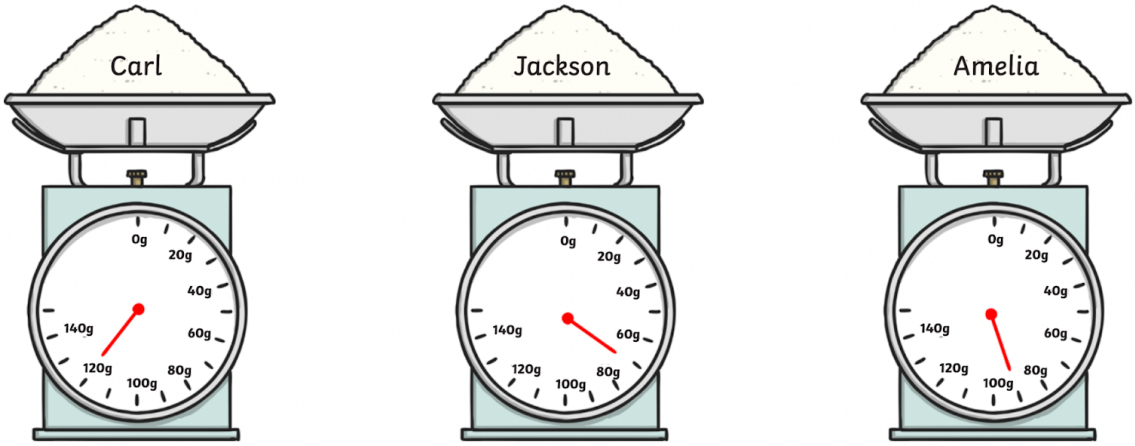
_____ g



_____ g

27. Carl, Jackson and Amelia decide to do some baking.

a) Whose ingredients weigh the least? (1 mark)
b) How much does Jackson's weigh?



c) How much does the least amount weigh? (1 mark)

28. The table shows the number of Year 3 children that attend after school clubs.

Club	Number of Children
art	10
gymnastics	5
drama	15
karate	18

i) a) How many children go to drama club? (1 mark)

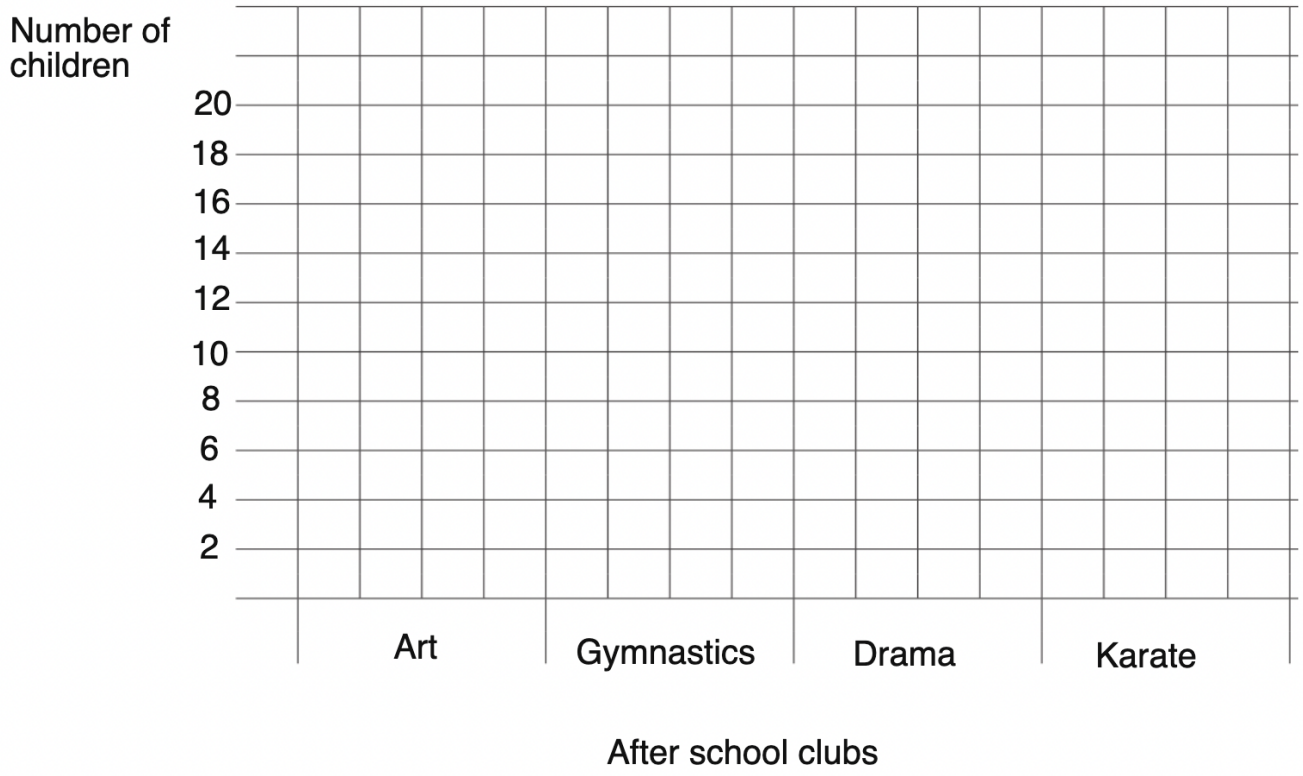
b) What is the most popular after school club? (1 mark)

d) What is the least popular after school club? (1 mark)

e) How many children attend karate and drama club altogether? (1 mark)

f) What is the difference between the number of children attending gymnastics club and the number of children attending karate club? (1 mark)

ii) Use the data in the table above to draw a bar chart on the grid below (2 marks)



END OF PAPER

8 + Entrance Examination Sample paper 8
Mathematics Marking Scheme
Total marks: 74

1. 5960

2. nine thousand and ninety; seven thousand and two

3. 7000; 40

4. a) 423
   b) 1377
   c) 9122
   d) 200
   e) 110
   f) 72

5. 108 cupcakes

6. 42 sunflowers (1 mark); 840 petals (1 mark)

7. a) 20 classes
   b) 128 children
   c) 576 children

8. 373 (1 mark); 216 balls (1 mark)

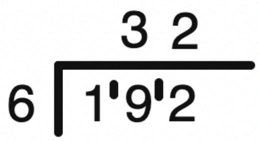
9. a) 72
   b) 11
   c) 8
   d) 9
   e) 81
   f) 7200
   g) 4050
   h) 1500

10. a) 41 (half a mark); 44 (half a mark)
    b) 175ml (half a mark); 225ml (half a mark)
    c) £110 (half a mark); £88 (half a mark)

d) 27 (half a mark); 48 (half a mark)

11. £24

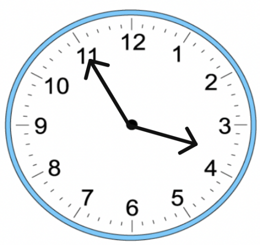
12.



13. 2570 (1 mark); 2600 (1 mark); 3000 (1 mark)

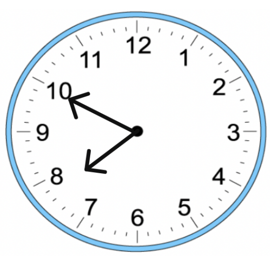
14. 14 hours and 30 minutes

15.



16. a) 7:50am

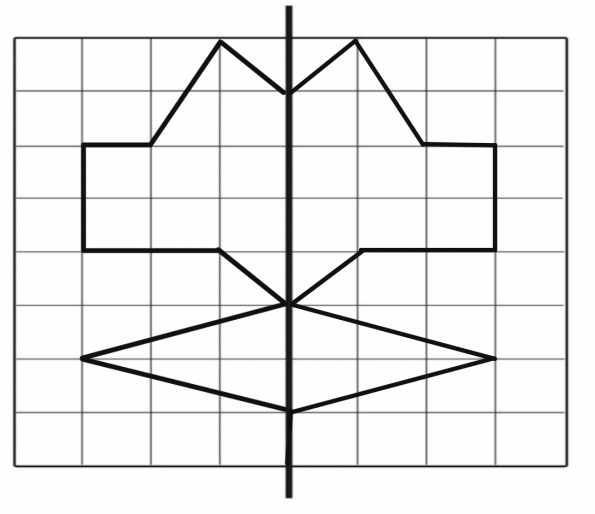
b)



17. £6.35

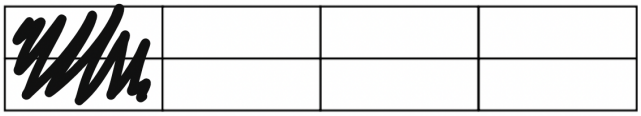
18. 96 faces

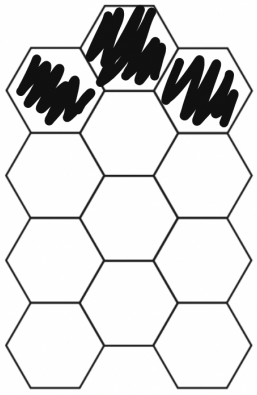
19.



20. 5 boxes

21. 250cm
    45mm
    5300m

22. 



23. a) <
    b) >
    c) <
    d) =

24. $\frac{1}{9}$ $\frac{3}{9}$ $\frac{4}{9}$ $\frac{7}{9}$ $\frac{9}{9}$

25.

$\frac{4}{4}$ $\frac{2}{3}$ $\frac{2}{4}$ $\frac{1}{2}$ or $\frac{4}{4}$ $\frac{2}{3}$ $\frac{1}{2}$ $\frac{2}{4}$

26. 50g
    75g

27. a) Jackson
    b) 70g

28. i) a) 15 children
       b) karate
       c) gymnastics
       d) 33 children
       e) 13 children

28. ii)